Pakistan International School, Jeddah

Worksheet Unit # 10

Simple Harmonic Motion and Waves

Class: 10th **Section_____** **Name_____**

Section – A

Choose the correct option

1.The maximum displacement of body from its mean position in one vibration is called.

A. Amplitude B. Displacement C. Frequency D. Vibration

2.Any effect that tends to reduce the amplitude of vibration is called.

A. Simple Harmonic Motion B. Damping C. Wave D. Frequency

3.Water waves and sound waves are the examples of

A. Transverse Waves B. Longitudinal Waves
C. Mechanical Waves D. Electromagnetic Waves

4.A wave moves on a spring with frequency of 5 Hz and wavelength of 0.5 m, the speed of wave is

A. 10 ms^{-1} B. 5.5 ms^{-1} C. 2.5 ms^{-1} D. 0.1 ms^{-1}

5.A high energy wave has

A. Low frequency B. High frequency C. Low intensity D. High intensity

6.Time period of simple pendulum is independent of

A. Length of pendulum B. Gravitational acceleration
C. Mass of bob D. None of these

7.Which of the following describes the motion of an object is simple harmonic motion?

A. Linear B. Random C. Oscillatory D. Irregular

8.Unit of spring constant is

A. N/m B. Nm C. m/N D. N

9.The value of K.E. is maximum at which position

A. Mean B. Extreme C. Both D. Centre

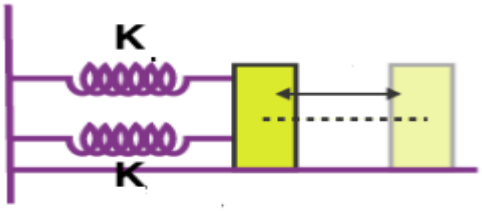
10.Time period of simple pendulum having length 1m is

A. 3 sec B. 2 sec C. 1 sec D. None

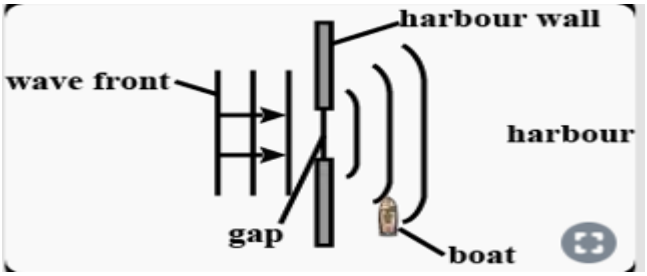
Section – B

Answer the following questions.

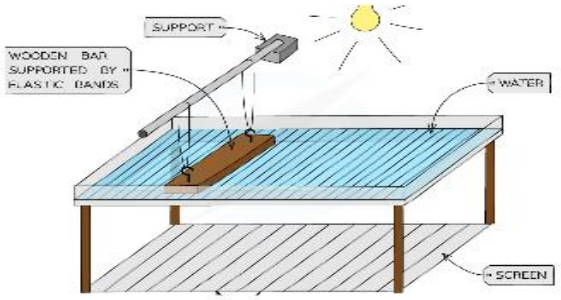
1. If one more spring of same spring constant ‘K’ is attached with mass ‘m’ performing SHM. Calculate the new time period.



2. What is the name of this curving effect? How can the gap be changed so that the wavefronts do not reach the boat?



3. How the dark and bright fringes are formed on the screen?



4. What is the displacement of an object in SHM when K.E. and P.E. is equal?
5. If the Gravity of Simple Pendulum is reduced to ¼ , what will be the change in its time period?
6. Why Shock absorbers are used in cars?

Section – C

Write answer in detail.

1. Prove that acceleration of mass attached with spring is directly proportional to the displacement and directed towards mean position.
2. Derive a relation between Velocity, Frequency and Wavelength.

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Worksheet Unit # 11

Sound

Class: 10th **Section_____** **Name_____**

Section – A

Choose the correct option

1. An object is Vibrating at 4000 Hz. The time period of sound produced is

A. 0.0025 sec B. 0.025 sec C. 0.00025 sec D. 0.0005 sec

2. The speed of sound is maximum in

A. Copper B. Air C. Water D. Vacuum

3. Which statement is incorrect about Sound Wave.

A. Obey law of reflection. B. These are mechanical waves

C. They cannot travel in vacuum D. Do not require medium for propagation

4. The Pitch of sound increases if its frequency

A. Increase B. One-Fourth C. Decrease D. One

5. The echo is heard at a distance of approximately equal to

A. 10 m B. 17 m C. 34 m D. 50 m

6. To detect the obstacles in their path, bats produce the waves

A. Infrared B. Ultrasonic C. Electromagnetic D. Radio

7. The repetition of sound heard in a cave or room is the case of

A. Echo B. Superposition C. Interpolation D. Reverberation

8. Two sounds A and B are of frequencies f and 2f respectively. Then:

A. Both are Identical **B**. B is grave than A **C**. B is shrill than A **D**. B is louder than A

9. The unit of quantity on which pitch of the sound depends is:

A. Hertz B. Meter C. Meter/ second D. Second

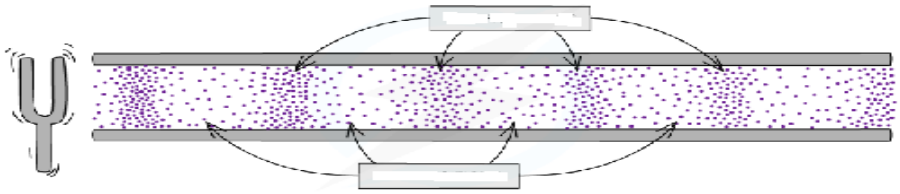
10. Voice of a friend is recognized by its:

A. Pitch B. Quality C. Intensity D. Velocity

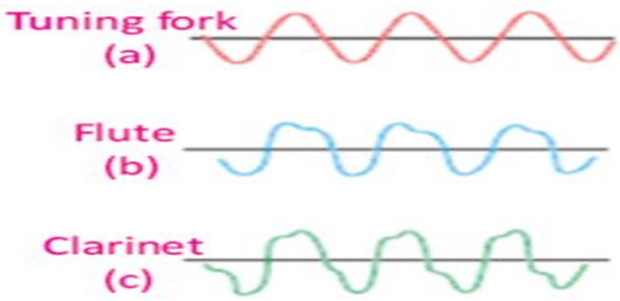
Section – B

Answer the following questions.

1. A tuning fork is sending sound waves in a pipe. Write the name of indicated areas and define them.



2. Describe the property of sound with following sound wave of same frequency can be distinguished



3. Why the voice of ladies and children is shrill than man?

4. The intensity level of sound is 120 dB. What will be the intensity of sound?

5. Why silent whistles are used to call dogs?

Section – C

Write answer in detail.

3. Define Ultrasounds, What are its uses in Medicine?
4. Derive a relation between Intensity Level and Intensity.

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Worksheet Unit # 12

Geometrical Optics

Class: 10th **Section_____** **Name_____**

Section – A

Choose the correct option

1. The ratio of image size to object size is.

A. Focal length B. Position C. Magnification D. Curvature

2. Change of direction of light as it moves from one medium to another medium is called.

A. Reflection B. Refraction C. Diffraction D. None of these

3. A lens that is thinner in centre than edges is called_____ lens.

A. Concave B. Convex C. Common D. Plane

4. The human eye form image of an object at its.

A. Iris B. Retina C. Pupil D. Cornea

5. What would be the angle of incidence for a light ray having zero reflection angle?

A. 180 º B. 90 º C. 0 º D. 45 º

6. A full length of the image of a distant tall building can be seen using

A. Convex mirror B. Plane mirror C. Concave mirror D. None of these

7. The ratio of the sine of the angle of incidence to the sine of the angle of refraction is constant. It is given by

A. Faraday's law B. Snell's law C. Newton's law D. Coulomb's law

8. The change in focal length of the human eye is caused due to

A. Iris B. Ciliary muscles C. Pupil D. Cornea

9. The ability of the eye lens to adjust its focal length is called

A. Indexing of eye B. Accommodation of eye

C. Vision restoration D. Adaptivity of eye

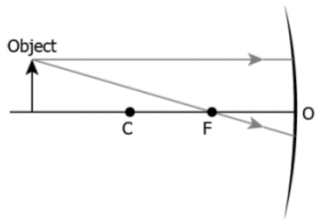
10. Far-sightedness is also known as

A. Hypermetropia B. Myopia C. Cataract D. Presbyopia

Section – B

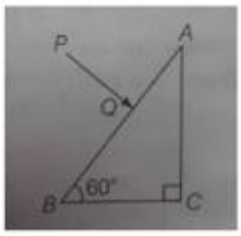
Answer the following questions.

1. The image shows the path of incident rays to a concave mirror.

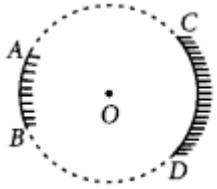


Where would the reflected rays meet for the image formation? Draw a ray diagram.

2. Mention any two situations in which Snell's law of reflection fails.
3. Show analytically from the lens equation that when the object is at the principal focus, the image is formed at infinity.
4. A ray PQ incident normally on refractive face BA is refracted in the prism BAC made of material of refractive index 1.5. From which face the ray will emerge? Justify your answer.



5. A magician during a show makes a glass lens with n = 1.47 disappear in trough of liquid. What is the refractive index of liquid? Could the liquid be water?
6. In blind turns on hilly roads, mirrors are used to help drivers. Are these Plane mirrors, concave mirrors, convex mirrors? Explain.
7. AB and CD, two spherical mirrors, from parts of a hollow spherical ball with its centre at O as shown in the diagram. If arc AB < arc CD, what is the ratio of their focal lengths? State which of the two mirrors will always form virtual image of an object placed in front of it and why?



Section – C

Write answer in detail.

1. What are the Defects of Vision? How these defects can be cured? Explain with diagrams.
2. An object 5 cm high is placed at a distance of 15 cm from a convex lens of focal 10 cm. Calculate the position and size of image.

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Worksheet Unit # 13 Electrostatics

Class: 10th **Section_____** **Name_____**

Section – A

Choose the correct option

1. . Electric charge of l00 µC is 13 m apart from another charge16.9µC.The force between them in Newton is
   (a) $9x\ 10^7$ (b) 0.09 (c) 90 (d) 9 x 105

2. The spacing between the field lines shows the
   (a) Strength of electric field (b) Direction of electric field
   (c) Both a and b (d) None of these

3. The work done in moving a unit positive charge form one point to another against the eclectic field is a measure of
   (a) Intensity of electric field (b) Resistance between two points .
   (c) Capacitance (d) Potential difference between two points .

4. . The number of electrons in one coulomb charge is equal to
   (a) $6.25\ x10^{19}$ (b) $1.6\ x10^{-19}$ (c) Zero (d) $6.2\ x\ 10^{21}$

5. . If the distance between the two charges bodies is halved, the force between them becomes
   (a) Doubled (b) Half (c) Four times (d) One half .

6. Electric field intensity is a vector quantity and its direction is
   (a) Perpendicular to the direction of field (b) Opposite to the direction of force
   (c) Along the direction of force (d) At a certain angle

7.The electric intensity at infinite distance from the point charge is?

   a. Zero b. Infinite c. Positive d. 1 volt /m

8.In fixed type of capacitors, the value of capacitance

   a. increase b. decrease c. Can not be changed d. Allof these

9. A capacitor is perfect insulator for

   a. Direct current b. Alternating current

   c. Both for direct and alternating current d. Electric charge

10.The Equivalent capacitance is greater than individual capacitance in

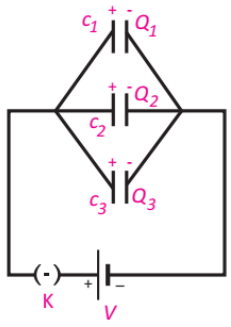
   a. Series combination b. Parallel combination

   c. 1 series and parallel combination d. All of them

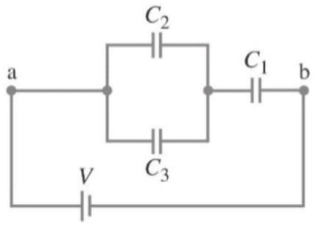
Section – B

Answer the following questions.

1- Given is the diagram of parallel combination of capacitors. Each capacitor has equal potential difference between its two plates. Justify the statement?



2. Determine the capacitance of a single capacitor that will have a same effect as the combination shown? C1= 12 µF, C2= 3 µF, C3= 6 µF,



3. Is the equivalent of a series capacitors larger or smaller than the capacitance of any individual capacitor in the combination?

4. Derive formula for one electron volt? Also find its energy in joules.

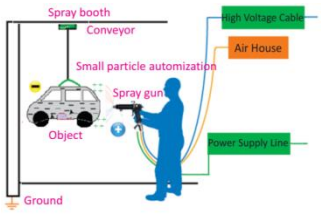
5. In combination of capacitors when will capacitance increase?

6. Why is electric charge produced in bodies by friction?

7. How is static electricity a major cause of fires and explosions at many places?

8- Enlist a few uses of Electroscope?

9- How automobile manufacturers use static electricity to paint a new car?

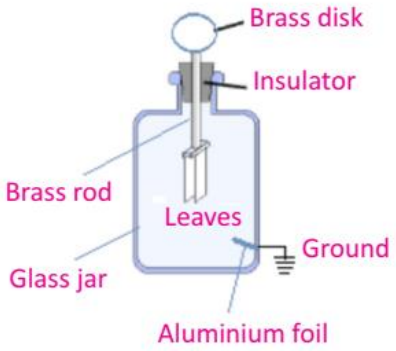


10- Why lightening conductors are used in tall buildings?

Section – C

Write answer in detail.

3. By using Electroscope, How can we
   i- Detect the type of charge?
   ii- Identify Conductors and Insulators?



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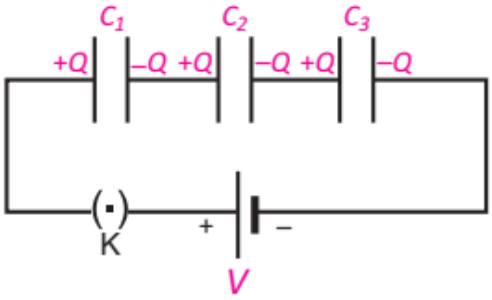
4. Write the characteristics of series combination of capacitors and hence derive the formula for the effective capacitance for a series combination of a number of capacitors..



3- State and explain Coulomb's Law and write its mathematical form? What are point charges?

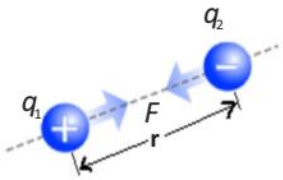


Fig.13.10 (a) Attraction between opposite charges

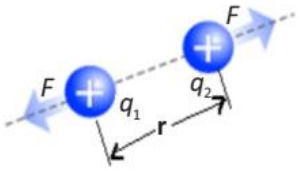


Fig.13.10 (b) Repulsion between similar charges

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Worksheet Unit # 14 Current Electricity

Class: 10th **Section_____** **Name_____**

Section – A

Choose the correct option

1. . The rate of flow of electric charge through any cross sectional area is callled

(a) Electrostatics (b) Electric current (c) emf (d) Voltage

2. One coulomb per second is equal to .

(a) One volt (b) One Ampere (c) One watt (d) One Ohm

3. In order to detect the current, Galvanometer is connected in

(a) parallel (b) series (c) parallel or in series (d) Anywhere in circuit

4. a good voltmeter is one which draws

(a) No Current (b) Small current (c) Large current (d) Very large current

5. Ohm's Law is applicable to the

(a) Liquids only (b) Gases only (c) Liquid conductors only (d) Metallic conductors only

6. The value of current passing through a conductor is directly proportional to the

(a) Resistance (b) Capacitance (c) Potential difference (d) None of these

7. If a potential of 220 V is applied across a conductor and a current of 2A flows through it. What should be the resistance of conductor?

(a) 210 OHM (b) 40 OHM (c) 880 OHM (d) 110 OHM

8. At a certain temperature, the resistance of a wire is inversely proportional to its

(a) Length (b) Area of cross section (c) Temperature (d) Colour

9.) When Current I is flowing through a resistance R , the electrical power that generates heat in the resistance is given by

(a) IR (b) I/R (c) IR^2 (d) $I^2 R$

10. The resistances are connected end to end and provide only one path for current in .

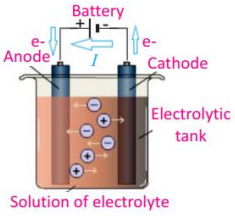
(a) parallel circuit (b) series circuit

(c) both parallel and series circuit (d) None of these

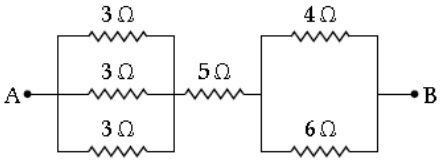
Section – B

Answer the following questions.

1- In metals, Current is produced due to flow of free electrons. How is current produced in Electrolytes?

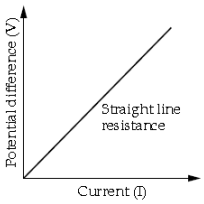


2. Find the equivalent resistance between point A and B in the following combination of resistors?



3. Explain Conventional current?

4. What happens to resistivity of semi conductor with the increase of temperature?.
5.Why the resistance of an ammeter is kept low and that of voltmeter is kept high?
6. What does the slope of V-I Graph represent?



7. Write at least three differences between AC and DC?

8- On what principal the circuit breaker works?

9- How a galvanometer is converted into voltmeter?

Section – C

Write answer in detail.

5. State and explain Joule's Law? Derive its formula?

6. How are resistances connected in parallel? Describe the characteristic features of this combination. How to find Equivalent resistance of a parallel combination. Write

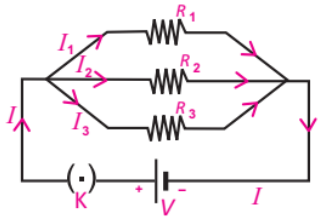


Fig 14.13: Three resistors in parallel combination

advantages of parallel combinat ion over series combination?

3- State and explain Ohm’s law. What are its limitations?

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Worksheet Unit # 15 Electromagnetism

Class: 10th **Section_____** **Name_____**

Section – A

Choose the correct option

1. Any D.C Motor converts_-
   a)Mechanical energy into electrical energy
   b)Mechanical energy into chemical energy.
   c)Electrical energy into mechanical energy
   d)Electrical energy into chemical energy

2.Which part of a D.C Motor reverses the direction of current through the coil every half cycle?

a)The Armature b)The Commutator c) T he Brushes d) the Slip rings

3. When current passes through straight conductor , It produces magnetic field in the form of
   a)straight Line b)centric Circles
   b)Rectangular Form c) parabolic Shape

4.

The magnetic field produced in straight current carrying conductor is weaker _____

Near pole Near current carrying conductor

Away from current carrying Conductor None of these

5. Direction of Magnetic lines of force in straight conductor can be find out by
a) Right Hand Rule b)Left Hand Rule c) Both a,b d) none of these

6.A dot"." on paper indicates that the current is directed _
a) Out of Plane b) Towards us c) Into the Plane d) None of these

7. A Cross ''x" on paper indicates that the current is directed-----
a) Out of plane b) Away from us c) Into the Plane d) None of these

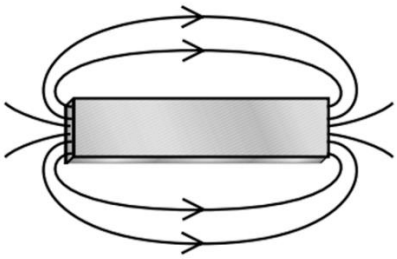
8. An electrical device which is used to increase or decrease voltage the value of alternating voltage
a) Transformer)A.C Generator c) D.C Motor d) non of these

9.Transformer works on the principle of
a) Electrostatic Induction b)Mutual Induction c)Self-Induction d) All of These

10. The magnetic field produced in straight current carrying conductor is weaker _
a) Near pole b) Near current carrying conductor
c) Away from current carrying Conductor d) None of these

Section – B

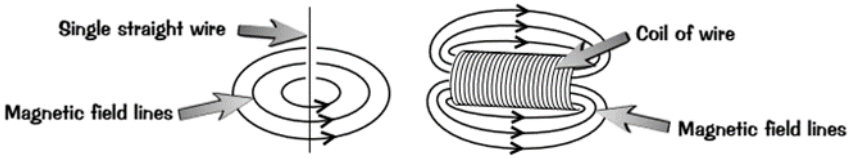
Q No.1 Where is the magnetic field strongest by a bar magnet? Explain how we can tell this from the diagram .



Q. No.2 Sketch magnetic field lines for when:

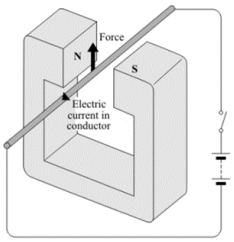
1) Two North poles of bar magnets are near each other.
2) Two South poles of bar magnets are near each other.
3) A North and a South pole of two bar magnets are near each other.

Q. No. 3 By explaining the diagram, Answers the following Questions.



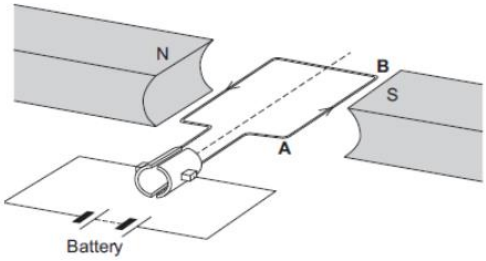
1. What causes a wire to produce a magnetic field?
2. What kind of magnet has the same magnetic field as the long coil of wire?
3. What is the scientific name for a long coil of wire?
4. What is the main advantage of using an electromagnet vs a permanent magnet?
5. Why would steel be bad to use as the core of an electromagnet?
6. Name a metal that would be more suitable to use as the core of an electromagnet.

Q No.4 From the figure ,Give the following answers



1) State two ways in which this force can be increased.
2) State two ways in which this force can be made to act in the opposite direction.
3) In what circumstance will no force act on a conductor carrying an electric current in a magnetic field.
4) suggest two other ways of increasing the strength of an electromagnet.

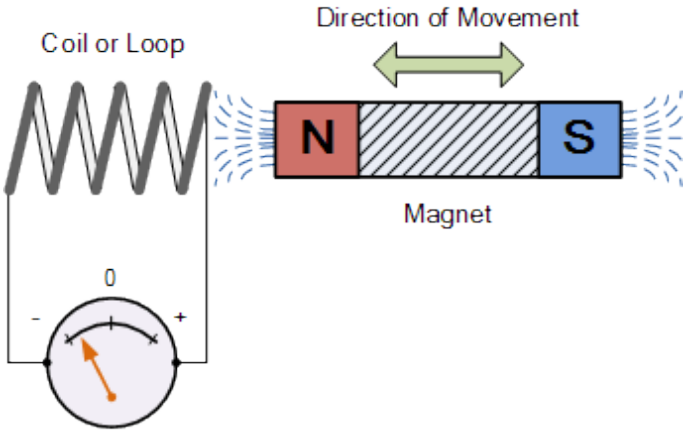
Q No.5 From the figure ,Give the following answers



1) which direction does the force on the wire **AB** act?

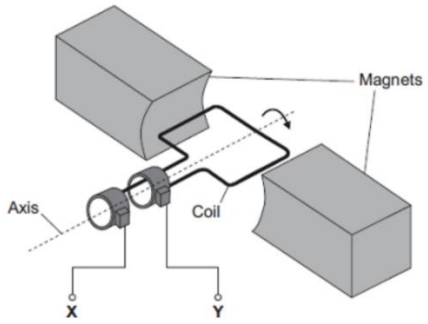
2) Suggest two changes that would reverse the direction of the force acting on the wire **AB**.

Q No.6 From the figure ,Give the following answers



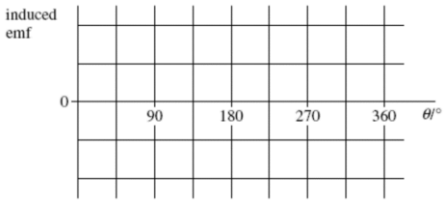
1. What is required to make an electric current flow in a circuit?
2. Name two ways of causing electromagnetic induction.
3. How can an induced current be produced?
4. What happens if you move a magnet into a coil of wire?
5. What happens when a magnet is stationary inside a coil of wire?
6. What happens if you move a magnet out of a coil of wire?
7. What happens if you move magnet in and out of the coil repeatedly?

Q No.6 From the figure ,Give the following answers

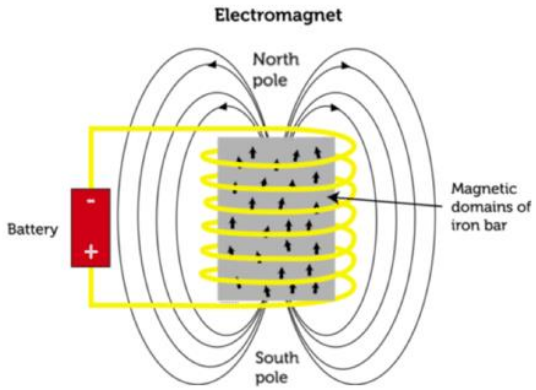


1. What type of generator is in the diagram opposite?
2. What type of current does this generator create?
3. What do the letters AC stand for?
4. Name what instrument could be used to measure the potential difference between X and Y.

Q No. 7 The coil is rotated at a constant speed, causing a potential difference to be induced. Sketch a graph on the axes to show how the induced potential difference varies with angle θ during one complete rotation of the coil, starting when θ = 0.



Q. No. 8



1. What is an electromagnet?
2. How could you increase the strength of an electromagnet?
3. Why are electromagnets the strongest of all magnets?
4. How could the crane operator cause the electromagnet to drop the metal parts into the train car?

Q. No. 9.. Explain some similarities and differences between:

a) Magnetism and gravity.

b) Magnetism and electrostatic forces

Section C

write answer in detail

Q -1 Give the construction and working of AC generator.

Q-2 Give the detail of electromagnetic induction.

Q-3 what is construction and working of transformer. Also give its types.

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Worksheet Unit # 16 Basic Electronics

Class: 10th **Section_____** **Name_____**

Section – A

Choose the correct option

1.who observed the deflection of cathode rays, by both electric and magnetic fields?
(a) Newton ·(b) J.J Thomson (c) Plank (d) Charles
.....

2. **The process of emission o f electrons from the hot metal surface is called;**
(a) dynamic emission (b) electronic emission
(c) thermionic emission (d) static emission

3. A component of cathode-ray oscilloscope (C.R.O) is;
(a) the electron gu . (b) the de ecting plates
(c) a fluorescent screen - (d) all of given

4. Cathode-ray oscilloscope (C.R.O) is used in
a) displaying waveform (b)measuring voltages
(c) range finding (d) all given are true

5. To find the depth of sea- bed CRO is used
(b) displaying waveforms (a) echo-sounding (c) measuring voltage
(d) range finding

6 Analogue quantities are;
(a) whose values vary continuous (b) whose values remains constant
(c) e.g. temperature of air (d) all of given are true

7. Which of the following is Analogus device ?
(a) Electric fan (b) Electric iron (c) Radio receiver (c) All of them

8. Which of the following arc digital devices?
(a) Computer (b) Mobile phone (c) Digital camera
(d) All of them

9. The circuit which implements the AND operation Is called:
a) AND gate (b) AND circuit (c) OR gate (d) Both a & b

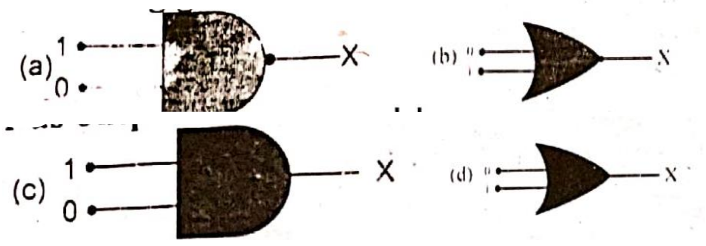
10. To make burglar alarm, we use:
(a) NAND gate (o) OR gate (c) NOT gate d) NOR gate

Section – B

Q No.1 Describe function of the electron gun

Q. No. 2 Name five analogue and five digital devices that are commonly used in every day life?

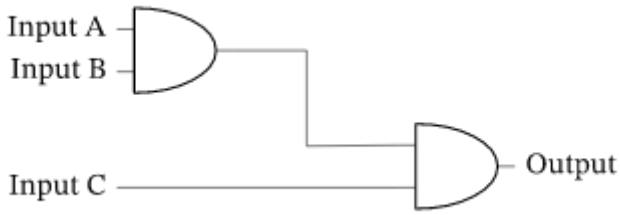
Q. No. 3 Which of the following would have 1 as output.



Q No.4

The diagram shows two AND gates connected as part of a logic circuit. The truth table shows the output for the various combinations of the inputs.

Input A	Input B	Input C	Output
0	0	0	0
0	0	1	p
0	1	0	0
q	1	1	0
1	0	0	0
1	0	1	0
1	1	0	r
s	1	1	1

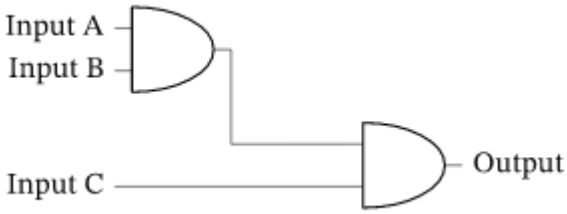


1.What is the value of p in the table?

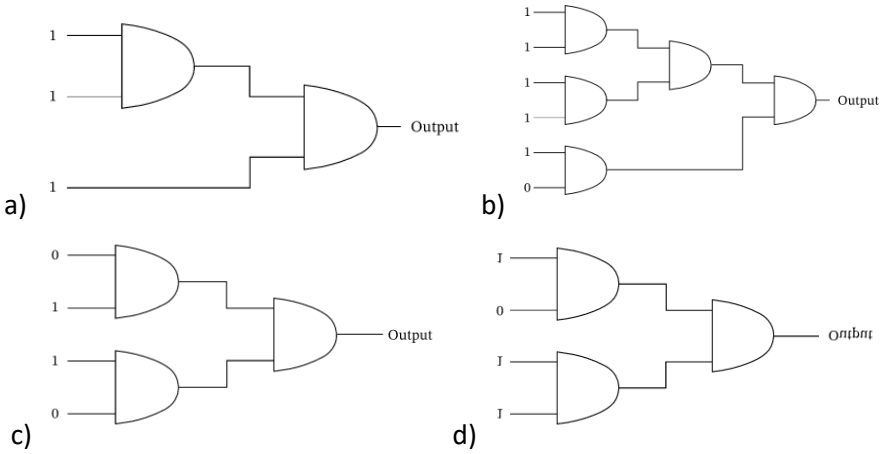
2. What is the value of q in the table?

3.What is the value of r in the table?

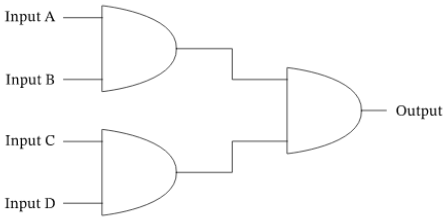
Q No 5.The diagram shows two AND gates, where the output of the first AND gate is one of the inputs to the second. If input A is 1, input B is 0, and input C is 1, what is the output?



Q No.6 Each of the diagrams shows a logic circuit consisting only of AND gates. Which of the diagrams shows circuits where the output has a value of 1?

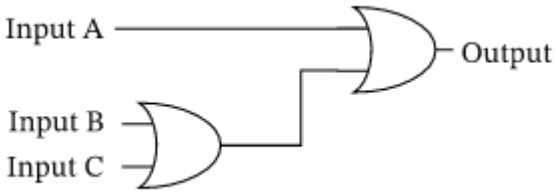


Q. No. 8 The diagram shows a logic circuit consisting of three AND gates. How many of the inputs must have a value of 1 in order for the output to have a value of 1?



Q. No. 9. The diagram shows two OR gates connected as part of a logic circuit. The truth table shows the output for the various combinations of inputs.

Input A	Input B	Input C	Output
0	0	0	0
0	0	p	1
0	1	0	1
0	1	1	q
r	0	0	1
1	0	1	1
1	1	0	s
1	1	1	1



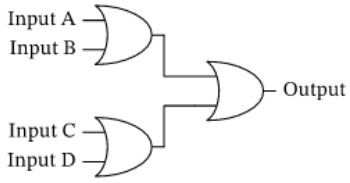
1.What is the value of p in the table?

2.What is the value of q in the table?

3.What is the value of r in the table?

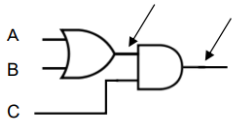
4.What is the value of s in the table

Q. No.10 he diagram shows a logic circuit consisting of three OR gates. How many different possible combinations of input values are there for this circuit?

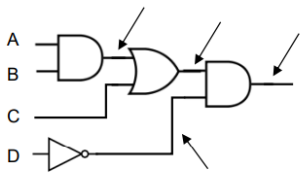


Q No.11 Convert each of the following logic gate circuits into Boolean expressions, writing subexpressions where indicated by the arrows

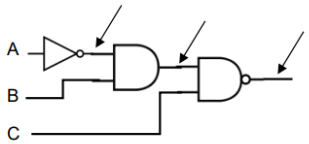
a)



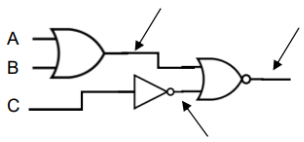
b)



c)



d)



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Section C

write answer in detail

Q -1 Give the construction and working of CRO

Q-2 Give the detail of AND,OR, NAND, NOR gates

Q-3 what is electronic emission .Give discovery and properties of electrons.

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Worksheet Unit # 17

Information & Communication Technology

Class: 10th **Section_____** **Name_____**

Section – A

Choose the correct option

1. In computer terminology, processed data is called?
   a. A. Output B. Information C. Input D. Procedure
2. The term refers to the machinery in computer terminology is _____?
   a. A. software B. Hardware C. Data D. procedure
3. Which are facts that are used by programs to produce useful information?
   a. A. Data B. Software C. Hardware D. Program
4. Which technology is used in mobile phone?
   A. Computer B. Internet C. Radio D. Fax
5. Telephone sends the voice notes in the form of?
   A. Waves B. Mechanical signals C. Electrical signals D. Magnetic signals
6. The essential part of any communication system is
   A. Transmitter B. Transmission channel C. Receiver D. All of these
7. The most important of hardware of computer system is
   A. Monitor B. CPU C. Hard disk D. Processor
8. Which are more compact and portable
   A. Desktop PC B. Computers C. Laptops D. All of these
9. 1024 bytes are equal to
   a. A. IMB B. IGB C. 1mB D. 1TB
10. Which of the following is not processing?
    a. A. Calculating B. Arranging C. Manipulating D. Gathering

Section – B

Answer the following questions.

1. How light signal would travel through optical fibre?
2. Differentiate among the followings
   a. Primary memory & secondary memory
   b. Floppy disk & Hard disk
   c. RAM & ROM
   d. Hard ware & Soft ware
3. Why word processing is useful tool to prepare the documents?
4. How an internet can be considered as a big source of information?
5. What is E-commerce? How it helps to boost up the earning level?
6. How data can be written & retrieved from a floppy disk?

Section – C

Write answer in detail.

1. What are the basic components of information technology? Explain each one explicitly.
2. What is half life? Briefly explain the process through which the half-life of an element can be calculated.

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Worksheet Unit # 18

Atomic & Nuclear Physics

Class: 10th **Section_____** **Name_____**

Section – A

Choose the correct option

1. Which force is actually responsible to keep the electron into its specified orbit?

A. Nuclear force B. Coulomb's Force C. Centripetal force D. Pion force

2. Neutron-Neutron has force of

A. Attractive B. Repulsive C. No force D. None of these

3. The nuclear energy in nuclear reactor is produced by

A. Nuclear Fission B. Nuclear Fusion
C. Electron-Electron Reaction D. Burning of coal

4. Emission of alpha particle lead to a _____ in the charge of an atom

A. Decrease by 4 units B. Increase of 2 units

C. Decrease by 2 units D. Increase of 4 units

5. An alpha particle is similar to

A. A helium nucleus B. A hydrogen nucleus C. A proton D. A positron

6. Radioactive carbon dating technique is used to estimate the age of

A. Rocks B. Soil C. Fossils
D. Buildings

7. Principle of nuclear fusion is used in

A. Atomic bomb B. Hydrogen bomb C.Both A&B D. None

8. The number of neutrons present in the isotope of $^{238}_{92}U$ are

A. 380 B. 238 C. 92 D. 131

9. The half-life of radioactive element is 30 days then the remaining amount after 90 days is?

A. 1/3 B. 1/4 C. 1/16 D. 1/8

10. Sun & Stars are throwing away the lights, It is due to which reaction?

A. Fission B. Fusion C. Chemical D. Conduction

11. Why is a fusion reaction difficult to perform?

A. The nuclei are set up far from each other
B. The attraction between the nuclei
C. Sun's energy is not sufficient
D. Repulsion between the nuclei

Section – B

Answer the following questions.

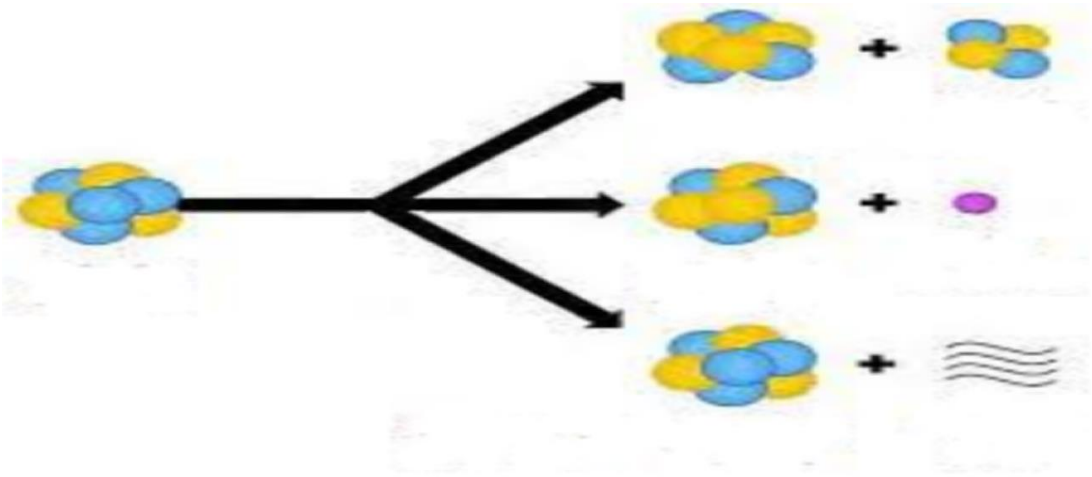
1. Why Beta particle are supposed to be most dangerous one as compared to others?

2. Why a patient should be positioned carefully during brain radiotherapy?

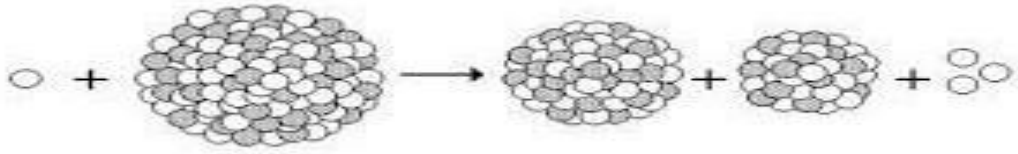
3. What do you understand the half of an element? Does the second half life is same as first half life? Give explanations.

4. How would you calculate the age of trees in carbon dating?

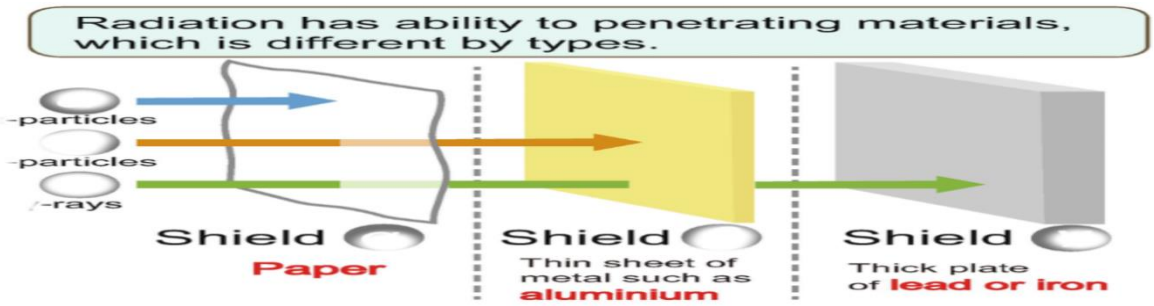
5. Label & Justify the following figure below & name the reaction either fission reaction or fusion reaction.



8. Prove that 1g of radium $3.73X10^{4}$MBq.
9. How would you make the alpha & beta particles harmless?
10. Indicate the parent & daughter elements in the figure given below and define it also.
11. (Hint: Keeping the fission reaction in mind)



11.Name the given particles according to properties of radiations



Section – C

Write the answer in detail.

1. How would you explain the background radiations? State the sources of it

2. What is half life? Briefly explain the process through which the half-life of an element can be calculated.

Contents

WORKSHEET (ENGLISH) FOR GRADE 10

A phrase is a group of words which make sense but not complete sense. It is a part of a sentence and cannot stand on its own.

In English grammar, there are five main types of phrases. They are,

- Noun phrase
- Adjective phrase
- Adverb phrase
- Verb phrase

- Prepositional phrase

Other types of phrases include gerund phrase, appositive phrase, participle phrase and infinitive phrase.

Noun Phrase

A noun phrase is a group of words that have a noun or pronoun. It is used to modify the noun. In other words, it can be said that a noun phrase can function as a subject, an object or a complement in a sentence.

For example:

- My brother's friend had come to visit him. (Used as a subject)
- Scented candles are my favourite. (Used as a subject)
- The students were asked to find the buried treasure. (Used as an object)

Adjective Phrase

An adjective phrase is a group of words that consist of an adjective. It can be used to complement it. It provides more information about the noun or pronoun in a sentence. In other words, it can be said that it functions just like an adjective in a sentence.

For example:

- Anum has silky, smooth hair.
- People, living in large cities, often find it difficult to reach in time.
- The team that made it to the final was congratulated in front of the whole school.

Adverb Phrase

An adverb phrase or an adverbial phrase is a group of words that includes an adverb and other modifiers. It performs all the functions of an adverb. It can be placed in any part of the sentence, with respect to the part of speech they modify.

For example:

- We are planning to finish our group project by the end of May.
- Later this evening, my cousins and I have planned to go to the park.
- They saw some abandoned puppies at the corner of the street.

Verb Phrase

A verb phrase can be used just like a verb. It consists of a main verb and an auxiliary verb.

For example:

- Students are practicing hard in order to participate in the state tournament.
- Ahmad has been writing multiplication tables for three hours.
- The dogs have been barking continuously.

Prepositional Phrase

A prepositional phrase consists of a preposition and an object. It works just like an adjective or an adverb. It relates the subject and the verb in a sentence. It is used to modify the nouns and verbs in a particular sentence.

Exercise 1

Underline phrases in the following sentences.

1. We get up early in the morning and go to school.
2. Mother put all the eatable on the table.
3. Cat is sitting under the chair.
4. The seagulls were flying above the sea.
5. He takes great interest in the sports.
6. My eldest son is very good at studies.
7. The procession is marching towards the court.
8. All the teachers are sitting in the staff room.
9. The students are moving to their classrooms.
10. He is on the committee.

Exercise 2.

Underline all the dependent (subordinate) clauses in the following sentences.

1. This is the girl who stood first in her class.
2. This is the ring which I bought yesterday.
3. The house which I want to purchase is located in Abdullah city.
4. The lady who lost her umbrella yesterday is very much upset.
5. I can guide you to the person who can help you in your studies.

Exercise 3

Complete the following sentences by using dependent (subordinate) clause.

1. Could you please guide me to the restaurant……..
2. Do you know the boy……..
3. These are the books ……
4. The car……is mine.
5. This is the person whom ……

Clause:

It is also a group of words which may or may not make complete sense. It depends whether it is a dependent clause or independent clause. An independent clause can make complete sense but a dependent clause cannot. Unlike a phrase, a clause has a subject and a predicate.

For example: He saw a monkey that was dancing.

He saw a monkey. (Independent clause)

Which was dancing. (Dependent clause)

Exercise 1.

Underline independent clauses and circle dependent ones.

1. I have bought a ring which is made of gold.
2. I know a man who can double your money.
3. I know some teachers who are very committed with their profession.
4. The boy, who topped the board, is visiting our school today.
5. The politician, that are not loyal with their country, are always despised by their nation.

Nouns and its types.

Noun is the name of a person, place, thing or idea.

Aslam, Jeddah, table, chair, honesty etc.

Types of Noun:

Proper Noun: it is the name of a specific person, place or thing.

Allama M. Iqbal, Jeddah, Albaik

Common Noun: It is the name of a person, place or thing which is shared by all.

Student, city and table.

Concrete Noun. It is the name of something which we can see and touch.

Table, chair, pen, book etc.

Abstract Noun: it is the name of some quality, state or action. It is something which our senses cannot perceive. For example, fight, childhood, or wisdom.

Compound Noun: it is made up of two or more words. For example: brother in law, story book. American cakes, sister in law.

Collective Noun: it is the name of a group of persons or things taken together and considered as a whole. For example. Class, committee, jury, army, police and family.

Exercise 1

Read the following sentences and say whether the italicized nouns are common, proper, collective or abstract.

1. His bravery is memorable.
2. Allama Iqbal rendered valuable services to wake the Muslims from a deep slumber.
3. Our class is located on third floor of the school.
4. Ahmed is a hard working student.
5. Students do not take as much interest in their studies as they should.
6. I like honesty.
7. A teacher must be sincere with his profession
8. Cleanliness is required in the kitchens.
9. My father is a teacher.
10. Mr. Mansour is our principal.

Exercise 2

Circle the proper nouns and underline the common nouns in the following sentences.

1. MS Hina taught us how to make cakes.
2. My friend finished the construction of house last Friday.
3. Every weekend we play football.
4. Neelam Ghar used by be a very famous show a few years ago.
5. Jinnah Garden is worth seeing with a lot of visitors.

Exercise 3

Circle the proper nouns and underline the collective nouns.

1. Ali is guiding our class to the seaside.
2. Mr. Hamid along with his family is coming to visit us this weekend.
3. Syed Asim Munir is the chief commander of Pak Army.
4. 10^{th} brown is taught by Mr. Junaid.
5. The committee will be chaired by Mr. Tahir.

Pronoun and its kinds.

What is a pronoun?

A pronoun is a word that is used in place or a noun or noun phrase.

Types of pronoun:

Personal pronouns:

Personal pronouns are used to replace persons, places or things to make sentences shorter and clearer.

I, we, you, he she, it and they

Relative pronouns:

A relative pronoun is used to connect and phrase or clause to a noun or pronoun. The most common relative pronouns are as follow. Which, that, who, whose whoever whomever and whom.

Reflexive pronouns:

A reflexive pronoun is used as an object of a verb that refers to the same person or thing as the subject of the verb. It is used when the subject and object of a sentence are the same person or thing. It is used when the action returns to the doer.

Examples: myself, ourselves, yourself, yourselves, himself, herself, itself, themselves.

Emphatic/intensive pronoun:

Emphatic pronoun refers back to the subject in order to add emphasis. Emphatic pronouns are identical in appearance to the reflexive pronouns.

Examples: myself, ourselves, yourself, yourselves, himself, herself, itself, themselves.

Indefinite pronouns:

Indefinite pronoun refers to some unspecified person or thing.

Examples: all, another, any, anybody, anyone, both, each, everybody, everyone, anything, everything, few, many, more, somebody, someone etc.

Exercise 1

State what type of pronoun is the underlined word?

1. I like my students……
2. Our team will win the match……

3. You must work hard to get excellent success in the exam……..
4. This is the book which I was looking for……
5. The lady who lost her umbrella was very upset……
6. He is the person whom you wanted to see……
7. This is the ring that I want to present to my wife on her birthday……
8. She cut herself with a knife…….
9. He fell and hurt himself……..
10. They should help themselves.
11. I love myself.
12. They know themselves.
13. Someone should go and call the security guard.
14. I am hungry. Please give me something to eat.
15. Somebody has stolen my book.
16. I myself saw her in the market today.
17. She herself will admit someday.
18. They themselves are very hard working. You need not to warn them.
19. You yourself will realize some day.
20. He himself came to pick me up.

Verb:

Verbs are words which express actions, feeling or states of being. There are three types of verbs: Actions verbs, linking verbs, and helping verbs.

Action Verbs: Action verbs are words that express action. (Play, read, write etc.) Actions verbs can be both either transitive or intransitive.

Transitive Verb: it is a verb which needs an object to receive an action. For example. He helped me. He supported his brother in his studies. Helped and supported are transitive verbs.

Intransitive verb: it is a verb which does not need an object to complete sense. For example: he went away. The sun shone brightly. Went and shone are intransitive verbs.

Linking verbs: A linking verb connects the subject of a sentence to a noun or adjective that renames or describes the subject. This noun or adjective is call the subject complement.

Example: Yaseen became a business man.

Helping verbs: helping verbs are used before action or linking verbs to convey additional information regarding aspects of possibility (can or could) or time (was, Is etc.)

The following words, called modals, always function as helping verbs:

Can	May	Must	Shall	Will
Could	Might	Ought to	Should	would

Examples: he could learn to speak English fluently.

He will narrate a story today.

Exercise 1

State whether the underlined words are transitive or intransitive verbs.

1. They won the match.
2. He created fuss today.
3. He always cuts jokes.
4. He will help us through thick and thin.
5. He played a trick to make money.
6. The children enjoyed a lot in the park
7. Where did he go today?

Exercise 2

State whether the underlined word is an action verb or non-action verb.

1. The children are playing football.
2. They love on another.
3. I hate chemistry.
4. They help each other in their studies.
5. He lent his book to me for a week.
6. I am really grateful to him.
7. They buried the hatchet and became friends one again.
8. He wrote an email to his mother.
9. She was very happy on reading her son's email.
10. I enjoyed the party.

Figures of speech:

Alliteration

Alliteration is the repeating of consonant sounds right next to each other, which creates a memorable or melodic effect.

Example: She sells seashells by the seashore.

Metaphor

A metaphor is the direct comparison of dissimilar things to create more vivid imagery or understanding. A metaphor is used to make a comparison without using the words “as and like.”

Example: He was an onion; to understand him, she had to peel back the layers.

Personification

Personification is assigning human attributes to nonhuman things.

Example: The floorboards groaned under the weight of each step. The flowers greeted me with a smile. The sea was very angry that day.

Simile

A simile compares two dissimilar things using “like” or “as.” The goal of simile is to give the reader a more vivid understanding of something.

Example: It was the first real day of summer, and by the time she came back indoors, she was as red as a tomato. She looked as white as snow. He is generous like Hatim Tai.

Exercise 1

State which figure of speech do the following sentences have?

1. The daffodils were tossing their heads in glee.
2. A black and brown bird was flying over our heads.
3. My friend is a lion as he can knock out his contestants easily.
4. In her white dress, she looked like a queen.
5. A teacher is like a father or mother for the students.

Do as directed:

1. He wrote an email to his mother. (change into negative)
2. She did not go to school today. (change into interrogative)
3. They will have reached home by now. (change into negative)
4. They do not work hard. (change into imperative)
5. We promise to help you through thick and thin. (change in negative)
6. They will have been constructing their house for the last 5 years. (negative)
7. Do it. (change the voice of)
8. Why are the prices increased so rapidly? (change the voice of)
9. He said to me, “where are you going now?” (change the narration of)
10. Did they pass the exam? (change into present tense)

ADJECTIVES

“An adjective is a part of speech that is used with a noun to describe or point out, the person, animal, place or thing which the noun names, or to tell the number or quantity, is called an ADJECTIVE”.

E.g.: He is a brave boy.

E.g.: There are twenty boys in this class.

In the examples mentioned above all the words in bold are adjectives.

KINDS OF ADJECTIVES

Following are the kinds of adjectives:

1. Adjective of quality shows the kind or quality of a person or thing.

E.g. : Lahore is a large city.

E.g.: She is a noble girl.

2. Adjectives of quantity show how much of a thing is meant.

E.G.: I ate some rice.

E.g.: you have no sense.

3. Adjectives of number show how many persons or things are meant.

E.g. The book has four chapters.

E.g. All men must die.

E.g. He made several mistakes.

4. Kinds of Adjectives of number

Adjectives of number are of three kinds:

(I) Definite Numerals:

Cardinals (one… two... three)

Ordinals (first, second, third)

(ii) Indefinite Numerals: (All, many, some, and any)

(iii) Distributive numerals: (Each, Every)

4. Demonstrative Adjectives: (This, that, these, those, such) E.G: This book is mine.

These flowers are very beautiful

That boy was not seen again.

Those were flown very high.

5. Interrogative Adjectives:

These are adjectives that are used with nouns to ask questions.

Note the underlined words.

Which way will you go?

Whose pen is this?

What name was written on the book?

6. Possessive Adjectives.

There are adjectives that are used with the nouns to show possession.

E.g. MY, Our, Her, His, Their, Its

This is my book.

7. Proper Adjective.

These are the adjectives that describe a things taken separately or in separate lots.

A Pakistani food.

7. Distributive Adjective

E.g.: Every, Each, All, Both, Either sand neither

Every circle is round.

Every girl had a blue hair ribbon.

Each boy received a prize.

Each plant had a different colour.

All men are created equal.

All bread is made using yeast.

Both dishes taste delicious.

Either dress is suitable for the party.

Neither road leads to Lahore.

8. Degrees of Adjectives

I- Positive degree (e.g.) Hamid is a strong boy.

ii- Comparative degree. (e.g.) Hamid is stronger than Aslam.

iii- Superlative degree. (e.g.) Hamid is the strongest of all the boys in class.

9. Descriptive Adjective.

The descriptive adjective describes the kind or quality of the noun the pronoun it modifies.

E.g. I have fluffy cat.

Lahore is a large city.

Table is brown in colour.

10. Emphasizing Adjectives

E.g.: Mind your own business.

This is very sweet I want.

Exercise of adjectives

Mention the adjectives in the following sentences and identify the kind of adjective.

1. The ship sustained heavy damage.
2. I have called several times.
3. Every dog has his day.
4. A live ass is better than a dead lion.
5. Every man has his duties.
6. Say the same thing twice over.
7. Several persons were present at the time.
8. He is a man of few words.
9. Neither party is quite in the night.
10. What time is it?
11. Which pen do you prefer?
12. The way was long, the wind was cold, and the minstrel was infirm and old.
13. He comes here every day.
14. I have not seen him for several days.
15. There should not be much talk and little work.

EXERCISE NO: 2

Fill in the blanks with appropriate adjectives from the brackets.

1. I often get……. In new social situations. (Nervous, shyly)
2. I am …….. around new people. (Confident, easily)
3. I often feel …… before a party. (Excited, nervously)
4. I feel ……. when I am nervous. (Uncomfortable, fast)
5. I try to be a ……. Person. (Nicely, friendly)
6. I tell jokes……. (Bad, well)
7. I give my opinion when I feel …… about something. (Strong, strongly)
8. I hope other people think I look …….. (Attractive, attractively)
9. I like people who are ……. than I. (tall, taller)
10. it's never a problem for me to remember people's name. I do that …… (Easily, automatic)

ADVERBS AND KINDS OF ADVERB

ADVERB: "An adverb is a part of speech that modifies a verb, adjective, and another adverb.

The following are the kinds of adjectives:

1. The Adverb of manner: It describes how an action is performed or how something happens.

E.g.: Ali read quietly. (Ali read. How? Quietly…..manner of reading)

2. The Adverb of place: It provides information about the location of an action, position, distance and direction. It comes after the main verb.

E.g. Go downstairs and open the door.

3. Adverb of time: It describes when something happens. It often comes in the end of a sentence.

E.g.: I have to run, but I will see you tomorrow.

4. Adverb of degree: It is used to qualify verbs, adjectives or adverbs by expressing extent of degree. (Some common adverbs of degree includes "extremely", "absolutely", "slightly", "quite" and "enough".)

E.g.: The medicine had a very positive effect.

5. Adverb of frequency: It describes how often something happens. This adverb can divided into two categories based on how specific they are.

(i)Adverbs of definite frequency (e.g. “hourly”, “weekly “, and “daily”.) All these words give a more precise description of how often something happens. They always take place at the end of a sentence.

E.g. I check my email hourly.

(ii) Adverb of indefinite frequency: (e.g. “always”, “sometimes” and “never”.) these words give an idea of how often something occurs, but they don’t give an exact timeframe. Adverbs of indefinite frequency are usually placed before the verb.

E.g. I never tell a lie.

6. Adverbs of purpose (also called “Adverbs of reason) these adverbs help to explain “WHY”, something is the case. Many adverbs of purpose used as Conjunctive Adverbs.

E.g. The Company made a huge profit; therefore, the employees were given raises.

Since you are busy, I will call you later.

EXERCISE NO 1

Name the kinds of Adverbs which are ITALICISED.

1. She could not dance well. ----------
2. She was standing outside. ----------
3. He will be returning soon. ----------
4. Leopard runs very fast. ----------
5. The thief ran away. ----------
6. The children sang merrily. ----------
7. I never meant any harm to him. ----------
8. They looked for the child everywhere. ----------
9. Always try to do your best. --- ----------

10. The child slept quite soundly. ----------
11. He often visits him. ----------
12. I go for swimming daily. ----------
13. This is good enough for my purpose. ----------
14. He faced the situation boldly. ----------
15. He was found nowhere. ----------

EX NO 2

Insert the Right Kind of Adverbs in the following sentences and also mention their kinds.

1. Don't stand_____ _____
2. The horse ran_____ _____
3. He should work_____ _____
4. They looked for him _____ _____
5. She is _____ proud.

_____

6. The girl replied _____ _____
7. He read the book _____ _____
8. We should finished it _____ _____
9. She waited for her turn
10. My uncle _____ goes to Lahore. _____
11. We will have a holiday _____ _____
12. His mother is waiting_____ _____
13. He will not go there _____ _____
14. They laughed _____ _____
15. The boy beat the dog _____.

_____

¬¬¬¬¬¬¬¬¬¬¬¬¬¬¬¬¬¬¬¬ ¬¬¬¬¬¬¬¬¬¬¬¬¬¬¬¬¬-

_____
_____

e.g. To jump is fun. (Noun; as subject of the verb is)

I like to ski. (Noun; direct object of the verb like)

She had a suggestion to offer. (Adjective modifying suggestion)

He called to warn her. (To warn is used as an Adverb modifying the verb called)

VERBALS

The three verbal—gerunds, infinitive and participial—are formed from verbs, but are never used alone as action words in sentence. Instead, verbal functions as nouns, adjectives or adverbs.

1. **The gerund** ends in –'ing' and functions as a noun. E.g. Jumping is fun. (Jumping is a noun as a subject of the verb "is") He liked jumping. ("Jumping" is a noun used as the object of the verb "liked".

2. **The infinitive** is the base form of a verb with" to". Usually it functions as a noun, although it can also function as an adjective or adverb.

3. A participle is a verb that ends in "ing" (present participle) or—Ed—t, d, --en, n (past participle). Participle may function as adjectives, describing or modifying nouns.

E.g. The dancing parrot entertained the crowd.

The wrecked sailboat washed up on shore.

But participles have another function. When used with helping verbs such as to be and to have, they are action verbs and form several verb tenses.

She is thinking of the children.

EXERCISE NO I Gerund Function

A. Gerund. Find out the gerund and identify its function.

1. I am found of playing video games. ------ ---------- ----------

2. We enjoy hanging out. ----
---------- ----------

3. Swimming is a good exercise. ---
---------- ----------

4. I am excited to hear more about skiing. ----------
--- ----------

5. Aslam loves reading as it takes him to distant lands. ----------
--- ----------

EX B: PARTICIPLES: Look for the participles and the word it modifies

Participle
The word it modifies

1. They found torn documents in the office. _____
_____

2. Where do broken hearts go? _____
_____

3. My friends believes in a wishing well. ----------
----

4. The estimated price of the house is worth 1 million. ---------- --
----

5. Employers look for skilled workers nowadays. ----------

C. INFINITIVES: Fill in the blank with suitable infinitive.

1. We used a calculator ----------the math problem.
2. My eldest sister plan----------medicine in college.
3. We told her ----------a doctor immediately.
4. Do you want ----------badminton now?
5. After a day's work, father watches TV ----------.

CONJUNCTIONS

Types of conjunction:

1. Coordinative conjunction-- used to combine two independent clauses. They are: “For, and, nor, but, or, yet,”.

E.g. He scored good marks but he is not satisfied.

2. Subordinating conjunction: --- used to combine an independent clause and dependent clause. They include:” After, although, as, as if, as long as, as much as, as though, because, before seven, even if, when, whenever, where”.

E.g. As long as you want to stay here, you can stay.

3. Correlative Conjunction-- Used to combine two phrases or parts of the sentence which have equal importance within a sentence.

4. Conjunctive adverbs : These are much like the coordinating conjunctions when they come to their function. Coordinating conjunction connect independent clauses and so do conjunctive adverbs. Moreover, Conjunctive adverbs are preceded by a semicolon and are usually followed by a coma.

The most common conjunctive adverbs are:” accordingly, also, besides, consequently, likewise, meanwhile, nevertheless, next, otherwise, still, therefore, and then”.

E.g. : The heavy rain flooded the creek; therefore, we were not able to return home.

1. Ex of coordination conjunctions

Complete these sentences with the conjunction.

1. She says that she loves her dog, _____ she never plays with it.
2. You must study for the test, ---------- you will fail.
3. Mother said we must wash the dishes --------- clean our room.
4. Would you like apples, ----------do you prefer bananas?
5. I feel sick, ---------I can still work.

6. I am a vegetarian, ---------- I don't eat any meet.
7. I was shopping all day, ------ I did not have time to do my homework.
8. I like to eat healthy food, ---------I find it very difficult.
9. I was late for school, ---------- my teacher made me stay after class.
10. He took me to the shop, ---------- bought me a new dress.

2. Exercise of subordination conjunctions

Fill in the blanks with suitable conjunctions.

1. Mother does not stop worrying----------we return home.
2. Amina arrived at school---------the bell was rung.
3. Kareem left the party---------- the guest of honors arrived.
4. We went to the pool------- it was a hot day.
5. ---------- You do not understand what he taught, you ask questions.
6. You will not pass your examinations-----you study diligently.
7. My father asked me -------I was leaving.
8. Ali took Ahmad to the doctor------he was not feeling well.
9. ---------- eating her dinner, Hassan did his homework.

PREPOSITIONS

"A Preposition is a word or group of words used before a noun, pronoun, or noun phrase to show direction, time, place location, spatial relationship, or to introduce an object."

E.g. "in, of, at, to, under, over, since, for, on, etc……"

Ex 1.Fill in the blanks with suitable prepositions.

1. The boys go -------- school.
2. Ali looked ---------- the window and saw his friend.
3. The dog jumped----- the wall.

4. The rat was running-------the flower bed.
5. Sana drove ------that village yesterday.
6. We will stop---------- the corner.
7. It is far ---------- here.
8. The helicopter----------the hills.
9. Aslam climbed--------the mountain.
10. You may take the book------my table.

Ex.2 Fill in the blanks with "since, for, on, in, at,"

1. I have a meeting ------15 April.
2. I always wake up-------6: am.
3. We always go to Lahore-------May.
4. It's his birthday-----Monday.
5. I have been in the village ------Monday.
6. Amina will work with them------one month.
7. I will be back---------an hour.
8. He retired -------October.
9. I have been living here-------one year.
10. The weather--------- is nice.

CONDITIONAL clause

A conditional clause is an adverbial clause used to express a condition or hypothesis- imagined or factual situation." If a sentences has one or more conditional clauses, along with a main clause expressing the result of the hypothesis, then we can call it a conditional sentence." Conditional clauses are referred to as" if clauses" as they generally starts with the word" IF".

There are four types of conditional sentences:

1. Zero conditional clause: It expresses actions, events or ideas typically known as the truth. In this type both the clauses are in present tense.

E.g. The water freezes if it is cooled. (the underlined part is the" IF clause".)

2. First conditional clauses are the clauses that express conditions in which the result is likely to happen in the future." The first conditional clauses are in the present tense, but the main clauses in the sentence are in the future tense".

E.g. IF IT RAINS, I will not go out. (here, If it rains, is the conditional clause or" IF clause")

3. Second conditional clauses are the clauses that express completely unrealistic results. The Second Conditional Clauses are placed in the simple past tense, and the main clauses in the sentences are in the perfect tense.

E.g. "If I could fly, I would go anywhere I wish." (here If I could fly, is the" IF" clause and rest of the sentence is in perfect tense.

4. Third Conditional clauses are the clauses used in a sentences to show the present situations would be different if something different had happened in the past.

E.g. "If she had told me about her illness, I would help her with money."(Here" If she had told me about her illness" is conditional or IF clause)

Exercise on conditionals

EX 1 Fill in the blanks using ZORO conditionals clauses.

1. If ------- (rain), the streets------- (get) wet.
2. My mother-------- (get) angry when I ------- (not do) my homework every day.
3. If you (run) too fast, you (get) really exhausted.
4. I cannot ---------- (understand) Amina when she (speaks) so quickly.
5. If Junaid (miss) the early train, he------ (be) late for school.
6. When you (turn on) an electrical appliance, the electricity (go) up.

Ex 2: fill in the blanks using FIRST TYPE OF CONDITIONAL CLAUSES.

1. If I ------- (go) out tonight, I ------ (go) to the cinema.
2. If you ------- (get) back late, --------- (be) angry.

3. If we ---------- (not see) each other tomorrow, we ---------- (see) each other next week.

4. If he ------- (come), I ---------- (be) surprised.

5. If we ---------- (wait) here, we---------- (be) late.

6. She --------- (stay) in London If she ---------- (get) a job.

EX 3: Fill in the blanks using SECOND TYPE of conditional clauses.

1. If we -------- (be) in Lahore today, we-------- (be) able to go to the concert in Shalimar Baugh.

2. If I ------- (win) the lottery, I---------- (give) a lot to charity.

3. My parents ---------- (not\drive), if public transport ---------- (be) reliable.

4. If I -------- (be) you, I ---------- (not\ride) a motorcycle.

5. She ---------- (not\call) you if she------- (not\want).

6. If you------ (go) by bike more often, you ---------- (not\be) so flabby.

EX 4: Fill in the blanks using THIRD TYPE of conditional clauses.

1. If you---------- (not\be) late, we---------- (not\miss) the bus.

2. If she ---------- (study), she---------- (pass) the exam.

3. If she ---------- (go) to university, she ---------- (study) English.

4. If he -------- (take) the job, he ---------- (not\go) travelling.

5. She---------- (pass) the exam if she---------- (study) at home.

6. We ---------- (not\get) married if we ---------- (not\go) to the same university.

Worksheet: Transitional Devices

Definition: Transition words are used to link ideas within sentences, and sentences within paragraphs. Used correctly, transition words make writing easier to understand and more mature.

For instance, Even though, instead, as much as, whereas, therefore, although, otherwise etc. We have a mouse in the house therefore, we should get a cat.

Transitional devices are words or phrases that help carry a thought from one sentence to another, from one idea to another, or from one paragraph to another. The most basic transition words are conjunctions that join words, phrases or clauses together. For example, words like and, but and or can connect two sentences together.

- I ran home, and I got there just in time. (and is a transition word that connects the two occurrences equally)
- I ran home, but I was still late. (but introduces a contrast)
- I could run home, or I could stay at school and work. (or presents two different options)
- First, we are going fishing. Then, we will get ready for dinner. (describe the way of action)

Paragraph Without Transition Words	*Paragraph With Transition Words*
Drawing is all about taking the time to master each step. Mastering the art of drawing doesn't happen in a day. It's a skill that takes daily practice. You need dedication to hone your craft. It's important not to burn yourself out. You need to stick with it.	Drawing is all about taking the time to master each step. In other words, mastering the art of drawing doesn't happen in a day. Furthermore, it's a skill that takes daily practice as well as dedication to hone your craft. It's important not to burn yourself out, but you need to stick with it.

Exercise: Read each sentence carefully and choose the most appropriate transition to make a new complete sentence.

1. Megan got into a car accident. Furthermore/As a result, her insurance rate increased.

…….

2. Michael is very athletic and plays on the school basketball team. However, /In addition, his brother just stays at home and plays video games all day.

……

……

3. There are many occupations today. Such as/For Example, you can become a doctor, engineer, teacher, artist, athlete, musician, or chef, just to name a few.

……

……

4. The US government has been spending its money recklessly for too long. Furthermore/As a result, the plans that Congress proposes are destined to put the nation at great economic risk in the future.

……

……

5. Getting a college degree is important. In conclusion/More importantly, building a good network of friends is crucial to future success.

……

……

6. Hawaii is a beautiful place to live. In addition, /On the contrary, Siberia is a very inhospitable location.

……

7. Eating well will help you live a healthier life. Moreover/As a result, exercising every day is also highly recommended.

……

8. Do you enjoy completing these grammar exercises? Then/Yet, you should be able to improve your writing skills in no time!

……

9. Without getting a college degree, it will be difficult to get a job. Moreover/However, some will say, "It's not what you know, but who you know."

……

10. The economy looks like it is improving. Therefore/However, with unemployment still very high, we are far from passing through the recession.

……

Exercise: Select the most appropriate transitions in the following passage: until that point, then, but, at first

…….Johnson thought people in the sugarcane fields could be eating so much of the plant itself that they were generating high levels of uric acid and oxidative stress in their kidneys. …., he calculated, even sucking on sugarcane all day wouldn't produce enough fructose to cause disease. ……. he discovered that, under certain conditions, the body processes regular carbohydrates to make its own fructose. And one of the triggers of this deadly alchemy is simple dehydration. ……., nephrologists had thought that dehydration could only cause acute kidney injury, but Johnson's findings put a new spin on the role of insufficient water intake. Could dehydration day in, day out be causing continuous fructose overproduction that, in turn, could be leading to long-term kidney damage?

Worksheet: Correct use of verbs

What is a verb?

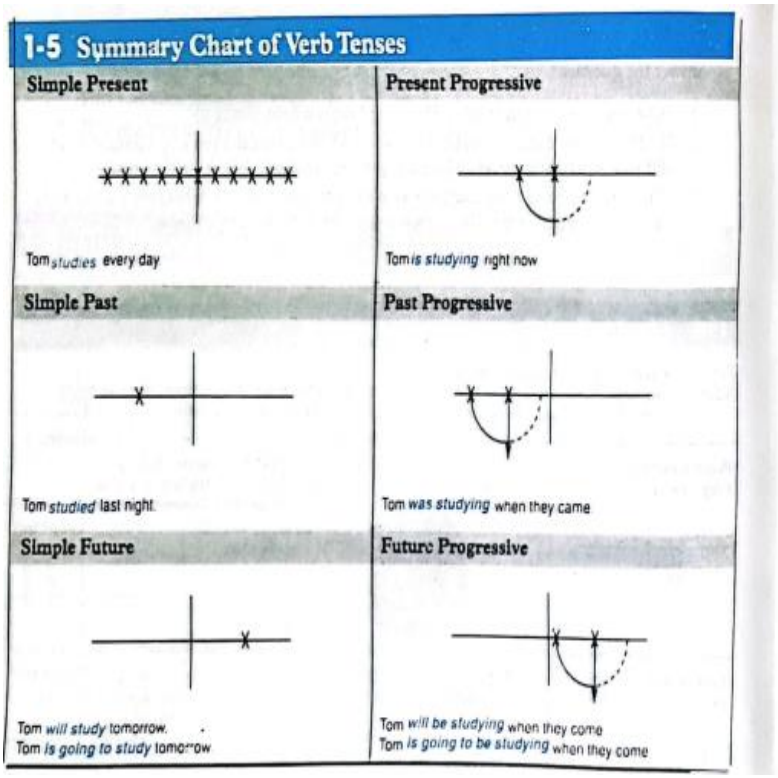
A verb shows an action in a sentence. For example, Ali is running very fast.

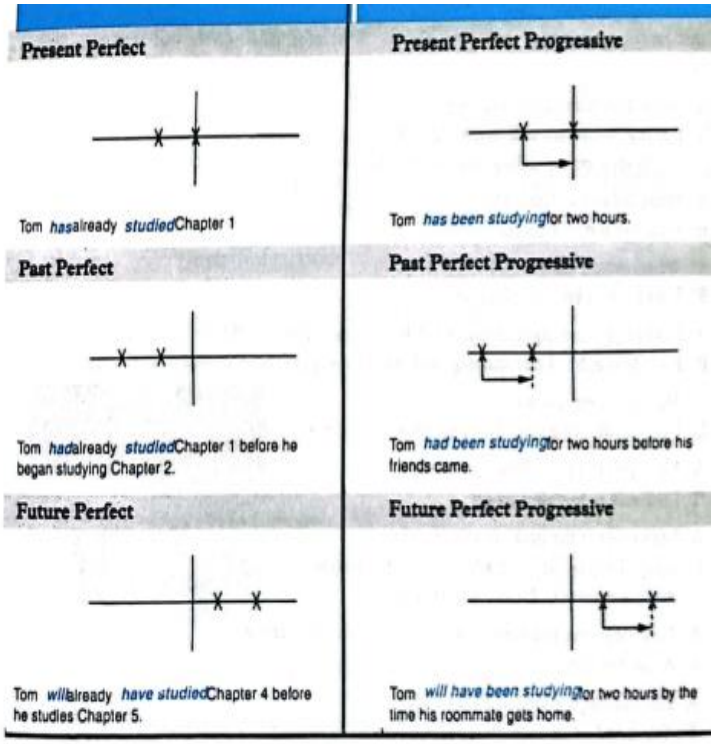
Correct use of verbs:

In English grammar, the verb is often regarded as one of the most crucial building blocks. It is one of the fundamental principles that govern a sentence. Verbs, which serve as the "heart" of sentences and clauses, reveal what the subject is doing or how they are feeling. Using verbs correctly means choosing the correct form. A verb must agree with its subject in number, person and gender. It should match the subject of the sentence. For example,

- He listen carefully in class. (Wrong)
- He listens carefully in class. (Right)

The following is the basic diagram of verb tenses, which is used in all tense descriptions.





Exercise-1: Use the correct form of verbs given in parentheses.

1. He (lie) in bed for many days.

……..

2. I (write) a letter to my father last week.

……

3. The boy (fine) for not doing homework.

……

4. My friend (come) to me tomorrow.

……

5. The workers (observe) strike on Monday.

……

6. A few of the questions (be) a little tricky.

…….

7. The government (introduce) the urgently needed social and economic reforms.

……

8. The whole nation (slam) at the leader's shameful conduct.

…….

9. She reduced it to splinters before I (get) it out again.

……

10. The train (leave) the station when he reached there.

……

11. The man (mount) his camel and went away.

……

Exercise # 2: Use the correct form of verbs given in parentheses.

1. Why (be) the pen stolen from my bag.

……

2. You (punish) if you miss behave.

……

3. If I (be) the principal, I would bring upon many changes.

   ……

4. He (reach) home by this time.

   …….

5. Many office friends (come) yesterday.

   …….

6. Charity (begin) at home.

   …….

7. She already (take) the examination.

   ……..

8. She seldom (attend) concerts.

   ……...

9. We (play) together since childhood.

   ……

10. Before it (stop) raining, we (reach) the station.

Worksheet: Types of Sentences

There are four different kinds of sentences in English grammar, and they are as follows:

1. **Declarative or Assertive Sentence**: A declarative or assertive sentence is a sentence that is informative and ends with a period or a full stop.

Examples:

- I like fantasy novels.

- There is a white house around the corner.

2. Imperative Sentence: An imperative sentence is a sentence that expresses a command, an order, or a request.

Examples:

- Please pick up the notes when you come.
- Close the door.

3. Exclamatory Sentence: An exclamatory sentence is one that is used to express sudden and strong emotions and ends with an exclamation mark. You can also use interjections to form exclamatory sentences.

Examples:

- Wow, how good is this!
- That was a great match!

4. Interrogative sentence: An interrogative sentence is one that is used to question something and ends with a question mark.

Examples:

- What is the name of the movie you were watching?
- Can I come with you to the book fair?

5. Optative Sentence: Optative sentences are a type of sentence through which one could express a prayer, keen wish, blessing, or curse.

Examples:

- May God bless you!
- Wish you a very successful married life.

Exercise: Circle the right kind of sentence.

1. Please leave your footwear outside.

Declarative Imperative Interrogative Exclamatory

2. Will you wait here?

Declarative Imperative Interrogative Exclamatory

3. Where have you been all this while?

Declarative Imperative Interrogative Exclamatory

4. We will not tolerate this.

Declarative Imperative Interrogative Exclamatory

5. I am your friend.

Declarative Imperative Exclamatory Interrogative

6. My sister lives in Mexico.

Declarative Interrogative Imperative Exclamatory

7. What did you do then?

Interrogative Declarative Imperative Exclamatory

8. Do be a bit more careful.

Declarative Imperative Interrogative Exclamatory

9. Never speak to me like that again.

Declarative Imperative Interrogative Exclamatory

10. Always remember what I told you.

Declarative Imperative Exclamatory Interrogative

11. The ball rolled slowly into the goal.

Declarative Interrogative Exclamatory Imperative

Simple Sentence:

A simple sentence is a group of words that has a subject, a verb, and delivers a complete thought. Another name for a simple sentence is an independent clause.

For example:

- I am a student.

In this sentence, Subject: I and Verb: am

- I can speak English.

In this sentence, Subject: I and Verb: speak

Compound Sentence: A compound sentence has two or more independent clauses joined by a coordinating conjunction.

For example:

- I am a doctor. My friend is a teacher.

These are two independent clauses and can stand on their own; however, to form a compound sentence we will add a conjunction.

- I am a doctor, and my friend is a teacher.
- She tried to lift her bag but it was too heavy.
- She did not bring her lunch, so she ordered through the app.
- I want to go to work, but I am tired.

Complex Sentences: A complex sentence has a dependent clause and an independent clause joined by a conjunction.

For example:

- When I got home from school yesterday

This is a dependent clause as it does not express a complete thought and cannot stand on its own. To make it complete we have to add an independent clause.

- When I got home from school yesterday, I watched TV for an hour.
- I love to travel, because I get to meet a lot of interesting people.

Compound-complex sentences: A compound-complex sentence is comprised of at least two independent clauses and one or more dependent clauses. For example, Amina forgot her friend's birthday, so she sent her a card when she finally remembered.

Exercise:

1. The girl looked at her brother and smiled.

Simple Complex Compound

2. Janet went to the library to borrow some books.

Simple Complex Compound

3. The water was so cold that we could not swim in it.

Simple Complex Compound

4. The little girl started crying when she couldn't find her toy.

Simple Complex Compound

5. I live in a large city.

Simple Complex Compound

6. As soon as the bell rang, the children rushed out.

Simple Complex Compound

7. We saw a film which was based on the life of Nelson Mandela.

Simple Complex Compound

8. His crude remarks offended me.

Simple Complex Compound

9. Though Ahmed prefers watching horror movies, he rented the latest spy thriller, and he enjoyed it very much.

Compound-complex Complex Compound

Pakistan International School, Al-Aziziah Jeddah (K.S.A)
Federal section Boys

Subject: English Grade X

Worksheet

Modal Verbs and their functions

Modal verbs show possibility, ability, or necessity. Because they are a type of auxiliary verb (helping verb), they are used alongside the infinitive form of the main verb of a sentence. Common examples of modal verbs include can, should, and must.

How are modal verbs used?

Modal verbs are used to express certain hypothetical conditions, such as advisability, capability, or requests (there's a full list in the next section). They're used alongside a main verb to inflect its meaning.
Consider the difference between these two examples:
I swim every Tuesday.
I can swim every Tuesday.
The first example is a simple factual statement. The speaker participates in a swimming activity every week on Tuesdays.
The second example uses the modal verb *can*. Notice how the meaning changes slightly. The speaker does not necessarily swim every Tuesday; they're saying that they are capable of swimming every Tuesday or that the possibility exists for them to swim every Tuesday.

Modal verbs are quite common in English; you've seen them in action hundreds of times even if you didn't know what they were called. The most frequently used ones are:

- *can*
- *may*
- *might*
- *could*
- *should*
- *would*
- *will*
- *must*

There are other, less common modal verbs. Some—like *shall* and *ought*—are rarely used any longer. There are also verbs that can function either as main verbs or as modal auxiliaries depending on the context; *got*, *need*, and *have* all behave like modal verbs in the common colloquial expressions *got to*, *need to*, and *have to*. Some modal verbs express very specific conditions that don't come up often, like *dare* in its modal form in "Dare I ask?" The word *used* in the idiomatic phrase *used to*, as in "I used to be an English student too," behaves like a modal verb with only a past tense form.

When are modal verbs used?
What special conditions do modal verbs indicate? Here's a list, along with examples:

Likelihood

Some things seem likely to be true but can't be stated as definite facts. In these cases, you can use the modal verbs *should* and *must* to show probability without certainty.
Examples:
Her parents must be so proud.
My baby brother should be asleep by now.
Possibility

In a situation when something is possible but not certain, use the modal verb *could*, *may*, or *might*.

Examples: Judging by the clouds, it might rain today.
She may become the youngest pro soccer player ever.

Ability

The modal verb *can* expresses whether the subject of a sentence is able to do something. Likewise, the negative form, *cannot* or *can't*, shows that the subject is unable to do something.

Examples: She can speak three languages but none of them well.
You can lead a horse to water, but you can't make it drink.

Permission

If you want to ask permission to do something, start your question with *can*, *may*, or *could*. Traditionally, *may* is considered more formal and polite usage for permission; if you ask "Can I go to the bathroom?" it could be misinterpreted as "Do I have the ability to go to the bathroom?" However, in modern informal usage, *may* and *can* are both perfectly acceptable options for describing possibility or permission.

Examples: Students, you may leave early today.
Could I play too?
Request

Similarly, if you want to ask someone else to do something, start your question with *will*, *would*, *can,* or *could*.

Examples: Would you get that box off the top shelf?
Will you turn that music down?

Suggestion/advice

What if you want to recommend a course of action but not command it? If you're giving suggestions or advice without ordering someone around, you can use the modal verb *should*.

Examples: You should try the lasagna.
That guy should wear less cologne.

Command

On the other hand, if you want to command someone, use the modal verbs *must*, *have*, or *need*. With the latter two, the main verb does not drop the word *to* from its infinitive form.

Examples: You must wash your hands before cooking.
You need to be here before 8:00.

Obligation or necessity

Modal verbs can express a necessary action, such as an obligation, duty, or requirement. Likewise, the negative forms express that an action is *not* necessary. Use the same modal verbs as with commands: *must*, *have*, and *need*.

Examples: We have to wait for our boss to arrive before we open.
You don't need to come if you don't want to.

Habit

To show an ongoing or habitual action—something the subject does regularly—you can use the modal verb *would* for the past tense and *will* for the present and future. The phrase *used to* is also acceptable when you're talking about a habit in the past.

Examples: When I lived alone, I would fall asleep with music.
I will arrive early to every meeting and leave late.

Exercise 1 – Fill in the blanks with the correct modals

1. I __ arrange the flowers for the bouquet. (may/can)
2. __ I borrow this pen from you? (may/might)
3. The teacher __ ask you to bring the homework. (might/can)

4. According to the weather forecast, it ___ snow heavily tomorrow. (may/shall)
5. Raj hasn't studied well. He __ fail his exam. (might/shall)
6. You __ follow the traffic rules. (may/must)
7. It __ be difficult to live amidst war. (should/must)
8. My mother __ scold me if I don't go back on time. (will/may)
9. We ___ take care of our parents. (ought to/ could)
10. I __ visit the local grocery store soon. (shall/can)
11. You ___ be punctual. (should/ought)
12. One __ repay all their debts. (must/ought to)
13. __ you show me the road to the market? (could/might)
14. The child __ be taken to hospital immediately. (must/might)
15. ___ you have hot chocolate? (shall/will)

Exercise 2 – Identify the modal verb in the following sentences

1. My teacher (can/must) speak four languages.
2. (May/should) I use your mobile to call my mother?
3. You (must/could) not speak loudly in the hospital.
4. I (could/must) use a little help in packing all these clothes.
5. Madam (could/may) you repeat what you said?
6. I (can/might) not be able to make it tonight.
7. Sheldon (ought to/must) study more if he wants to pass the test.
8. (Can/May) you come to the prom with me?
9. My parents (shall/ought to) arrive soon.
10. I (could/must) be late as I have a lot on my plate.
11. Leonard (can/may) easily solve the problem.
12. It (might/should) rain tomorrow.
13. (May/might) all your wishes come true in life.
14. I (could/might) not be any happier.

Pakistan International School, Al-Aziziah Jeddah (K.S.A)
Federal section Boys

Subject: English Grade - X

Worksheet

How to paraphrase a poem?

How hard was it when you tried it? Simply reproducing the poem's key concepts in your own words constitutes paraphrasing. The primary purpose of paraphrasing is to restate the main ideas in your own words, not evaluate the original author's arguments. Through paraphrasing, readers can comprehend the meanings of figurative languages such as metaphors, similes, and allusions. A vast number of poetic approaches can be used to confound and distort the meaning of a verse. For example, let's consider syntax. The arrangement of words or phrases that constitutes a sentence is called syntax. Depending on the language, it is commonly viewed as a standard set of principles for how a sentence is put together.
No matter how hard a poem is to read, following the guidelines in this article will help you paraphrase the poems.

Key Considerations to Paraphrasing a Poem

Poem paraphrasing requires several considerations.

If the original words of the poem best convey the poem's meaning, it is recommended that you quote them directly. This will assist preserve the effectiveness of the poem's message.
Before you can even attempt to paraphrase a few words from a poem, you must be familiar with the poem's meaning. If not, you must reread the poem to get the message it is attempting to convey. Examine the poem's original text to see if your words accurately reflect its meaning. Sentence structure and meaning should be revised in your initial paraphrase.

Steps for Paraphrasing a Poem?

1. Read and Understand the Poem

To ensure that you comprehend the poem's setting, plot, and characters, reread the entire poem multiple times. Then, divide the poetry into lines or stanzas and try to comprehend what the author was trying to say.

2. Translate in your Words

Maintain the basic theme of the poem while translating the words. Translate using simple words. Use simple language, paraphrase the poem by restating its words. You should not replace every term with its synonym, but you may occasionally utilize synonyms to identify significant words. Remember, though, that replacing every word with its synonym is not paraphrasing. Consider swapping and rearranging the words to convey the same concept.

3. Elaborate the Author's Message

Explain the stanzas and lines in the text using complete sentences to clarify the poet's ideas. Typically, poets condense their thoughts to fit inside the rhythm and meter of the poem. Maintain the perspective of the author. Your revised version should reflect the author's voice, tone, and emotion. Maintain the first-person viewpoint.

A stanza is a collection of lines that serve as a poem's fundamental metric element. Therefore, the first four lines of a 12-line poem might be a stanza. A stanza can be identified by the number of lines it contains and its rhyme scheme or pattern, for example, C-D-C-D.

- To paraphrase a stanza, you must understand each stanza's meaning.
- Make sure you are not writing your text line by line.
- Create a new version with your own words.
- Utilize the author's point of view.

Model Stanza 1

Once or twice though you should fail,
Try, try again;
If you would at last prevail,
Try, try again;
If we strive, 'tis no disgrace
Though we do not win the race;
What should you do in the case?
Try, try again.

Ans. Paraphrase of Stanza 1

You might fail one or two times in the beginning, but you should remain steadfast and firm and keep on trying. There is no insult in hard work and persistence after getting failed. Even if we don't win the competition, we have no other option but to keep on trying without getting discouraged

Model Stanza 2

Continuous as the stars that shine
And twinkle on the Milky Way,
They stretched in never-ending line
Along the margin of a bay:
Ten thousand saw I at a glance,
Tossing their heads in sprightly dance.

Ans. Paraphrase of Stanza 2

There were so many daffodils that they looked like the stars in our galaxy. The daffodils formed a line that stretched around much of the bay. In one glance I could see ten thousand of them. They looked like they were dancing.

Stanzas for Paraphrasing

1. The wind is now
A roaring, smashing
Monster of destruction,
Raking all man's work
From the valleys,
From the vales,
And sends them spinning,
Broken flying

Ans.

_____
_____
_____
_____
_____
_____

2. And when the sun comes out,

After this rain shall stop,
A wondrous light will fill
Each dark, round drop;
I hope the Sun shines bright;
It will be a lovely sight

Ans.

3. Be kind to thy sister-not many may know
The depth of true sisterly love;
The wealth of the Ocean lies fathoms below
The surface that sparkles above

Ans.

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Worksheet

What is a Participle? Definition and Examples

A participle is a form of a verb used as either an adjective or a part of certain tenses. Participles have two different types, the present participle and past participle, and participles used as adjectives can form a longer participle phrase.
Here we will learn how to use participle properly with examples.

Participles are a particular form of verb that has two main purposes:

1. Turn the verb into an adjective to modify nouns.
2. Connect with auxiliary verbs to create different tenses, such as the present perfect tense.

The second purpose of participles is to create different verb tenses, specifically the perfect tenses and continuous tenses. For example, if you are doing something now or in the near future, you use the present continuous tense, which is formed with the verb *be* and a present participle, or *-ing* form, of the verb.

I am eating lunch right now.
Every verb has participle forms, even impersonal verbs. Moreover, there are two different types of participles—the present participle and the past participle—so each verb has a couple of different participles you can choose from.

Let's look at each type individually.

The present participle is used in the continuous tenses or as an adjective describing an action that is currently taking place.
Examples:
The bird is singing outside my window.
The singing bird is outside my window.
What is a past participle?

The past participle is used in the perfect tenses or as an adjective describing an action that has already been completed. It's also a key component in using the passive voice, which we explain further down. The hardest part about past participles is irregular verbs. Many irregular verbs have unique past participles that don't follow the normal rules.
Examples:
I have completed my paper already.
I turned in my completed paper.
For regular verbs, the past participle is the same as the simple past tense. That means you simply add *–ed* to the end.

Exercises

1. Complete the following sentences using the present participle or past participle form of the verb.
1. A …….. child dreads fire. (burnt/burned)
2. He was wearing a …….. shirt. (tearing/torn)
3. ……. the wicked man, the boy ran into the house. (seen/seeing)
4. …….. occupied with work, he couldn't meet us. (being/been)
5. …… by her behavior, he walked out. (irritated/irritating)
6. It was …… in the storm. (broken/breaking)
7. He lived alone, ……. by everybody. (forgetting/forgotten)
8. I love the noise of ……. rain. (falling/fallen)
9. The house looked ……. (abandoned/abandoning)

10. I was very …….. in the program. (interesting/interested)

Make the past participle of the given verbs in the following sentences.

1. Julie wasn't at home. She had _____ (go) to the shops.
2. We've already _____ (have) lunch.
3. This was the first time she had _____ (do) her homework
4. They have _____ (begin) painting the living room.
5. We have _____ (keep) this secret for three years.
6. He has never _____ (drive) a motorbike before.
7. I have _____ (be) sick all week.
8. By the time we arrived, the children had _____ (eat) all the chocolate.
9. The books had _____ (fall) off the table, and were all over the floor.
10. A: Are you okay? B: I've _____ (feel) better.
11. I'd _____ (lend) my umbrella to John, so I got wet.
12. I've been looking for ages, but I haven't _____ (find) my keys yet.
13. The birds have _____ (fly) south for the winter.
14. She has finally _____ (come).
15. Don't worry, we haven't _____ (forget) about the meeting.
16. It had _____ (become) very cold, so we went inside.
17. You have _____ (buy) a lot of new clothes recently.
18. I'd _____ (get) a lovely new bike for my birthday, so I was keen to try it.
19. She'd _____ (bring) a cake to the party, but we didn't eat it.
20. Have you _____ (choose) your university yet?

Gerunds

What are Gerunds?

Gerunds are words that are formed with verbs but act as nouns. They’re very easy to spot, since every gerund is a verb with ing tacked to its tail. There are no exceptions to this rule.

Like all things grammar, gerunds do take a tiny bit of detective work to spot. The problem here is that present participles also end with the letters ing. Besides being able to spot gerunds, you should be able to tell the difference between a gerund and a present participle.
Remember that gerunds are words that are formed with verbs but act as nouns. Present participles do not act as nouns. Instead, they act as modifiers or complete progressive verbs. To find gerunds in sentences, just look for a verb + ing that is used as a noun. It's that simple.

Examples of Gerunds

As you read these examples of gerunds, notice the verbs they contain, and notice that every single one of them ends in ing.

1. Swimming in the ocean has been Sharon's passion since she was five years old.
2. The ballerina taught us dancing.
3. Apologizing to me isn't enough this time.
4. She is afraid of flying.
5. They are capable of doing hard work.

Forming a Gerund – Points to Keep in Mind

- Any verb can be turned into a gerund. Generally, a gerund is formed with the addition of '-ing' at the end of the base verb.
- If the verb ends in 'e', see to it that you remove the 'e' and then add '-ing' to the remaining part of the verb.
- However, there are verbs which retain the 'e'. This happens when the verb ends in 'ee'. In this case, the '-ing' is just added to the end of the verb, just like other verbs.
- For verbs ending in 'ie', you will have to replace the 'ie' with 'y' and then add '-ing' to the remaining part of the verb.
- For monosyllabic verbs with a consonant-vowel-consonant format, what you have to do is double the final consonant and then add '-ing' to it.
- For longer verbs that have the same format of a consonant-vowel-consonant, the final consonant has to be doubled only if the last syllable is stressed.

How to Use Gerunds in a Sentence?

A gerund can be used as a subject, a direct object or an indirect object in a sentence. In this case, it performs the role of a noun. It can also be employed as the object of a preposition. It also works as a present participle to indicate different continuous tenses. However, for a verb to act as a gerund, it has to act as a noun. Gerunds can also be used along with an object or a modifier, thereby forming gerund phrases.

Look at the following sentences to see which is a gerund and which is not.

- Exercising daily will help you stay fit and healthy.
- Following a diet will help you reduce weight and maintain your BMI.
- Wow! She is great at singing.

In the above sentences, the words ‘exercising’, ‘following’ and ‘singing’ are gerunds. Furthermore, the word ‘exercising’ is a subject, ‘following a diet’ is a gerund phrase which acts as a noun and ‘singing’ acts as an object.

Now complete the following Exercises with correct use of gerunds.

Exercise

Circle the correct use of gerund in the following sentences.

- Naveen loves (reading/read) books.
- William enjoys (playing/play) football.
- (Baking/baked) is one of the hobbies I picked up during the pandemic.
- When it comes to (solving/solve) algebraic equations, Rahim is an expert.
- (Working hard/ work hard) is the only way to succeed.
- (Going through/ go through) the lessons again the day before the exam will help you.
- The best part of life is (making/made) memories.
- Not many kids like (having/have) healthy food.

Exercise

Fill in the blanks with correct use of gerund in the following sentences.

1. John and Sam tried _____ the bottle, but they were not able to. (opened/opening)
2. _____ out is a part of my daily routine. (worked/working)
3. My brother does not like _____ chess. (played/playing)
4. _____ cigarettes in public is considered an offence. (smoking/smoked)
5. _____ is my newfound hobby. (baked/baking)
6. We spent our time _____. (talked/talking)
7. She considered _____ trigonometric equations her superpower. (solved/solving)
8. _____in the middle of a forest is something that is on my bucket list. (camping/camped)
9. They spent the whole day _____ where to go. (planning/planned)
10. I like dancing to old songs. (danced/dancing)
11. The man denied _____ the crime. (commit/committing)
12. Their memories of _____ in Africa will stay with them forever. (travelling/travel)
13. _____is good for your health. (swim/swimming)
14. Would you mind _____ me the sugar. (pass/passing)
15. I had a hard time _____ the situation to my husband. (explaining/explain)
16. She had some problems _____without glasses. (read/reading)
17. What about going to the zoo tomorrow? (going/go)
18. Barca _____ in winning the Spanish championship. (succeed/succeeding)

19. We had no problem _____ from the airport to the train station. (drive/driving)
20. It's no use _____ a taxi. We'll be late anyway. (take/taking)
21. Playing video games all the time is very boring. (play/playing)
22. John admitted _____ during the English test. (cheat/cheating)

Infinitives

What Are Infinitives, and How Do We Use Them?

Infinitives are a special form of verbs that can be used as a noun, adjective, or adverb. They are usually made by adding the word to before the base verb, and they can be useful when discussing actions without actually doing the action, such as "I want to go home," or "To err is human."

1.Infinitives are used to explain why someone is doing something, often replacing the phrase "in order to." In this case, they act as adverbs to describe the main verb.
Examples:
1.Mom left to buy milk.
2.I'm writing this email to tell you something important.
3.Did you come to college to study or to party?

2.Infinitives can also modify the meanings of nouns. In this case, they act as adjectives and adjective phrases.
Examples:
1.We need a hero to save us.
2.Would you like something to drink?
3.It was a dumb thing to say, and I regret it.

3.Infinitives can be used as the subject of a sentence.
Examples:

1.To love someone requires patience and understanding.
2.To go this late seems pointless.
3.To unlearn is the highest form of learning.

4. Full infinitives can add context or extra description when used after adjectives.
Examples:
1.I'm happy to be here.
2.Isn't it nice to leave the city?
3.Computers are easy to use with practice

5.We Use the full infinitive in phrases that start with one of the relative pronouns *who, whom, what, where, when,* and *how*—but not *why*.

Examples:
1.I don't understand how to beat the Level 5 boss.
2.Playing cards is about knowing when to hold them and when to fold them.
3.Here's a list of whom to call in an emergency.

6.Bare infinitives, also known as zero infinitives, are formed without to—you simply use the base form of a verb within a sentence. As you can imagine, this gets confusing, but thankfully bare infinitives are less common than full infinitives.

Examples:

- There's too much sugar to put in this bowl.
- I had too many books to carry.
- This soup is too hot to eat.
- She was too tired to work.
- He arrived too late to see the actors.
- I've had enough food to eat.
- She's old enough to make up her own mind.
- There isn't enough snow to ski on.

Exercise

Fill in the blanks with correct gerund/Infinitives (with or without "TO")

1. They suggested _____ by bus instead of by plane. (TRAVEL)
2. It seems difficult _____ everything about this topic. (KNOW)
3. We were all looking forward to _____ the New Year in New York. (CELEBRATE)
4. We are planning _____ to Europe this summer. (GO)
5. It was very difficult for him to quit _____. (SMOKE)
6. She tried to avoid _____ unnecessary mistakes. (MAKE)
7. Can you imagine _____ the painting before the Christmas holidays? (FINISH)
8. We are used to _____ up early in the morning. (GET)
9. The suspect denied _____ said that in public. (HAVE)
10. She enjoys _____ the weekend with her family. (SPEND)
11. I forgot _____the door when I left. (LOCK)
12. I have decided _____ more often. (EXERCISE)

13. Mary keeps _____about her problems all the time. (TALK)
14. Most European countries don't allow _____ in bars and restaurants. (SMOKE)
15. She seemed _____ fed up with all the problems she's facing. (BE)
16. She couldn't bear _____ on so much responsibility. That's why she quit her job. (TAKE)
17. She promised _____ biting nails. (STOP)
18. The government urged their citizens _____ more waste. (RECYCLE)
19. Hermann is thinking about _____ abroad for a few years. (STUDY)
20. She considered _____ to New York, but then dropped the idea. (MOVE)
21. The aquarium needs _____. (CLEAN)
22. Morris agreed _____ me with the project. (HELP)

PAKISTAN INTERNATIONAL SCHOOL, AL-AZIZIA, JEDDAH

Senior Boys section Session 2023 – 20234

Worksheet Chapter No.1 chapter#9 SUBJECT: Chemistry Class: 10th

Section- A

Q.No.1 Circle the correct option i.e. A / B / C /.

1. Predict the unit of K_C for the given reaction:

$N_2 + O_2 \rightleftharpoons 2NO \quad K_C = \frac{[NO]^2}{[N_2][O_2]}$

A. $Mol^{-1}dm^{-3}$ B. $Mol^{-1}\ dm^3$ C. $Mol\ dm^3$ D. No Units

2. Which one of the following compounds is formed by the reaction of Aluminum Hydroxide $Al(OH)_3$ with Sulphuric Acid (H_2SO_4)?

A. $Al(SO_4)_3$ B. Al_2CO_3 C. $Al_2(SO_4)_3$ D. $AlCl_3$

3. Nitrogen and hydrogen were reacted together to make ammonia: $N_2 + 3H_2 \rightleftharpoons 2NH_3$, Kc = 2.86 $mol^{-2}\ dm^6$. What will be present in the equilibrium mixture?

A. NH_3 only B. N_2, H_2 and NH_3 C. N_2 and H_2 only D. H_2 only

4. Which Is True About The Equilibrium State?

A. The forward reaction stops

B. The reverse reaction stops

C. Both forward and reverse reactions stop

D. Both forward and reverse reactions continue at the same rate

5. Which Of The Following Catalysts Is Used To Form NH_3 Gas From Nitrogen And Hydrogen Gas?

A. Fe_2O_3 B. FeO C. Fe D. Pt

Q2. Answer the following short questions.

i. For the given reversible reaction equilibrium concentration are:
$N_2(g) + 3H_2(g) \rightleftharpoons 2NH3(g)$
$N_2 = 0.602 mol/dm^{-3}$
$H_2 = 0.420\ mol/dm^{-3}$ and $NH_3 = 0.113\ mol/dm^{-3}$. Calculate the value of Kc and determine Kc unit.

P.T.O

ii. Differentiate between reversible and irreversible reactions with the help of an example.

iii. The reaction between PCl_3 and Cl_2 produces PCl_5 gas. Derive Kc unit for this reaction with the help of balanced chemical equation.

iv. How can you predict the direction of a reaction by using equilibrium constant?

Q3. a. State law of mass action. Derive Kc expression for the following reaction:

$4HCl\ (g) + O_2(g) \rightleftharpoons 2Cl_2(g) + 2H_2O\ (g)$.

b. State and explain necessary conditions for equilibrium.

P.T.O

P.T.O

PAKISTAN INTERNATIONAL SCHOOL, AL-AZIZIA, JEDDAH

Senior Boys section Session 2023 – 20234

Worksheet Chapter No.2 chapter#10 SUBJECT: Chemistry Class: 10th

Section- A

Q.No.1 Circle the correct option i.e. A / B / C /.

1. F^- is a base, because it:

A. Contains OH group

B. Can accept an election pair

C. Can accept proton

D. Ionizes in water to give OH^- ions

2. The pH of 10^{-3}M aqueous solution of NaOH is:

A. 3 B. 2 C. 11 D. 9

3. Water can be decomposed with the help of electrolysis. Identify the hydrogen oxygen ratio by value in water:

A. 1:1 B.1:2 C.2:1 D.2:2

4. Kw is known as ionization constant for water. Name the factor on which it depends.

A. amount of water B. Temperature C. Density D. Volume

5. What Is The Particular PH Range At Which Carrots Grow?

A. 6.0 – 7.5 **B.** 6.5 – 7.5 C. 6.5 – 7.0 D. 5.5 – 7.0

Q2. Answer the following short questions.

i. List three applications of pH in daily life.

_____

_____

_____

ii. Classify the following substances as Lewis acids or Lewis bases.

A. $AlBr_3$ B. CH_3-CH_2- OH C. CN^{-1}

_____

_____

_____

P.T.O

iii. Concentration of an aquas solution of potassium hydroxide 1.0×10^{-3} mol/dm^3 . What is its pH? Is this solution acidic, basic or neutral?

iv. What is a neutral salt? Describe its formation with the help of a valid chemical equation.

Q3.a. H_3PO_4 donates three hydrogen ions. Reaction of KOH with H_3PO_4 gives three salts. KH_2PO_4, K_2HPO_4 and K_3HPO_4. Identify the nature of each salt and write reaction for the formation of each.

P.T.O

Q4.a. Prove that $10^{-14}=[H^+][OH^-]$ for the self-ionization of water at 25°C.

b. Show by chemical reactions that water is amphoteric in nature

P.T.O

PAKISTAN INTERNATIONAL SCHOOL, AL-AZIZIA, JEDDAH

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Worksheet Chapter No.3 chapter#11 SUBJECT: Chemistry Class: 10th

Section- A

Q.No.1 Circle the correct option i.e. A / B / C /.

1. Which one of the following compounds is an aldehyde?

A. CH_3 - CH_2 – OH B. CH_3 – COOH C. CH_3 – CHO D. CH_3 - $COCH_3$

2. Identify the class of compound to which $CH_3 - CH_2 - \overset{\overset{O}{||}}{C} - CH_3$ belongs to:

A. Aldehyde B. Ether C. Ester D. Ketone

3. Predict the property that organic compounds have:

A. Low melting and low boiling points

B. High melting and low boiling points

C. Low melting and high boiling points

D. High melting and low boiling points

4. Identify in which one of the following functional groups, oxygen is attached on both sides with carbon atoms?

A. Carboxylic Acid B. Ether C. Ester D. Ketone

5. What is the molecular formula of Butyne?

A. C_4H_6 B. C_5H_7 C. C_4H_8 D. C_3H_4

Q2. Answer the following short questions.

i. Draw the structure of different isomers of C_6H_{14}.

_____

_____

_____

_____

_____

_____

P.T.O

ii. Draw the structures of heterocyclic compounds. (Any four)

iii. Illustrate structural formula of iso pentane, pentene and pentyne.

iv. Show the structures of Ester and Ether functional groups.

v. Write the structural formulas of the following:
a. n-Heptane b. Methanal c. Methanoic acid

Q3. What is functional group? Identify the functional group in the following organic compound:

(i) CH_3COCH_3 (ii) CH_3COOH (iii) $HCOCH_3$

P.T.O

P.T.O

Pakistan International School Jeddah

Federal senior section

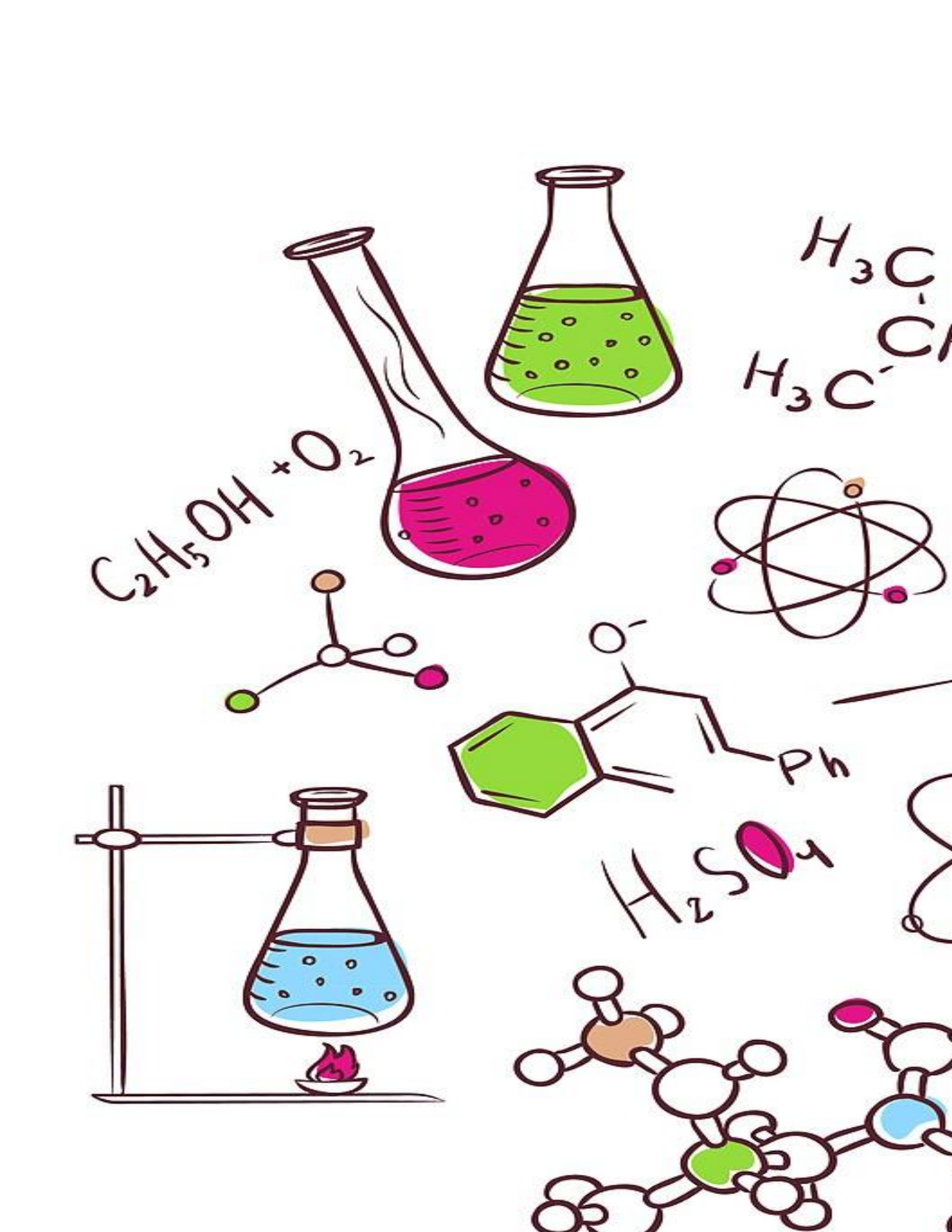
Session 2022 - 2023

Chemistry

Worksheet Booklet

SSC - II

P.T.O


$C_2H_5OH + O_2$
H_3C
H_3C
Ph
H_2SO_4

Hydrocarbons.

Chapter 12. Worksheet No. 4.

Choose the correct option.

i-. Addition of hydrogen molecule across carbon-carbon multiple bonds is called

A- oxidation B- reduction C- ionization D- hydrogenation.

ii-. Alkane molecules are essentially

A- polar B- nonpolar C- ionic D- none of these

iii-. The reaction of an alkane and halogen is a ------ reaction.

A- oxidation B- addition C- substitution D- reduction

iv-. The lighter alkanes are widely used as

A- fuels B- oxidizing agent C- reducing agent D- all of these.

v-. In oxy-acetylene torch for cutting and welding metals ------- is used

A- butane B- ethene C- propane D- acetylene

vi-. A vicinal dihalide has ---------halogen atoms on adjacent carbon atoms

A- 2 B- 3 C- 4 D- 5

vii-. Alkane burns in the presence of oxygen with a ratio of

A- 1:3 B- 1:1 C- 1:2 D- 1: 24

viii-. Chloroform is used as

A- fuel B- anesthetic C- oxidizing agent D- none of these.

ix-. Natural gas, Petroleum, and coal are important sources of

A- alkane B- alkane C- alkyne D- hydrocarbons

x-. The red colour of tomatoes is due to an ------- called lycopene

A- alkane B- alkene C- alkyne D- none of these

P.T.O

Write down the brief answers to the following questions.

Q-1. White structural formulas for hexane and heptane

Q-2. What is hydrogenation? Write down the equation for the hydrogenation of ethyne.

Q-3. Complete the following reaction.

$CH_4 + 2O_2$ ---------->

Q-4. Write down the uses of Ethylene.

Q-5. Ethylene is the most important commercial organic compound. How you convert ethanol into ethylene?

P.T.O

Q-6. Ethylene glycol is used as an anti-freeze in car radiators. Write down the equation for the conversion of Ethene into ethylene glycol. Name this reaction.

Write down the answers to the following questions in detail.

Q1-. Reduction is the addition of hydrogen to a compound. Elaborate on how alkyl halide is converted into alkane using a reduction reaction.

Q-2. In a substitution reaction of alkane, a halogen atom is substituted for one or more of the hydrogen atoms of an alkane, write down the complete substitution of Methane.

Q-3. How you will convert 1,2 Dichloroethane into ethyne?

Q-4. Potassium permanganate ($KMnO_4$) is a strong oxidizing agent. Elaborate how this compound is used to convert the acetylene into oxalic acid ; give complete chemical reactions.

Q-5. How you convert:

i-. Ethyne to tetrachloroethane

ii-. Ethene to 1,2 Dibromo ethane.

Biochemistry

Chapter 13 Worksheet No. 5

Choose the correct option.

i-. Dipeptide is formed by the joining of two molecules of

A- amino acids B- alcohol C- carboxylic acid D- amines

ii-. The following compounds are present in DNA EXCEPT

A- nitrogenous base B- phosphate unit C- ribose sugar D- ketone

iii-. Plants convert glucose into starch and

A- alcohol B- ketone C- cellulose D- oil

iv-. Fructose is a

A- aldohexose B- ketohexose C- aldopentose D- ketopentose

v-. Galactose is a

A- levo-rotatory B- dextro-rotatory C- polysaccharide D- oligosaccharide

vi-. When maltose hydrolyses it produces one molecule of glucose and one molecule of

A- fructose B- galactose C- glucose D- none of these

vii-. Raffinose is a

A- monosaccharide B- oligosaccharide C- polysaccharide D- trisaccharide

viii-. The enzyme used in detergent to remove food stains on clothes is

A- inverters B- zymase C- diastase D- protease

ix-. The vitamin which helps in the chemical transmission of images from the eye to the brain is

A- vitamin K B- vitamin B-6 C- vitamin A D- vitamin C

x-. Rickets is caused by the deficiency of the

A- vitamin A. B- vitamin K. C- vitamin D. D- vitamin B

Write down the short answers to the following questions.

Q-1. How do plants synthesize carbohydrates?

Q-2. Glucose and Fructose are two monosaccharides. Write down the differences between glucose and fructose and also draw their structures.

P.T.O

Q-3. Gelatin is a kind of protein that is used in Jelly and many other Bakery products. How gelatin is obtained?

Q-4. Biotechnology produces many products for human welfare. Describe how human insulin is produced using Recombinant DNA technology.

Q-5. Complete the following table.

Number of carbon atoms	condensed structure formula	name of fatty acids	sources of fatty acids
4		butyric acid	butter
6	CH_3-(CH_2)-COOH		
16		palmitic acid	
	CH_3-$(CH_2)_{16}$-COOH		beef fat
		Oleic acid	

Q-6. Enzymes are known as biological catalysts. Elaborate on the use of enzymes like the states amylase protease and lactase to produce Industrial Products.

In the following picture label the food item which are the source of carbohydrates, proteins or lipids.

P.T.O

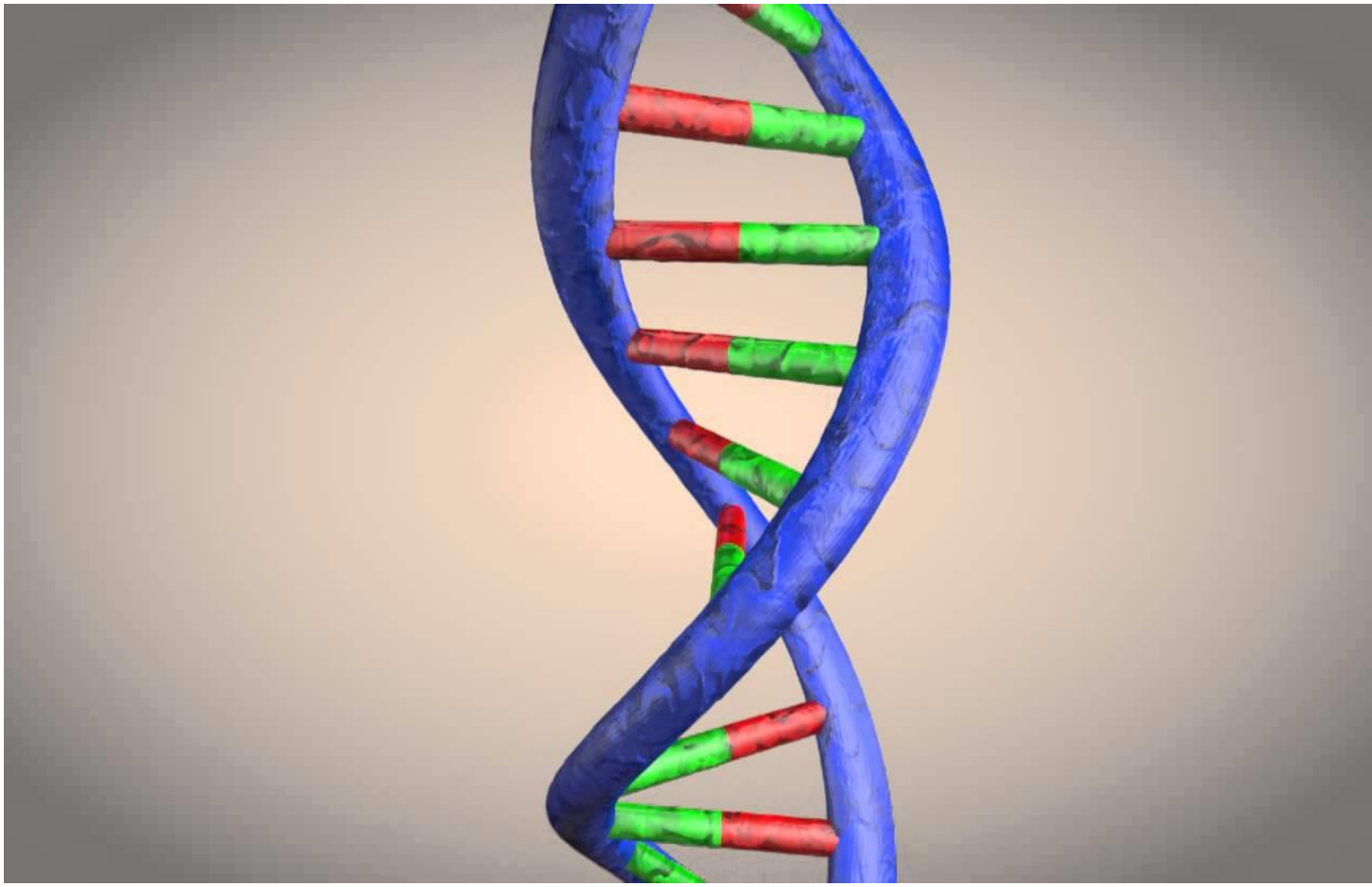
Q-7. Justify water-soluble vitamins are not injurious to health.

Q-8. How do you justify RNA works like a messenger?

Write down the answer to the following question in detail.

Q-1 What are carbohydrates? How are monosaccharides produced? Give their characteristics.

P.T.O



Q-2. Amino acids are the building block of proteins. Write down the chemical equation showing the formation of a dipeptide.

Q-3. Write down the uses of proteins.

Q-4. Describe the structure and function of DNA also draw the diagram.

Q-5. What are fat-soluble vitamins describe the sources and deficiency symptoms of fat-soluble vitamins?

Label the following diagram.

Q-6. What do you understand by DNA Fingerprinting?

Environmental Chemistry 1: Atmosphere

P.T.O

Chapter 14

Worksheet No.3

Choose the correct option.

i-. Which of the following is a non-poisonous Greenhouse gas

A- carbon disulphide B- carbon monoxide C- carbon dioxide D- carbon tetrachloride

ii-. Which one of the following is not produced by burning of fossil fuel

A- NOx B- CO C- CFCs D- SOx

iii-. Identify the source of Sulphur dioxide from the following

A- aerosol spray B- fossil fuel C- refrigerants D- decaying Dead plant.

iv-. Lead particles in the air come mainly due to the combustion of

A- fossil fuel B- industrial gases C- leaded petrol D- volcanic eruption

v-. Carbon monoxide gas came into the atmosphere from

A- incomplete burning B-volcanic eruption C- aerosol spray D- chlorofluorocarbons

vi-. Incineration is a---------- treatment

A- gaseous waste B- liquid waste C- solid waste D- none of these

vii-. Normal rainwater has a pH of 5.6. This pH is due to the

A- carbon dioxide B- sulphur dioxide C- nitrogen dioxide D-sulphur trioxide

viii-. In catalytic converters ---------- metal is used as a catalyst

A- iron B- zinc C- Platinum D- copper

ix-. About 99% atmosphere's mass lies within

A- 30 km B- 35 km C- 15 km D- 11 km

x-. The earth's atmosphere is getting hotter because of

A- increasing concentration of CO. B- increasing concentration of CO_2. C- increasing concentration of O_3

D- increasing concentration of SO_2.

Write down the brief answers to the following questions

P.T.O

Q1-. A distinctive increase in the average temperature of the Earth is recorded. Name this phenomenon and explain how the temperature of the earth Rises.

Q-2. Nitric oxide and Nitrogen dioxide cause air pollution. Enlist sources and three effects of these oxides.

Q-3. Enlist the names of layers of the atmosphere and explain the layer nearest to the Earth.

Q-4. State the major sources of carbon monoxide and carbon dioxide emission.

Q-5.How Ozone layer forms in stratosphere?

Q-6. Carbon dioxide is responsible for heating up atmosphere how?

P.T.O

Answer the following question in detail.

Q-1. Give the characteristics of stratosphere. Why temperature increases in this layer?

Q-2. Define acid rain. How it forms and what are its effects?

Q-3. Where does Ozone Layer lie in the atmosphere? How it is depleting and how we can prevent its depletion?

Q-4. Oxides of sulphur cause air pollution, describe the sources of these compounds.

Q-5. Explain how human activities contributes in the air pollutiom.

Pakistan International School Aziza ,Jeddah 2023

Senior Boys Section (2022-2023)

Subject: chemistry

Class:10

Chapter# 15

Environmental Chemistry II : WATER

Q#1 MCQS: Students Learning outcome (SLO BASESD)

Q#1 Encircle the correct answer.

1:water has a heat capacity

(1) 4.2 jg-1k-1 (2)3.42 jg-1k-1 (3) 4.52 jg-1k-1 (4) none

2:NaCl present up to in sea water is

(1) 3.4% (2) 4.5% (3) 5.6% (4)NONE

3: Permanent hardness is so called because it cannot remove by

(1) BOILING (2) HEATING (3) COOLING (4) NONE

4:The cloudiness is due the formation of a white precipitate by reaction of ------or ------ in hard water and soap

P.T.O

.(1) Ca+2 and Mg+2 ion (2) Ca+2 and Na+1 ion (3) k+1 ion (4) none

5: permanent hardness in water can be removed by adding

(1) Washing soda (2) baking soda (3) caustic soda (4) None

(6)Zeolite is one of the natural

(1) Na Ion exchanger (2) K Ion exchanger (3) Zn Ion exchanger (4) NONE

7:Coagulation is the process in which water is treated

(1) Slaked lime and Alum (2) Ca(OH) 2 (3) NaCl (4) None

8:Chlorination is added in water to kill

(1) Bacteria (2) Fungi (3) parasite (4) virus

9:Dysentry is also an disease.

(1) Intestinal (2) liver (3) Kidney (4) None

10:the disese jaundice proceeds from obstruction of

(1)Obstruction of liver (2) Obstruction of lungs (3) Obstruction of stomach (4) None

Q#2 Short question: Students Learning outcome (SLO BASESD)

(I):How hard water hampers the cleansing action of soap?

Answer:

(ii)what is purpose of sedimentation in raw water treatment?

Answer:

(iii)what is the purpose of coagulation process in raw water treatment.?

Answer:

P.T.O

(iv)how temporary hardness can be remove by slaked lime (Clark method)?

Answer:

(v)how it can be overcome the problem of scum formation in hard water?

Answer:

(vi) why it is difficult to make soap lather in hard water?

Answer:

Q#3 Long Question: Students Learning outcome (SLO BASESD)

(i) How many methods to remove permanent hardness? Explain each methods
Answer:

(ii) What are health effects of biological contamination of water?
Answer:

(iii) Hard water causes kettles to fur. This fur can be remove by using an acid explain why?

P.T.O

Answer:

(iv) Explain some waterborne disease. Their causes also.

Answer:

Pakistan International School Aziza ,Jeddah 2023

Senior Boys Section (2022-2023)

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P.T.O

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P.T.O

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P.T.O

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P.T.O

PAKISTAN INTERNATIONAL SCHOOL JEDDAH

SENIOR BOYS SECTION 2023-2024

E.MATH WORKSHEET SSC-II

CONTENTS:

WORK SHEET

Unit#1

(Quadratic Equations)

Q#1 Circle the correct answers

1. The solution set of $25x^2 - 1 = 0$ is

(a) $\left\{\pm\frac{1}{5}\right\}$ (b) $\left\{+\frac{1}{5}\right\}$

(c) $\left\{-\frac{1}{5}\right\}$ (d) None of these

2. An equation of the form $2^{2x} - 3.\ 2^x + 5 = 0$ is called a /an ___ equation.

(a) Exponential (b) Radical

(c) Reciprocal (d) None of these

3. The solution set of the equation $x^2 - 9 = 0$ is:

(a) $\{\pm 3\}$ (b) {3}

(c) { − 3} (d) {9}

4. An equation of type $x^4 + x^3 + x^2 + x + 1 = 0$ is called a/an ……equation.

(a) Radical (b) Reciprocal

(c) Exponential (d) None of these

5. Solve the equation $5^{1+x} + 5^{1-x} = 26$

(a) {1} (b) { ±1}

(c) {2} (d) { ±2}

6. The solution set of equation 2+9x=5 x^2 is:

(a) $\left\{\frac{-1}{5}, 2\right\}$ (b) $\left\{\frac{1}{5}, 2\right\}$

(c) $\left\{\frac{1}{5}, -2\right\}$ (d) $\left\{\frac{-1}{5}, -2\right\}$

7. The solution set of equation 5 x^2=30x is:

(a) {5, 30} (b) {0, 6}

(c) {0, − 6} (d) {5, 0}

8. The solution set of equation x^2–x–2=0 is:

(a) {2, 1} (b) { − 2, 1}

(c) {2, –1} (d) {–2, − 1}

9. The solution set of equation x^2–16=0 is:

(a) {$\pm$ 4} (b) {+4}

(c) {–4} (d) None of these

10. The solution set of equation x^2 − 7x+6=0 is:

(a) {1, 6} (b) {–1, –6}

(c) {–1, 6} (d) {1, –6}

11. If b=0 in a quadratic equation ax^2+bx+c=0, then it is called:

(a) Pure quadratic equation (b) Linear equation

(c) Quadratic equation (d) Exponential equation

12. Sentences involving the sign…….. Between two algebraic expressions are called equations.

(a) < (b) $\geq$

(c) = (d) < or >

13. The standard form of the quadratic equation is a x^2+bx +c=0 where a, b, c are.

(a) Irrational numbers (b) Rational numbers

(c) Real numbers (d) Whole numbers

14. If a=0, in a x^2+bx+c=0, then it reduces to:

(a) Pure quadratic equation (b)Linear equation

(c)Quadratic equations (d)Exponential equation

15. How many linear factors a quadratic equation has?

(a) 1 (b) 2

(c) 3 (d) 4

16. What is the degree of quadratic equation?

(a) 1 (b) 2

(c) 3 (d) 4

17. The number of roots of a quadratic equation is:

(a) 1 (b) 2

(c) 3 (d) 4

18. What should be done to make the co-efficient of x^2 equal to 1, in $7x^2$+2x −1=0?

(a) Multiply the equation by 7 (b) Divide the equation by 7

(c) Add 7 in both sides (d) Subtract 7 from both sides

19. The value of variable of an equation not satisfying the equation is called:

(a) Root (b) Extraneous root

(c) Exponent (d) Solution set

20. The cancellation of x on both sides of the equation of the type ax^2= bx means the loss of one root. That root is always equal to:

(a) 0 (b) 1

(c) a (d) b

21. If y=x−1 and 3y=5, the value of x is:

(a) 5/3 (b) -5/3

(c) -3/5 (d) 3/5

22. If 2x=1, then x = …….

(a) 0 (b) 1

(c) 2 (d) none of these

23. If y=2x and 8y =1, then, x =…

(a) 8 (b) 1 8

(c) 3 (d) −3

Q#2: Match the column:

a $x^2 + bx + c = 0$	Pure Quadratic equation
$a\,x^4 + b\,x^3 + c\,x^2 + bx + a = 0$	Radical equation
$5^{1+x} + 5^{1-x}$ = 26	Reciprocal equation
If b=0 then a $x^2 + bx + c = 0$	Exponential equation
$\sqrt{ax + b} = cx + d$	Quadratic equation

Q#3: Solve $\frac{x^2+4}{3} - \frac{7x}{9} = 1$ by using completing square

Q#4: Solve $\frac{2x+4}{x+2} + \frac{x+2}{x+3} = 1$ by using quadratic formula

Q#4: Solve 2^{2x+3} – 3. 2^{x+1} – 16= 0

Q#5: Solve $2x^4 - 3x^3 - x^2 - x - 3x + 2 = 0$

Q# 6: Solve $\sqrt{2x+8} + \sqrt{x+5} = 7$

UNIT#2

(Theory of Quadratic Equations)

Q#1 Circle the correct answers

1. If $b^2 - 4ac > 0$ and is a perfect square, then roots of a x^2 + bx + c = 0 are:

(a) irrational, equal (b) Rational, equal

(c) Rational, unequal (d) Irrational, unequal

2. If $b^2 - 4ac$ = 0 – ,then roots of a x^2 + bx + c = 0 are:

(a) irrational, equal (b) Rational, equal

(c) Rational, unequal (d) Irrational, unequal

3. Disc. of 2 x^2 – 7x +1 = 0 is:

(a) 47 (b) 41

(c) 40 (d) 51

4. Disc. of 2 x^2 – 3x + 3 = 0 is:

(a) 6 (b) 12

(c) 21 (d) –3

5. The roots of x^2 +8x +16 = 0 are:

(a) Imaginary (b) equal

(c) Unequal (d) irrational

6. If roots of a quadratic equation are equal, then disc. is:

(a) Positive (b) negative

(c) Zero (d) irrational

7. If roots of a quadratic equation are imaginary, then disc. is:

(a) Positive (b) negative

(c) Zero (d) irrational

8. If roots of an quadratic equation are real and distinct then disc. is:

(a) Positive (b) negative

(c) Zero (d) imaginary

9. If roots of a quadratic equation are rational and distinct, then disc. is:

(a) Perfect square (b) Not perfect square

(c) Zero (d) Negative

10. If roots of a quadratic equation are irrational and distinct, then disc. is:

(a) Perfect square (b) Not perfect square

(c) Zero (d) Negative

11. If for a quadratic equation $b^2 - 4ac = 49$, then roots are real and:

(a) Equal (b) unequal

(c) Irrational (d) imaginary

12. If for a quadratic equation $b^2 - 4ac = -47$, then roots are:

(a) Real (b) rational

(c) Irrational (d) complex

13. If for a quadratic equation $b^2 - 4ac = 0$, then roots are:

(a) complex (b) irrational

(c) Repeated (d) distinct

14. If for a quadratic equation $b^2 - 4ac = 205$, then roots are:

(a) complex (b) irrational

(c) Rational (d) equal

15. Which of the following is true description of nature of roots of a quadratic equation?

(a) Real, irrational, equal (b) Real, imaginary, unequal

(c) Real, irrational, unequal (d) Complex, repeated, rational

16. If roots of a quadratic equation are real, rational and equal, then possible value of disc. is:

(a) 0 (b) 36

(c) 40 (d) –49

17. If roots of a quadratic equation are real, rational and unequal then possible value of disc. is:

(a) 0 (b) 36

(c) 40 (d) –25

18. If roots of a quadratic equation are real, irrational and unequal then possible value of disc. is:

(a) 0 (b) 9

(c) 5 (d) –7

19. If $\alpha\beta$, are the roots of $5x^2$+5x–15=0 then α β+ is:

(a) - 3 (b) -5

(c) 5 (d) 3

20. If α+β, are the roots of $3x^2$– 15x+4=0 then α+β is:

(a) - 3 (b) -5

(c) 5 (d) 3

Q#2: Match the column:

$b^2 - 4ac > 0$	The discriminant of ax^2+bx+c =0
$b^2 - 4ac$	The roots are equal
$b^2 - 4ac < 0$	Sum of the roots
$b^2 - 4ac = 0$	Product of the roots
$\frac{-b}{a}$	The roots are real
$\frac{c}{a}$	The roots are imaginary

Q#3: Show the roots of $(a+b)x^2 - ax - b = 0$ will be rational.

Q#4: Find the value of k, If the sum of the square of the roots of the equation

$18kx^2 - 9kx - 72 = 0$ is 27

Q#4: If α , β are the roots of $5x^2 - 10x + 45 = 0$, form the equation

Whose roots are $\frac{5}{\alpha}$ and $\frac{5}{\beta}$

Q#5: Find the dimensions of a rectangle whose perimeter is 60 cm and its area cm^2 is 395.

Q# 6: Show that $(1+\omega^2)(1+\omega^4)(1+\omega^8)(1+\omega^{16}) - - - 2n\ factors = 1$

UNIT#3

(Variations)

Q#1 Circle the correct answers

1. The simplest form of the ratio $\frac{(x+y)(x^2+xy+y^2)}{(x^3-y^3)}$ is:

(a) $\frac{(x+y)}{(x-y)}$ (b) $\frac{(x-y)}{(x+y)}$

(c) 1 (d) 2

2. Newton's law of Gravitation is an example of:

(a) variation (b) direct variation

(c) inverse variation (d) joint variation

3. The relation between radius and circumference of a circle is an example:

(a) Variation (b) Direct variation

(c) Inverse variation (d) Joint variation

4. If $\frac{24}{7} = \frac{6}{x}$ then 4x = ……

(a) 7 (b) $\frac{7}{4}$

(c) 4 (d) $\frac{42}{24}$

5. If $\frac{5a}{3x} = \frac{15\ b}{y}$ then ay = ……

(a) 9bx/ y (b) 9y /9b

(c) 5ay = 45bx (d) 9bx

8. In proportion 7:4::p:8, p =…….

(a) 1 (b) 28

(c) 14 (d) 56

9. If 6: m:: 9: 12, then m = ……

(a) 6 (b) 9

(c) 1 (d) 8

10. If x and y varies directly, then x = ……

(a) Y (b) ky

(c) k / y (d) k

11. If v varies directly as u^3, then u^3 = ……

(a) Vk (b) k /v

(c) v /k (d) vk^3

12. If w varies inversely as p^2 , then k = …..

(a) w /p^2 (b) wp^2

(c) p^2/ w (d) WP

13. A third proportional of 12 and 4, is:

(a) 3 /4 (b) 4/ 3

c) 12 (d) 16

14. The fourth proportional of 15, 6, 5 is:

(a) 30 (b) 15

(c) 2 (d) 1

15. The mean proportional of $4m^2n^4$ and p^6 is: 1

(a) $\pm$2mnp (b) $\pm$mnp

(c) $\pm 2m^2$n / p^3 (d) $\pm$2mn^2p^3

16. The continued proportion of 4, m, 9 is:

(a) 4 : m : : m : 9 (b) 4: 9:: 9: m

(c) 9: 4:: 4: m (D) 9: 4:: m : m

17. Third proportional of 6, 12 is:

(a) 24 (b) 2

(c) 18 (d) 84

18. Third proportional of a^3 , $3a^2$ is:

(a) $3a^5$ (b) 9a

(c) $9a^4$ (d) $9a^7$

19. Fourth proportional of 5, 8, 15 is:

(a) 120 (b) 40

(c) 24 (d) 20

20. Fourth proportional of $4x^4$, $2x^3$, $18x^5$ is:

(a) $36x^8$ (b) $9x^2$

(c) $9x^{12}$ (d) $9x^4$

21. Mean Proportional of 20 and 45 is:

(a) ± 30 (b) ± 25

(c) ± 20 (d) ± 15

22. Mean proportional of $20x^3y^5$, $5x^7$ y is:

(a) $\pm 10x^5$ x^6 (b) $\pm 10x^5y^3$

(c) $\pm 10x^{10}y^6$ (d) $100x^{10}y^6$

23. What is the value of p in the continued proportion of 5, p, 45?

(a) 225 (b) $\pm$ 50

(c) ± 15 (d) $\pm$ 9

24. What is the value of x in the continued proportion of 8, x, 18?

(a) ± 144 (b) ± 8

(c) ± 18 (d) ± 12

25. If $\frac{9pq}{2lm} = \frac{18p}{5m}$, then 5q = …..

(a) 4m (b) 4p

(c) $4l$ (d) 4q

26. The mean proportional of $9p^6q^4$ and r^8 is:

(a) $\pm 3\ p^3\ q^2\ r^4$ (b) $\pm 9p^6\ q^2\ r^8$

(c) $\pm 9\ p^3\ q^2\ r^4$ (d) $\pm 3\ p^6\ q^4\ r^8$

27. What is the value of P in continued proportion of 12, p, 3?

(a) ± 4 (b) ± 6

(c) ± 30 (d) ± 2

28. How many types of variations are there?

(a) One (b) two

(c) three (d) four

Q#2: Match the column:

If a : b = c:d , then b : a = d : c	Theorem of alternando
If a : b = c:d , then a : c = b : d	Theorem of Componendo
If a : b = c:d , then (i) a+b : b = c+d: d and (ii) a : a+b = c:c+ d	Theorem of invertendo
If a : b = c:d , then (i) a-b : b = c-d: d and (ii) a : a-b = c:c- d	Theorem of Componendo-dividendo
If a : b = c:d , then a+b :a- b = c+d: c- d	Theorem of Dividendo

Q#3: Find the x in the given proportion $\frac{2}{x-3} : \frac{x-1}{5} :: \frac{3}{x-1} : \frac{x+4}{4}$

Q#4: Find the value of $\frac{x-3y}{x+3y} - \frac{x+3z}{x-3z}$, $if\ x = \frac{6yz}{y-z}$

by using theorem of componendo-dividendo

Q#4: Find the value of $\frac{\sqrt{x^2+4} + \sqrt{x^2-4}}{\sqrt{x^2+4} - \sqrt{x^2-4}} = 4$

by using theorem of componendo-dividendo

Q#5:If $p\ varies$ directly as x^3z^2 and inversely as y^2 and $p = 12$,

$when\ x = 3, z = 5\ and\ y = 15$.Find the value of p, when $x = 5$,

$z = 6\ and\ y = 10$

Q# 6: If $\frac{a}{b} = \frac{c}{d} = \frac{e}{f}$, then show that $\frac{a}{b} = \frac{\sqrt[3]{a^3+c^3+e^3}}{\sqrt[3]{b^3+d^3+f^3}}$

UNIT#4

(Partial Fractions)

Q#1: Circle the correct option.

(i) The quotient of two polynomials $\frac{P(x)}{Q(x)}$ where $Q(x) \neq 0$ with no common factors, is called a :

(a) Rational Fraction (b) Irrational Fraction

(c) Polynomial (d) Complex Fraction

(ii) The conditional equation $\frac{1}{x} = 3$ holds if $x =$_____

(a) $\frac{1}{3}$ (b) $\frac{1}{2}$

(c) $\frac{1}{4}$ (d) none of these

(iii) If degree of $P(x) = 3$ and degree of $Q(x) = 4$, then $\frac{P(x)}{Q(x)}$ will be

(a) Proper Rational Fraction (b) Improper rational Fraction

(c) Polynomial (d) Conditional equation

(iv) If degree of $P(x) = 4$ and degree of $Q(x) = 3$, then $\frac{P(x)}{Q(x)}$ will be

(a) Proper Rational Fraction (b) Improper rational Fraction

(c) Polynomial (d) Conditional equation

(v) $\frac{x^2+x+1}{Q(x)}$ will be improper fraction if,

(a) Degree of $P(x) = 2$ (b) Degree of $P(x) = 4$

(c) Degree of $P(x) = 3$ (d) none of these

(vi) $\frac{x^2+x+1}{Q(x)}$ will be proper fraction if,

(a) Degree of $P(x) = 2$ (b) Degree of $P(x) = 1$

(c) Degree of $P(x) = 3$ (d) none of these

(vii) The rational fraction $\frac{2x+1}{x(x-1)(x-3)}$ is _____ fraction

(a) Proper (b) Improper

(c) Polynomial (d) both

(viii) The partial fraction of $\frac{1}{x^3+1}$ will be

(a) $\frac{A}{x+1} + \frac{B}{x^2-x+1}$ (b) $\frac{A}{x-1} + \frac{B}{x^2+x+1}$

(c) $\frac{A}{x+1}+\frac{B}{x^2=x+1}$ (d) $\frac{A}{x-1}+\frac{B}{x^2-x+1}$

(ix) The partial fraction of $\frac{1}{x^3-1}$ will be

(a) $\frac{A}{x+1}+\frac{B}{x^2-x+1}$ (b) $\frac{A}{x-1}+\frac{B}{x^2+x+1}$

(c) $\frac{A}{x+1}+\frac{B}{x^2=x+1}$ (d) $\frac{A}{x-1}+\frac{B}{x^2-x+1}$

(x) If $\frac{1}{x^2-1}=\frac{A}{x-1}+\frac{B}{x+1}$, then the value of B is

(a) $\frac{1}{3}$ (b) $\frac{1}{2}$

(c) $\frac{-1}{2}$ (d) none of these

Q#2: Resolve into partial fraction $\frac{x^2+x+5}{(x-1)(x+2)}$

Q#3: Resolve into partial fraction $\frac{x+7}{(x^2-1)(x+1)}$

Q#4: Resolve into partial fraction $\frac{1}{(x^3-1)(x-1)}$

UNIT#5

(Sets and Functions)

Q#1: Circle the correct option.

(ii) The union of rational number and irrational number is called

(a) Rational number (b) Irrational number

(c) Real number (d) Complex number

(ii) The union of two sets A and B is written as

(a) A $\cup B$ (b) A $\cap B$

(c) A' (d) A $- B$

(iii) If A and B are two sets and $\{x|x \in A \; and \; x \notin B\}$ is defined as

(a) A ∪ B (b) A ∩ B

(c) A' (d) A $- B$

(iv) If A = $\{1,3,5,7,9\}$ and B = $\{2,4,6,8,10\}$, then A ∩ B is

(a) $\{1,3,5,7,9\}$ (b) $\{2,4,6,8,10\}$

(c) $\{1,2,3,4,5,6,7,8,9,10\}$ (d) $\{\}$

(v) If U = $\{1,2,3,4,5,6,7,8,9,10\}$ and A = $\{2,4,6,8,10\}$, then A' is

(a) $\{1,3,5,7,9\}$ (b) $\{2,4,6,8,10\}$

(c) $\{1,2,3,4,5,6,7,8,9,10\}$ (d) $\{\}$

(vi) If A = $\{a, b\}$, Then P(A) is

(a) $\big\{\{a\},\{b\}\big\}$ (b) $\big\{\{a, b\}\big\}$

(c) $\big\{\phi\,\{a\},\{b\},\{a, b\}\big\}$ (d) $\{\}$s

(vii) If A = $\{1,2,3,4,5,6\}$, Then the number of elements in power set is

(a) 8 (b) 16

(c) 32 (d) 64

(viii) The number of elements in power set of an empty set is

(a) 1 (b) 2

(c) 3 (d) 4

(ix) $(A \cup B)' = A' \cap B'$ and $(A \cap B)' = A' \cup B'$ is-------- Law

(a) De-Morgan (b) Associative

(c) Distributive (d) Commutative

(x) If A = $\{1,2,4,8\}$ and B = $\{2,4,6,\}$ and C = $\{3,4,5,6\}$ then A ∪(B ∩ C) is

(a) $\{1,2,4,8,\}$ (b) $\{1,2,4,6,8\}$

(c) $\{2,3,4,5,6\}$ (d) $\{1,2,3,4,5\}$

(xi) The Cartesian product of two non-empty sets A and B denoted by

(a) A ∪ B (b) A ∩ B

(c) $f: A \dashrightarrow B$ (d) A × B

(xii) If A = $\{a, b\}$, B = $\{c, d\}$, The domain of B × A is

(a) $\{a, b\}$ (b) $\{a, b, c\}$

(c) $\{a, b, c, d\}$ (d) $\{c, d\}$

(xiii) If A = $\{1,2,3,4\}$, B = $\{5,6,7\}$ Then the number of elements

In A × B is

(a) 4 (b) 12

(c) 3 (d) 7

(xiv) If $(x + 5,\ y - 3) = (-4x + 65,\ y - 13)$,then the value of $x\ is$

(a) 5 (b) 12

(c) 10 (d) 16

(xv) If A = $\{1,2,3,4,5\}$, B = $\{2,3,5,7\}$,the domain of R={(x,y)|x+y=6} is

(a) $\{1,3,4\}$ (b) $\{1,3,5\}$

(c) $\{2,3,5\}$ (d) $\{3,4,5\}$

Q#2: Match the column

A well-defined collection of objects is	One-one function
A function $f: A \dashrightarrow B$ is called ---- If range of $f \subseteq B$	Onto function
A function $f: A \dashrightarrow B$ is called ---- If range of $f = B$	Set
A function $f: A \dashrightarrow B$ is called ---- Iff function is one-one and onto.	Into function
A function $f: A \dashrightarrow B$ is called ---- If all distinct elements of A have distinct images in B	Bijective function

Q#3: If U = $\{1,2,3,4,5,6,7,8,9,10\}$, A = $\{2,4,6,8,10,\}$,

B = $\{2,3,5,7,9\}$ and C = $\{3,5,7,9\}$

Find (a) $(A \cup B) \cap (A \cup C)$ (b) $A - B = A \cap B'$

Q#4: If U = $\{1,2,3,4,5,6,7,8,9,10\}$, A = $\{2,3,5,7\}$ and B = $\{2,4,6,8\}$

(a) $(A \cup B)' = A' \cap B'$ (b) $(A \cap B)' = A' \cup B'$

Q#5: If A = $\{2,4,6,8\}$ and B = $\{2,3,5,7\}$, then make the following relations from A to B and find the domain and range in each relation:

(a) $R_1 = \{(x,y) | \, y \leq x\}$ (b) $R_2 = \{(x,y) | \, y \geq x\}$

$(c) R_1 = \{(x,y) | \, x + y = 5\}$ (d) $R_2 = \{(x,y) | \, y - x = 2\}$

(e) $R_1 = \{(x,y) | \, y \not\leq x\}$ (f) $R_2 = \{(x,y) | \, y \not\geq x\}$

Q#6: A = $\{a, b, c\}$, B = $\{d, e, f\}$

(i) A $\times B =?$ and find $R = \{(x, y) | \, y = x\}$

(ii) B $\times A =?$ and find $R = \{(x, y) | \, y = x\}$

Unit#6

(**Basic Statistics**)

Q#1 Circle the correct answers

1. The nth positive root of the product of the 1x2x3……x n observations is called:

(a) Mode (b) Mean

(c) Geometric mean (d) median

2. The value obtained by reciprocating the mean of the reciprocal of x1x2x3… x n observations is called:

(a) Geometric mean (b) Median

(c) Harmonic mean (d) S.D

3. The most frequent occurring observation in a data set is called:

(a) Mode (b) Median

(c) Harmonic mean (d) Mean

4. The measure which determines the middlemost observation in a data set is called:

(a) median (b) mode

(c) Mean (d) variance

5. The observation that divide a data set into four equal part, are called:

(a) defiles (b) quartiles

(c) Percentiles (d) mode

6. The spread or scatterings of observations in a data set is called:

(a) average (b) dispersion

(c) central tendency (d) quartile

7. The measures that are used to determine the degree or extent of variation in a data set are called measures of:

(a) Dispersion (b) central tendency

(c) Average (d) quartile

8. The extent of variation between two extreme observations of a data set is measured by:

(a) Average (b) range

(c) Quartiles (d) mode

9. The mean of the squared deviations of xi (i = 1, 2……,n) observations from their arithmetic mean is called:

(a) Variance (b) Standard deviation

(c) Range (d) mode

10. The positive square root of mean of the squared deviations of xi (i – 1,2,…. n) observations from their arithmetic mean is called:

(a) Harmonic mean (b) range

(c) S.D (d) variance

11. The size of class interval (6–10) is:

(a) 4 (b) 5

(c) 8 (d) 10

12. The arrangement of data is necessary to find the value of:

(a) Mean (b) Median

(c) Mode (d) Range

13. The class having maximum frequency is called …….class.

(a) Modal (b) Median

(c) Lower (d) Upper

14. During frequency distribution number of groups should be between:

(a) 5 and 10 (b) 10 and 15

(c) 10 and 20 (d) 5 and 15

15. Direct formula to find mean from ungrouped data.

(a) $\bar{X} = \frac{\sum X}{n}$ $(b)\ \bar{X} = \frac{\sum fX}{\sum f}$

(c) $\bar{X} = A + \frac{\sum D}{n}$ (d) $\bar{X} = A + \frac{\sum fD}{\sum f}$

16. Direct formula to find mean from grouped data is: 1

(a) $\bar{X} = \frac{\sum X}{n}$ $(b)\bar{X} = \frac{\sum fX}{\sum f}$

(c) $\bar{X} = A + \frac{\sum D}{n}$ (d) $\bar{X} = A + \frac{\sum fD}{\sum f}$

17. Short formula to find mean from ungrouped data is:

(a) $\bar{X} = \frac{\sum X}{n}$ $(b)\bar{X} = \frac{\sum fX}{\sum f}$

(c) $\bar{X} = A + \frac{\sum D}{n}$ (d) $\bar{X} = A + \frac{\sum fD}{\sum f}$

18. Short formula to find mean from grouped data is:

(a) $\bar{X} = \frac{\sum X}{n}$ $(b)\bar{X} = \frac{\sum fX}{\sum f}$

(c) $\bar{X} = A + \frac{\sum D}{n}$ (d) $\bar{X} = A + \frac{\sum fD}{\sum f}$

19. Coding formula to find mean from ungrouped data is:

(a) $\bar{X} = \frac{n}{\sum \frac{1}{X}}$ $(b)\ \bar{X} = \frac{n}{\sum \frac{f}{X}}$

(c) $\bar{X} = A + \frac{\sum U}{n} \times h$ (d) $\bar{X} = A + \frac{\sum fU}{\sum f} \times h$

20. Coding formula to find mean from grouped data is:

(a) $\bar{X} = \frac{n}{\sum \frac{1}{X}}$ $(b)\ \bar{X} = \frac{n}{\sum \frac{f}{X}}$

(c) $\bar{X} = A + \frac{\sum U}{n} \times h$ (d) $\bar{X} = A + \frac{\sum fU}{\sum f} \times h$

21. Formula to find Harmonic mean from ungrouped data is:

(a) $\bar{X} = \frac{n}{\sum \frac{1}{X}}$ $(b)\ \bar{X} = \frac{n}{\sum \frac{f}{X}}$

(c) $\bar{X} = A + \frac{\sum U}{n} \times h$ (d) $\bar{X} = A + \frac{\sum fU}{\sum f} \times h$

22. Formula to find Harmonic mean from grouped data is:

(a) $\bar{X} = \frac{n}{\sum \frac{1}{X}}$ $(b)\ \bar{X} = \frac{n}{\sum \frac{f}{X}}$

(c) $\bar{X} = A + \frac{\sum U}{n} \times h$ (d) $\bar{X} = A + \frac{\sum fU}{\sum f} \times h$

23. The concept of antilogarithm is used to find the value of:

(a) A.M (b) G. M

(c) H. M (d) Mode

24. Variance is denoted by:

(a) V (b) S

(c) S^2 (d) $\bar{X}$

25. Standard deviation is denoted by:

(a) X (b) S

(c) S^2 (d) $\bar{X}$

26. Median is denoted by:

(a) X (b) $\bar{X}$

(c) S (d) S^2

27. On the basis of types of variable or data, the types of frequency distribution are:

(a) 2 (b) 3

(c) 4 (d) 5

28. If standard deviation is 6 then its variance is:

(a) 6 (b) 36

(c) 3 (d) 6

29. $\sum$ (X - $\bar{X}$) = ……

(a) 0 (b) 1

(c) –1 (d) 2

30. Types of dispersion are:

(a) 4 (b) 5

(c) 6 (d) 3

Q#2: Match the column For grouped data:

$\frac{\sum fX}{\sum f}$	Median
$\frac{n}{\sum \frac{f}{X}}$	Arithmetic Mean
$Antilog\left(\frac{\sum f\ logX}{\sum f}\right)$	Mode
$l + \frac{f_m - f_1}{2f_m - f_1 - f_2} \times h$	Harmonic Mean
$l + \frac{h}{f}\left\{\frac{n}{2} - c\right\}$	Geometric Mean

Q#3: Calculate (a) A.M. by direct method , (b) A.M. by indirect method

(c) G.M. , (d) H.M. , (e) Mode , (g) Median.

from the following data: 25,20,35,28,20,18,28,19,16,20

Q#4: Calculate from the following data by

(a) Direct Method , (b) indirect method (Short-cut Method)

(c) Geometric Mean (d) Harmonic Mean

(e) Mode (f) Median

Classes	**1-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**31-35**	**36-40**
frequency	7	10	16	32	24	18	10	5

Q#5: Find the standard deviation and Variance from the following data

Classes	**1-5**	**6-10**	**11-15**	**16-20**	**21-25**	**26-30**	**31-35**	**36-40**
frequency	7	10	16	32	24	18	10	5

Unit#7

(INTRODUCTION TO TRIGONOMETRY)

Q#1 Circle the correct answers

1. In degree measurement, 1^0 is equal to:

(a) $1'$ (b) $60'$

(c) $90'$ (d) $360'$

2. In degree measurement, $1'$ is equal to:

(a) $1''$ (b) $60''$

(c) $90''$ (d) $360''$

3. How many right angles are there in 360 degrees?

(a) Two (b) four

(c) Six (d) eight

4. If 'r' is the radius of a circle, then its circumference is:

(a) $\frac{1}{2}\pi r$ (b) πr

(c) $2\pi r$ (d) $4\pi r$

5. The radian measure of an angle that form a complete circle is:

(a) $\frac{1}{2}\pi$ (b) π

(c) 2π (d) 4π

6. π radians =

(a) 0^0 (b) 90^0

(c) 180^0 (d) 360^0

7. 1^0 =

(a) 180 π radian (b) π radian

(c) $\frac{\pi}{180}$ radian (d) $\frac{180}{\pi}$ radian

8. 1 radian =

(a) $(180\ \pi)^0$ (b) $(180\ )^0$

(c) $(\frac{\pi}{180})^0$ (d) $(\frac{180}{\pi})^0$

9. A part of circumference of a circle is called:

(a) radius (b) chord

(c) sector (d) arc

10. Formula for arc length is:

(a) l= θr (b) r = $l\theta$

(c) θ= l r (d) l = $\frac{r}{\theta}$

11. Area of a circular sector =

(a) rθ (b) $r^2\theta$

(c) $\frac{1}{2}$ rθ (d) $\frac{1}{2}r^2\theta$

12. In which quadrant only Sinθ and Cosecθ are positive?

(a) I (b) II

(c) III (d) IV

13. In which quadrant only Cosθ and Secθ are positive?

(a) I (b) II

(c) III (d) IV

14. In which quadrant only tanθ and Cotθ are positive?

(a) I (b) II

(c) III (d) IV

15. In which quadrant θ lie when Cosθ <0, tanθ <0 ?

(a) I (b) II

(c) III (d) IV

16. In which quadrant θ lie when Cosecθ > 0,Cos θ> 0 ?

(a) I (b) II

(c) III (d) IV

17. In which quadrant all trigonometric ratios are positive?

(a) I (b) II

(c) III (d) IV

18. Fundamental trigonometric ratios are:

(a) 3 (b) 4

(c) 5 (d) 6

19. Which one is a quadrant angle?

(a) 30^0 (b) 45^0

(c) 60^0 (d) 90^0

20. Sinθ.cosecθ =

(a) 1 (b) 0

(c) Sinθ (d) Cosθ

21. Cosθ. Secθ =

(a) 1 (b) tanθ

(c) 0 (d) Cotθ

22. Angles between $180^0$and $270^0$are in which quadrant?

(a) I (b) II

(c) III (d) IV

23. Sin (-310^0)=…….

(a) Sin310^0 (b) –Sin310^0

(c) Cos310^0 (d) tan310^0

24. Sec (-60^0)=…….

(a) –Sec60^0 (b) Sec60^0

(c) Cos60^0 (d) Cot60^0

Q#2: Match the column:

$sin^2\theta + cos^2\theta$	$sec^2\theta$
$1 + tan^2\theta$	1
$\sin\theta cot\theta$	$cosec^2\theta$
$tan\theta + cot\theta$	$\sin\theta$
$1 + cot^2\theta$	$\sec\theta\ cosec\theta$

Q#3: Find the values of the remaining trigonometric functions

if $\tan\theta = -\frac{1}{3}$ and the terminal arm of the angle is in quad ll

Q#4: Solve $\frac{cos\theta - sin\theta}{cos\theta + sin\theta} = \frac{cot\theta - 1}{cot\theta + 1}$

Q#5: Solve $\frac{1+cos\theta}{1-cos\theta} = (\text{cosec}\theta + cot\theta)^2$

Q#6: (a) What is the area of a circle of a radius 14cms by the arms of a central angle 45^o?

(b) Find the area of the sector with central angle of $\frac{\pi}{3}$ radian in a circle of radius 15cm.

Q# 7: A man standing 60m away from a tower notices that the angle of elevation of the top and the bottom of the flag staff on the top of the tower are 64^o and 62^o respectively. Find the length of the flag.

Unit#8

(**Projection of a side of a Triangle**)

Q#1 Chose the correct option

i. In an obtuse angle triangle one angle is of measure.

(a) Less than 90^0 (b) greater than 90^0

(c) Equal to 90^0 (d) Equal to 180^0

ii. A projection in the transformation of _____ and lines in one plane onto another plane.

(a) Lines (b) Circle

(c) Angles (d) Points

iii. The casting of shadows onto a plane is called.

(a) Projection (b) Shadow

(c) Lines (d) Acute angle

iv. There are _____ types of projection.

(a) Three (b) One

(c) Two (d) Four

v. The concept of projection mostly used in__.

(a) Physics (b) Chemistry

(c) Biology (d) None of them

vi. The most important theorem regarding projection is called

(a) Pythagoras (b) Right-angled

(c)None of these (d) Apollonius

vii. The Apollonius Theorem is usually used to find the length of _____ of a triangle

(a) Median (b) Angle bisector

(c)Ride (d) Mid-point

viii. Apollonius Theorem is also used to find the length of a median of triangle if we know the length of its

(a) Angles (b) Sides

(c)Median (d) none of these

ix. In a parallelogram ABCD $(\overline{AB})^2 + (\overline{AC})^2 = 2[(\overline{BD})^2 + \_\_\_\_]$

(a) $(\overline{BC})^2$ (b) $(\overline{AD})^2$

(c) $(\overline{BE})^2$ (d) none of these

x. Projection of a vertical line segment $\overline{CD}$ on a line segment $\overline{AB}$ is a point on $\overline{AB}$ which is of _____

(a) Equal (b) Zero dimension

(c)Un-equal (d) none of these

Q2 Match the column.

In Δ ABC m<A=110^O	Pythagoras Theorem
A projection is always	At least one angle=90^o
A right angled triangle	$2\overline{(AD)}^2$
$\overline{(AB)}^2 + \overline{(AC)}^2 = 2\overline{(BD)}^2 + - - -$	Obtuse angled triangle
$(hypotenuse)^2 = (base)^2 + (perpendicular)^2$	Perpendicular

Q#3) In a Δ PQR, p=15cm, q=12cm

Find m∠P=?

Q#4) Whether the triangle with sides 16cm, 14cm and 7cm is acute, obtuse or a right angled triangle.

Q#5) In a triangle Δ LMN, if m$\overline{LM} = 7cm,\ m\overline{LN}$ =10cm and m$\overline{MN} = 9cm$ and "O" is the midpoint of m$\overline{LN}$. Find the length of the medium $\overline{MO}$.

Q#6) In a triangle Δ DEF , m$\overline{EF} = 18cm, m\overline{DF}$ =14cm and m$\overline{DE}$=7cm, Then calculate the projection of $\overline{DE}$ on $\overline{EF}$

Unit#9

(Chords of a Circle)

Q1) Choose the correct option.

i) A chord of a circle is a line segment with any two points on the _____ of a circle.

(a) Radius (b) Center

(c) Circumference (d) Diameter

ii) An arc of a circle is in any portion of its _____.

(a) Circumference (b) Arc

(c) Sector (d) Radial segment

iii) Three or more points lie on the same line are called.

(a) Non-collinear (b) Collinear points

(c) Perpendicular d (d) None of these

iv) A secant is a line which intersects a circle at ____.

(a) One point (b) three points

(c) Two points (d) four points

v) A redial segment of a circle is a line segment, determined by the center and a point on the_____ of a circle

(a) Circumference (b) area

(c) Sector (d) Secant

vi) The largest Chord of a Circle is _____.

(a) Centre (b) Diameter

(c) Secant (d) None of these

vii) Only one circle can pass through, three _____ points.

(a) Collinear (b) Parallel

(c) Non-collinear (d) Adjacent

viii) Arc , secant and chord are _____?

(a) Not same (b) same

(c) Tangent (d) Radii

ix) A sector of a circle is the plane figure bounded by two_____.

(a) Chords (b) Diameters

(c) Radii (d) None of these

x) An arc of a circle is any portion of its_____.

(a) Circumference (b) Radius

(c) Center (d) Sector

Q#2: Match the column

Column A	Column B
πr^2	Circumference of a circle
Three non collinear points	Diameter of a circle
Secant	A line of a circle
Largest Chord	Area of a circle
$2\pi r$	Only one circle

Q#3 Calculate the length of the chord which stands at a distance of 4cm from the center of a circle whose radius is 7cm.

Q#4 Prove that the perpendicular bisectors of the chord of a circle passes through the center of a circle.

Q#5 If the length of the chord $\overline{PQ}$=6cm and its distance from the center is 4cm the find diameter of such circle.

Q#6 Prove that the largest chord of a circle is its diameter.

Unit#10

(Tangents to a circle)

Q1) Choose the correct option.

i) A tangent to a circle is the straight line which touches the circumference of a circle at _____

(a) Two point (b) single point

(c) Three point (d) four point

ii) The length of a tangent to a circle is measured from the given point to the point of _____

(a) Contact (b) construction

(c) Center (d) None of these

iii) The diameter of a circle is _____ of the radius

(a) Same (b) three times

(c) four times (d) twice

iv) The two tangents drawn to a circle from a point outside it, are _____ in length.

(a) Non-equal (b) Equal

(c) Parallel (d) perpendicular

v) Two circles are congruent if their____ __ are congruent

(a) Radii (b) chords

(c) Secants (d) tangents

vi) A chord through the center of a circle is called _____

(a) Sector (b) Radius

(c) Diameter (d) None of these

vii) a piece of a circumference of a circle is a

(a) A chord (b) A Line segment

(c) An arc (d) A line

viii) A secant is a straight line which cuts the circumference of a circle in _____ distinct points.

(a) Two point (b) single point

(c) Three point (d) four point

ix) $2r_1+2r_2+2r_3$ _____

(a) $d_1+d_2+d_3$ (b) $d_1\ d_2\ d_3$

(c)$(d_1\ d_2\ d_3)^2$ (d) None of these

x) A line which has two points in common with a circle is called:

(a) sine of a circle (b) Cosine of a circle

(c) Tangent of a circle (d) Secant of a circle

xi) A line which has only one point in common with a circle is called:

(a) sine of a circle (b) Cosine of a circle

(c) Tangent of a circle (d) Secant of a circle

xii) Two tangents drawn to a circle from a point outside it are …….in length.

(a) Half (b) equal (c) Double (d) triple

xiii). A circle has only one:

(a) secant (b) chord (c) diameter (d) center

xiv). Tangents drawn at the ends of diameter of a circle are…… to each other.

(a) parallel (b) non-parallel (c) collinear (d) perpendicular

Q# 2: Match the column:

A tangent is a	Secant of a circle
A line having two points in common with a circle	Line
The area of a semicircle is	Equals angles with that chord
Application of tangent to a circle	$\frac{\pi r^2}{2}$
The tangent drawn at the end of a chord	School building, pyramids

Q#3 The radii of two intersecting circles are 8cm and 6cm. If the length of their common chord is 4 cm, then find the distance between the centers

Q#4 Two circles having radii 4cm and 3cm touch each other externally. Draw another circle with radius 1.5cm touching the first pair externally.

Q#5 prove that in a circle of radius 2.5 cm, the tangents drown at the ends of a chord make equal angles with that chord

Q#6 The diameter of two circles are 8cm and 6cm. Find the length of the chord of the outer circle , which touches the inner circle

m $\overline{AB}$ = 2x

= $2\sqrt{(\overline{OB})^2 - (\overline{OC})^2}$

Unit#11

(Chords and Arcs)

Q#1 choose the correct option

i) If two areas of a circle are equal then their corresponding areas are _____

(a) Not equal (b) Congruent

(c) Unequal (d) Not congruent

ii) A point P on the circumference is equidistant from the _____

(a)Radii (b) Diameter

(c)Chord (d) None of these

iii) Equal chords of a circle subtend equal angels at the _____

(a) Chord (b) Radius

(c) Sector (d) Center

iv) In congruent circles if central angles are equal then corresponding _____are equal

(a) Chords (b) Angles

(c) Sectors (d) None of these

v) 180° is the angle of a _____

(a) Semi circle (b) Circles

(c) Chords (d) Center

vi) Perpendicular from the center of the circle to a chord _____

(a) parellel (b) Bisects

(c) Dose not bisect (d) None of these

Vii) The portion of a circle bounded by an arc and chord is called _____ of the circle

(a) Angle (b) line segment

(c) Segment (d) None of these

Viii) The number of arcs made by a chord on a circle is _____

(a) 2 (b) 3

(c) 1 (d) 4

ix) The length of an arcs of a circle is l =_____

(a) rθ (b) r^2 θ

(c) $\frac{r}{2}$ θ (d) r $\frac{\theta}{2}$

x) Angles formed by the same arc on the circumference is always _____

(a) un equal (b) equal

(c) Not congruent (d) None of these

Q#2. Match the column:

A semicircle and diameter have	360°
Length of an arc l =	Position of a circle
An arc is a	Between two rays
An angle is a measure of rotation	rθ
The central angle of a circle is	180°

Q#3. In congruent circles, if central angle are equal then corresponding sectors are equal

Q#4. A point" Q "on the circumference is equidistant from the radii $\overline{OX}$ and $\overline{OY}$ then prove thst m $\overline{XQ}$=m $\overline{YQ}$

Q#5. In congruent circles, unequal arcs will subtend unequal central angles

Q#6. In a circle if two pairs of diameters $\overline{DF}$ and $\overline{EG}$ are perpendicular to each other then the lines joining its ends in order form a square

Uni#12

(Angle in a segment of a circle)

Q#1 choose the correct option

1. The angle subtended between any two chords of a circle having common points on the circumference is called

a) Circum angle b)acute angle

C) Obtuse angle d) right angle

2. A Quadrilateral is called _____ when a circle can be drawn through its four vertices.

a) In-Center b) circum-circle

C) diameter d) cyclic

3. The angle in a semicircle is a _____

a) Right angle b)acute angle

C) Obtuse angle d) none of these

4. The opposite angle of any quadrilateral inscribed in a _____ are supplementary.

a) Square b)circle

C) Triangle d) rectangle

5. A central angle is subtended by two radii of a circle is called

a) Center b) diameter

C) Radius d)central angle

6. Any two angles in the same segment of a circle are_____

A) Equal b)unequal

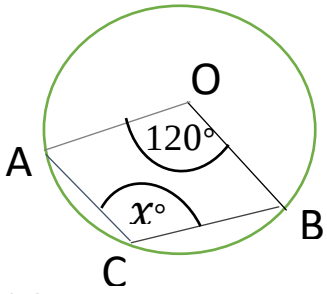
C) Not congruent d) none of these

7. If A,B,C,D is a quadrilateral circumscribed about a circle then its opposite sides are _____

A) Not congruent b)unequal

C) Congruent d) not parallel

8. In the figure 'O' is the center, then the angle x° will be



A) 120° b) 9o°

C) 100° d) 180°

9. In center of a triangle is the center of a circle inscribed in a ____

a) Square b)triangle

c) Rectangle d) none of these

10. The join of any two points on the circumference of the circle is called its ___

a) Radius b)diameter

c) Chord d) center

Q#2 Match the column

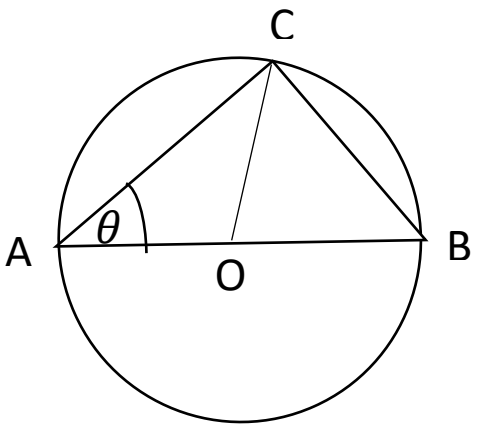
Column A	Column B
If the sector is greater than a semicircle the angle is	Right angle
Angle at a point of circumference of circle if joining the end points of a circle	36o°
Total angle in the center of a circle	Less than 90°
If the sector is less than a semicircle the angle is	greater than 90°
The opposite angles of any quadrilateral in a circle is	180°

Q#3. Prove that the angle in the same segment of a circle are congruent.

Q#4. Prove that the Supplementary angles are formed by any quadrilateral inscribed in a circle when these are opposite.

Q#5 Prove that a parallelogram inscribed in a circle will be a rectangle.

Q#6: From the figure find the measure of the angle' θ '.



Unit#13

(Practical Geometry-circle)

Q#1. Choose the correct option.

i) The radius of an inscribed circle is called_____.

(a) Circumcircle (b) Inscribed

(c) In-circle (d) none of these

ii) A circle can be drawn through given_____ non collinear points.

(a)Two (b) Three

(c) Four (d) Five

iii) Tangent two unequal touching circle can be_____.

(a) Not possible (b) Not traced

(c) Traced (d) None of these

iv) . The boundary of the circle is _____

(a) Area (b) Radius

(c) Circumference (d) Diameter

V) Angle inscribed in a semi-circle is a _____ angle.

(a) Reflex (b) Obtuse

(c) Acute (d) Right

vi) Circle with three points common will _____.

(a) Coincide (b) Not coincide

(c) Do not intersect (d) none of these

vii) Three common tangent can be drawn for_____touching circle.

(a) Five (b) Four

(c) Two (d) three

viii) Two tangents can be drawn for a point outside a_____.

(a) Square (b) Triangle

(c) Circle (d) Rectangle

ix) Is it possible to draw a circle touching three converging lines?

(a) Maybe (b) Yes

(c) No (d) None of these

x) Two unequal touching circle have _____ tangent.

(a) Four (b) Three

(c) Two (d) One

Q#2) Match the column

Two touching circles externally	A circle touches sides of a triangle internally
Circumcircle	A circle touches one side of a triangle externally
In – circle	Common tangent
E- circle	Inscribed in the circle
Regular hexagon	A circle passing through the sides of a triangle

Q#3) Draw two perpendicular tangents to a circle of a radius 3.5cm?

Q#4) Circumscribe a circle for a triangle ΔLMN, where m$\overline{LM}$ =4cm,

m$\overline{MN}$=2.5cm and m$\overline{NL}$=3cm and measure its radius.

Q#5) Draw a square inside a circle of radius 3.5cm

Q#6) Draw a triangle ΔXYZ, where m$\overline{XY}$ =5.5cm, m$\overline{YZ}$=3.5cm and m $\overline{XZ}$=4.5cm. Make an inscribed circle and measure its radius

Q#7) Draw a regular hexagon inside a circle of a radius 2.5cm

PAKISTAN INTERNATIONAL SCHOOL JEDDAH

SENIOR BOYS SECTION 2023-2024

G.MATH WORKSHEET SSC-II

CONTENTS:

Unit#1

Algebraic expression

Q#1;Circle the correct answer:

(i) An algebraic expression is of types:

(a)One (b)Two

(c)Three (d) Four

(ii) A rational expression $\frac{P(x)}{Q(x)}$, Q(x) ≠ 0, in which the degree of P(x) is____ the degree of Q(x) is called a proper rational fraction.

(a) Less than (b) greater that

(c) Equal (d) not equal

(iii) $\frac{2}{5}x^2$-5x+7 is a polynomial on _____

(a) Natural numbers (b) Integers

(c) Rational numbers (d) Irrational numbers

(iv) $(2\lambda + 3m)^2$- $(2\lambda - 3m)^2$ =_____

(a)- 27λm (b) 24λm

(c) 27λm (d) - 24λm

(v)The degree of constant is _____

(a) 0 (b) 1

(c) -1 (d) 2

(vi) $(a + b + c)^2$ = a^2+$b^2 + c^2$_____

(a) 2ab-2bc-2ca (b) -2ab-2bc-2ca

(c) 2ab+2bc+2ca (d) 2ab+2bc-2ca

(vii)The descending order of the given expression

8-$7y^5$+y^3+$6y^4$ is _____

(a) -$7y^5 + 6y^4$+y^3+8 (b) $7y^5 + 6y^4$+y^3-8

(c) -$7y^5 - 6y^4$-y^3-8 (d) -$7y^5 - 6y^4$+y^3+8

(viii)The root of the x^3-6x+11x-6=0_____

(a) 3 (b) 4 (c)1 (d)2

(ix)Multiply with the help of formula ($\sqrt{a} - \sqrt{b}$)(a+$\sqrt{ab}$ + b) =_____

(a) a − b (b) $\sqrt{a} - \sqrt{b}$ (c) a$\sqrt{a}$ − b$\sqrt{b}$ (d)$a^2 - b^2$

(x)A surd is an _____ number that contains a radical sign

(a) rational (b) irrational (c) prime (d) integers

Q#2 Match the following column

$\frac{x^2 - 25}{x^2 + 7x + 10}$	$\frac{x - 1}{x^2 - 3x + 9}$
$\frac{x^2 + 10x + 25}{x^2 + 2x - 15}$	$\frac{x - 1}{3x + 5}$
$\frac{x^2 + 2x - 3}{x^3 + 27}$	$\frac{x + 5}{x - 3}$
$\frac{2x^2 + 3x - 5}{4x^2 + 20x + 25}$	$\frac{x - 5}{x + 2}$
$\frac{x^2 + 3x - 10}{x^2 - 4x + 4}$	$\frac{x + 5}{x - 2}$

Q#3 Resolve into factors $r^6s^4 - 27t^6s^4 - 9r^6u^4 + 108t^6u^4$

Q#4 If P(S) = $s^8 + \frac{7s^7}{8} - s^6 + 1$ then find P(S) for s=2,s= −2.

Q#5 Show that $(P+\frac{1}{P})^3-(P-\frac{1}{P})^3$ = 2(3P+$\frac{1}{p^3}$)

Q#6 (i) if q=$\sqrt{5}-\sqrt{3}$ then evaluate q $-\frac{1}{q}$, $q^2+\frac{1}{q^3}$

(ii)$\frac{\sqrt{t+5}-\sqrt{t-5}}{\sqrt{t+5}-\sqrt{t-5}}$ Rationalize

Unit# 2

Factorization

Q#1 Circle the correct answers:

(i) Factors of $x^2 - 5x + 6$ *are*_____

(a) $(x + 1)(x - 6)$ (b) $(x - 2)(x - 3)$

(c)$(x - 1)(x + 6)$ (d) $(x + 2)(x + 3)$

(ii) $8x^3 + 27y^3 =$ _____

(a) $(2x + 3y)(4x + 9y^2)$ (b) $(2x - 3y)(4x^2 - 9y^2)$

(c) $(2x + 3y)(4x^2 - 6xy + 9y^2)$ (d) $(2x + 3y)(4x^2 + 6xy + 9y^2)$

(iii) Factors of $ax + by - bx - ay =$ _____

(a) $(a - x)(x - y)$ (b) $(a + b)(x + y)$

(b) $(a - b)(x + y)$ (d) $(a + b)(x - y)$

(iv) $a^4b^2 - a^2b^4 = a^2b^2$_____

(a) $a^2 + b^2$ (b) $(a - b)(a + b)$

(c)$a^3 + b^3$ (d) $a^3 - b^3$

(v) The zero of polynomial $P(x) = 2x + 5$ is

(a) $\frac{2}{5}$ (b) $\frac{5}{2}$

(c) 0 (d) $\frac{-5}{2}$

(vi) If $x^{51} + 51$ *is divided by* $(x + 1)$*the remainder is*:

(a) 0 (b)1

(c)49 (d)50

(vii) Which of the following polynomial has -3 as zero:

(a) $(x - 3)$ (b) $(x^2 - 9)$

(b) $(x^2 - 3x)$ (d) $(x^2 + 3x)$

(viii) In which of the following ($x + 2$) $is\ a\ factor$:

(a) $4x^3 - 13\,x + 6$ (b) $x^3 - x^2 + \ x + 4$

(b) $4x^3 - 13\,x - 25$ (d) -2x^3+$x^2 - 13\,x - 19$

(ix) The coefficient of x^2 in (2-3x^2) ($x^2 - 5$) is:

(a) -17 (b) -10

(c) -3 (d) 17

(x) If P(x) $= 2x^3 - x^2$+3 $x - 1$, $then\ \ P(2) =$

(a) 17 (b) -17

(c)16 (d) -16

Q#2: Match the column:

Column A	Column B
$9x^2 + 9x + 2$	(3 $x - 1$)($2x + 1$)
$9x^2 + 3x - 2$	(3 $x - 2$)($3x - 1$)
$9x^2 - 9x - 2$	(3 $x + 2$)($3x - 1$)
$6x^2 + 5x + 1$	(3 $x + 1$)($3x + 2$)
$6x^2 + x - 1$	(3 $x + 1$)($2x + 1$)

Q3#: Short Questions:

(i) Factorize. $7x^3 - 42x^2 + 56x$

(ii) Resolve into factors. $x^4 + 1024$

(iii) Factorize. $6\sqrt{2}\,x^2 + 16x - 3\sqrt{2}$

(iv) Determine whether the first polynomial is factor of second polynomial.
$4x^5 - 3x^4 + 6x - 7, x - 1$

Q4#: Long Questions:

(i) If P(x) = $x^4 - kx^3 + 4x + 6$ is divided by $x - 2$, find k if remainder is 16

(ii) If P(x) = $4x^4 + kx - 28$ $is\ divided\ by\ x - 4$, $Find\ k\ if\ remainder\ is\ 0$

Unit#3

Q#1 : Circle the correct answers:

(i) H.C.F of $a^3 + b^3$ and $a^2 - ab + b^2$ is _____

(a) $a + b$ (b) $a^2 - ab + b^2$

(c) $(a - b)^3$ (d) $a^2 + b^2$

(ii) L.C.M of $(a - b)^2$ and $(a - b)^3$ is _____

(a) a-b (b) $(a - b)^2$

(c) $(a - b)^3$ (d) $(a - b)^5$

(iii) H.C.F of $x^2 - 1, x^3 - 1$ is _____

(a) $x + 1$ (b) $x + 2$

(c) $x - 1$ (d) $x - 2$

(iv) H.C.F of $x^2 + 9ax + 6a^2$, $x^2 - 5ax - 24a^2$ is _____

(a) $x - 3a$ (b) $x + 3a$

(c) $x - 2a$ (d) $x + 2a$

(v) The G.C.D of $18x^5y^2$ and $12x^3y^4$ is _____

(a) $6x^2y^2$ (b) $6x^3y^2$

(c) $-6x^3y^2$ (d) $6xy$

(vi) P(x) = ?

(a) q(x)

(b) $\frac{L.C.M \times H.C.F}{q(x)}$

(c) $\frac{q(x)}{H.C.F \times L.C.M}$

(d) $H.C.F \times L.C.M$

(vii) H.C.F of 14rs,16r^2s is:

(a) $2rs$

(b)14rs

(c)16rs

(d)$14r^2s^2$

(viii) The number of methods to find the square route of algebraic expression

(a) 1

(b) 2

(c) 3

(d) 4

(ix) H.C.F of $(x^3 - x^2 + x - 1)$ and $(x^3 - x^2 + 3x + 3)$

(a) $x - 1$

(b) $x - 3$

(c) $x + 1$

(d) $x + 3$

(x) L.CM of x^2yz,xy^2z,xyz^2

(a) $x^2y^2z^2$

(b)$x^3y^3z^3$

(c)$x^4y^4z^4$

(d) xyz

Q#2. Match the column

H.C.F of $12p^3q^2$,$8p^2qr^3$and $4p^2q^3r$	$p^2q^2(p-q)(p+q)(p^2+pq+q^2)$
H.C.F OF $6p^2qr^2$,$9q^2rs$	$24p^3q^3r^3$
L.C.M of $12p^3q^2$,$8p^2qr^3$ and $4p^2q^3r$	$pq(p-q)$
L.C.M of $p^3q-pq^3, p^5q^2-p^2q^5$	$4p^2q$
H.C.F of $p^3q-pq^3, p^5q^2-p^2q^5$	$3qr$

Q#3. Short questions.

(i) Find H.C.F of 16$(6x^5-x^4-2x^3)$ and $12(2x^7+3x^6+x^5)$ by factorization

(ii) Find the H.C.F by division method

(x^3-x^2+x-1) and (x^3-x^2-3x+3)

(iii) Find the L.C.M of x^2-64 and $x^2+5x-24$ by factorization method

(iv) Product of two expressions is $x^4+3x^3-12x^2-20x+48$ and their L.C.M is $x^3+5x^2-2x-24$. Find H.C.F

Q4. Long Questions.

(i) Simplify $\frac{a^2-b^2-c^2+2cb}{b^2+c^2-a^2+2cb} \times \frac{a^2+b^2-c^2-2ab}{c^2-a^2+b^2-2cb}$

(ii) Find the square root of $\left(\frac{a}{b}+\frac{b}{a}\right)^2-4\left(\frac{a}{b}-\frac{b}{a}\right)$

UNIT#4

(LINEAR EQUATIONS)

Q#1: Circle the correct answers

(i) In the equation x+y = 7, if x = 3 then the value of y___

(a)-4 (b)4 (c)10 (d)-10

(ii) A statement involving any of the symbols < , > $\leq$ or $\geq$

Is called _____

(a)equation (b)identity

(c)inequality (d)linear equation

(iii) Solution of |x – 5 |= 8 is _____

(a)$\{13, 3\}$ (b)$\{-13, -3\}$

(c)$\{-13, 3\}$ (d)$\{13, -3\}$

(iv)Solution of |x| = 7 is _____

(a)7 (b)-7 (c)±7 (d)0

(v) If x = _____ is a solution of inequality -4 <x <$\frac{5}{4}$

(a)0 (b)9 (c)5 (d) $\frac{5}{4}$

(vi) If x is no longer than 15 then ____

(a) $x \geq 13$ (b) $x \leq 15$

(c) $x < 15$ (d) $x > 15$

(vii) if the capacity of an elevator is atmost 1800 pounds, then _____

(a) $c < 1800$ (b) $c \leq 1800$

(c) $c \geq 1800$ (c) $c > 1800$

(viii) if x = 0 is a solution of the inequality _____

(a) $x > o$ (b) $4x+6 < 0$

(c) $x + 1 < o$ (d) $x-3 < 0$

(ix) Which of the following is a solution of inequality $5-6x \leq 15$?

(a)-5 (b)-3 (c)$-\frac{5}{3}$ (d) $\frac{15}{6}$

(x) If 20 > 15 and 15 > a , then 20___a

(a) > (b)< (c)= (d) $\leq$

Q#2 Match the following columns

COLUMN A	COLUMN B
$\frac{1}{3}x > \frac{1}{4}(x-1)$	$x \leq 4$
x -7 $\leq 5-2x$	x < -10
$\frac{4x-3}{3}$ + 8 > 6 + $\frac{3x}{2}$	x > -3
$\frac{x-2}{4} + \frac{2}{3} < \frac{x-4}{6}$	x < 6
$\frac{1}{2}x > 1 + \frac{1}{3}x$	$x \geq 6$

Q#3 SHORT ANSWERS

(i) Solve 2y + $\frac{11}{4} = \frac{1}{3}y + 2$

(ii) solve $\frac{1}{3}\ x > \frac{1}{4}(x-1)$

(iii) solve $\sqrt{10x-4}$ - $\sqrt{x}$ = 4

Q#4 LONG QUESTIONS

(I) Solve x – [2x - $\frac{3x-4}{7}$] = $\frac{4x-27}{3}$ – 3

(ii) Solve x +$\sqrt{x-8}$ = 8

UNIT#5

QUADRATIC EQUATION

Q#1: Circle the correct answers

(i) The standard form of quadratic equation____

(a)ax^2+bx+c=0 (b)ax^2-bx+c=0

(c)ax^2+bx-c=0 (d)a$x^2 - bx - x = 0$

(ii) The standard form of quadratic quation

$2x^2 - 3 = 7x$ is ____

(a)$2x^2 - 3 = 7x$ (b)$2x^2 - 3 - 7x = 0$

(c)$2x^2 - 7x - 3 = 0$ (d)-$2x^2 + 3 + 7x = 0$

(iii) Which of the following equation is not quadratic equation?

(a) $3x^2 + 4x - 7 = 0$ (b) $m^2 - 5m - 8 = 0$

(c) $2b^2 + b + 6 = 0$ (d) $0\ x^2 - 2x - 9 = 0$

(iv) The highest power appearing in a quadratic equation

$3x^2 = 6x - 4$

(a) 1 (b) 2 (c) 3 (d) 4

(v)The constant term in the quadratic equation

$7x^2 - 4x = 5$

(a)7 (b)-4 (c)-5 (d)5

(vi) The polynomial equation x (x +1)+8 =(x +2)(x -2)

Is a _____ equation

(a)Linear (b)cubic

(c)quadratic (d)simultaneous

(vii)Which one of the following value satisfies the

equation $x^2 - 3x + 2 = 0$?

(a)1 (b)2 (c)-1 (d) -3

(viii)The maximum number of roots of quadratic

equation a$x^2 + bx + c = 0$

(a)1 (b)2 (c)3 (d)4

(ix) The roots of quadratic equation a$x^2 + bx + c = 0$ is

given by:

(a)$\frac{-b\pm\sqrt{b^2-4ac}}{2a}$ (b) $\frac{-b\pm\sqrt{b^2-4a}}{2a}$

(c) $\frac{-b\pm\sqrt{b^2}-4\text{ac}}{2a}$ (d) $\frac{-b\pm\sqrt{b^2-4c}}{2a}$

(x) Solution of $x^2 = 1$ is:

(a){1} (b){ ± 1} (c) {0} (d)does not exist

Q#2 Match the following coloumn

COLUMN A	COLUMN B
$x^2 + 4x - 77$	{7,-11}
$6\,x^2 - 19x - 7 = 0$	{-3 + $\sqrt{11}, -3 - \sqrt{11}$}
$x^2 + 6x - 2 = 0$	{2,3}
$(x-3)^2 = 4$	$\{-\frac{1}{3}, \frac{7}{2}\}$
$3\,(x-2)^2 = x(x-2)$	{1,5}

Q#3 Short Answers

(i) Solve $10x^2 - 12x = 15$ by completing square method

(ii) Solve by using quadratic formula $2\,x + \frac{3}{2} = x^2$

(iii)Find two consecutive positive numbers such that the sum of their squares is equal to 61.

Q#4 Long questions

(i)Solve $(x+5)^2 + (2x-1)^2 - 67 = (x+5)(2x-1)$

by quadratic formula

(ii) A man is now four times as old as his son. Three years ago ,the product of their ages was 63. Find their present ages.

UNIT#6

MATRICS AND DETERMINANTS

Q#1. Circle the correct answers

(i) A diagonal matrix in which all diagonal elements are equal / same is called _____ matrix

(a)Diagonal (b) Identity (c)Null (d)Scalar

(ii)Matrix is a ___ word which means a place in which something develops or originates

(a)German (b) Latin (c) Spanish (d) Arabic

(iii)Transpose of a row matrix is called ____

(a)Square (b) Rectangular (c)Row (d) column

(iv) $(A+B+C)^t$ = _____

(a)A+B+C (b)$A^t+B^t+C^t$ (C) ABC (d) $C^TB^TC^T$

(v)Matrix of order m x n is a square matrix if

(a) m≠n (b) m = n (c) m < n (d) m > n

(vi) [0] is ___ matrix

(a)Square (b) Rectangular (c) Identity (d) Unit

(vii) The principle diagonal of square matrix is _____

(a)Identity diagonal (b) Unitary diagonal

(c)Leading diagonal (d) Diagonal matrix

(viii) A square matrix A is singular if ___

(a) A = 0 (b) |A| = I (c) A is a Scalar (d) |A| = 0

(ix) For a non-singular matrix A, A^{-1} = _____

(a)$\frac{1}{|A|}$ (b)$\frac{1}{|A|}AdjA$ (c) $|A|$ |adj A (d) $\frac{1}{|A|\ Adj\ A}$

(x) By commutative property of addition for any two matrices A and B

(a) AB = BA (b) A+B = B+A (c) A-B = B-A (d) $A^{-1}B = B^{-1}A$

Q#2 Match the following column

Row matrices	$\begin{bmatrix} a \\ b \end{bmatrix}$
Column matrix	$[0 \quad 0 \quad 0]$
Null matrix	$[a \quad b \quad c]$
Scalar matrix	$\begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$
Identity matrix	$\begin{bmatrix} a & 0 \\ 0 & a \end{bmatrix}$

Q#3 Short Questions

(i) If A=$\begin{bmatrix} 1 & 2 \\ 0 & 1 \end{bmatrix}$, B=$\begin{bmatrix} 1 & 1 \\ 2 & 1 \end{bmatrix}$, then verify that $(A + B)^t = A^t + B^t$

(ii) If A =$\begin{bmatrix} -1 & 3 \\ 2 & 0 \end{bmatrix}$, B = $\begin{bmatrix} 1 & 2 \\ -3 & -5 \end{bmatrix}$, $(AB)^t = B^t A^t$

(iii) Find the inverse of A =$\begin{bmatrix} 5 & -10 \\ -2 & 4 \end{bmatrix}$

Q#4 Long Questions

(I)Solve by inversion method

2x – 2y = 4

-5x – 2y = -10

(ii)Solve by crammers rule

4x + y = 9

-3x – y = -5

UNIT#7

FUNDAMENTAL CONCEPTS OF GEOMETRY

Q#1: Circle the correct answers

(i) The points that lie on the same line are said to be ___ points

(a) Collinear (b) Non-collinear (c) Coincident (d) Congruent

(ii) An _____ is the union of two non – collinear rays having a common end points

(a) Vertex (b) half plane (c) Angle (d) Ray

(iii) If two adjacent angles are equal in measure then their common arms is called ____ of the angle

(a) bisector (b)exterior (c) convex set (d)coincident lines

(iv) If the sum of measures of two angles 90^o , they are called_____

(a)supplementary (b)complementary

(c)Adjacent d) Exterior

(v) if the sum of measures of two angles 180^o , they are called____

(a)supplementary (b)complementary

(c)Adjacent (d) Exterior

(vi) The common end points of rays whose union is an angle is called ____ of the angle

(a)Point (b) Median (c) Vertex (d) mid-point

(vii) The supplement of the angle of 30 is ____

(a)180^o (b)600^o (c)150^o (d)90^o

(viii) The circle passes through the three vertices of a triangle is called

(a)Circum circle (b)In circle (C) escribed circle (d) None

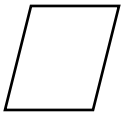
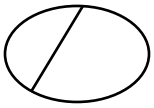
(ix) Two ___ can be drawn to a circle from a point outside the circle

(a)Tangents (b) Secants (c) Rays (d) None

(x) A Tangent is a line touching a circle at

(a)Two points (b) One point (c) Three Points (d) No point

Q#2 Match the columns

	Ray
	Plane
	Chord
	Line
	Line segment

Q#3 Short answers

(i)Find the values of a , b , c and d from the figure.

(ii) The sides of a quadrilateral are 3cm, 5cm, 7cm and 9cm. The longest sides of a similar quadrilateral is 36cm. Find the others sides

Q#4Long questions

(i) The sides of a polygon are 4cm, 5cm, 6cm, 7cm, and 8cm. In a similar polygon the sides are corresponding to 7cm is 14cm. Find the other sides of the second polygon

Unit#8

(Practical geometry)

(i) The sum of all angles of a triangle is :
(a) 90^0 (b) 180^0 (c) 270^0 (d) 360^0

(ii) Every triangle has angle bisectors:
(a) 2 (b) 3 (c) 4 (d)1

(iii) The point at which the three angle bisectors of a triangle meet is called
(a) In-Center (b) Ortho-center c) in-Circle (d)Circum-center

(iv) The point at which the three right bisectors of a triangle meet is called
(a) In-Center (b) Ortho-center c) in-Circle (d) Circum-center

(v) The centroid of a triangle divides each one of the medians in the ratio:
(a) $2:1$ (b) $3:1$ (c) $4:1$ (d)$1:1$

(vi) A Quadrilateral figure is
(a) 3-sided (b) 5-sided (c) 4-sided (d) none of these

(vii) A line cuts the circle at _____ is called tangent:
(a) 3-points (b) 2- points (c) 4- points (d) one point

(viii) The point at which the three medians of a triangle meet is called
(b) In-Center (b) Ortho-center c) centroid (d) Circum-center

(ix) The medians of a triangle are

(a) Congruent (b) concurrent c) parallel (d) perpendicular

(x) One and only one circle can pass through _____ non-collinear points.

(a) 2 (b) 3 (c) 4 (d)1

Q#2: match the column:

In-center is a point at which the _____ of a triangle meet	Medians
Ortho-center is a point at which _____ of a triangle meet	Altitudes
centroid is a point at which _____ of a triangle meet	Right bisectors
cicum-center is a point at which _____ of a triangle meet	Tangent
A line is passing only one point of a circle is	Angle bisectors

Q#3: Construct a $\Delta ABC\ in\ which$ m$\overline{AB} = 4.4\ cm$, m$\overline{BC} = 5.5cm$

m$\overline{AC} = 4\ cm$. Find the in-center of the triangle

Q#4: Construct a $\Delta ABC\ in\ which$ m$\overline{AB} = 6\ cm$, m$\angle A = 60^0$

m$\angle B = 45^0$. Find the centroid of the triangle

Q#5: Draw an equilateral triangle with length of each side is 5 cm.

Q#6: Construct a rectangle whose adjacent sides are 5 cm and 4 cm.

Q#7: Construct a square whose one side is 4 cm.

Unit #9

(Areas and Volume)

Q#1 Circle the correct answers

i) If the sides of a right triangle are 5cm and 12cm the hypotenuse is _____.

(a) 12 (b)13

(c) 14 (d) 15

ii) The sides form a right triangle are _____.

(a) 3,4,5 (b) 2,3,5

(c) 4,5,6 (d) 5,6,7

iii) Heros formula is used to find _____.

(a) Area of circle (b) Area of triangle

(c) Area of square (d) Area of sphere

iv) In a right triangle if base =5 and altitude =12 then the area of a triangle is _____.

(a) 60 (b) 30

(c)15 (d) 17

v) The area of a circle whose circumference is 52π cm _____.

(a) 686π (b) 656π

(c) 676π (d) 576π

vi) The volume of a cube of a side is 5 cm _____.

(a)100 (b) 150

(c) 125 (d) 200

vii) Area of equilateral triangle with side 2 cm is _____.

(a) 3 (b) $\sqrt{3}$

(c) $\frac{\sqrt{3}}{4}$ (d) $\frac{2}{\sqrt{3}}$

viii) Area of a semi-circle with radius 2 cm is _____.

(a) π (b) π^2

(c) 2π (d) $\frac{\pi^2}{2}$

ix) The space inside the boundary of a shape is _____.

(a) Circumference (b) Area

(c) Volume (d) Sides

x) 1000 cm^3 is equal to _____.

(a) 1 ml (b) 1 l

(c) 1 Kl (d) none of these

Q#2 match the column:

Area of a circle	$\frac{4}{3}\pi r^3$
Volume of sphere	$\frac{2}{3}\pi r^3$
Volume of a hemi sphere	πr^2
Volume of a right circular cylinder	$\frac{1}{3}\pi r^2 h$
Volume of a right circular cone	$\pi r^2 h$

Q#3: The sides of a triangle are 17 cm, 15cm and 8cm. Show that it is a right triangle.

Q#4: A 39 cm ladder leans against a house with its foot 15 cm from the house. How far is the top of the ladder from the ground?

Q#5: Find the area of a room 6.5 m long and 4.5 m wide. What is the cost of carpeting the room if the rate of carpet is Rs 12 per square meter?

Q#6: Find (liters) the volume of storage of tank whose length, breadth, and depth are 6.5m, 5.5m and 4.5m respectively.

Unit#10:

Q1) Circle the correct answer:

(i) If points $A(6,-2) and\ B(1,-2)$, then the distance between points is

(a) 25 (b) 20 (c) 5 (d) 4

(ii) A point lies in the III quadrant, then both coordinates are

(a) Positive (b) Negative (c) positive abscissa (d) negative ordinate

(iii) A point $(6,-7)$ lies in the quadrant

(a) I (b) II (c) III (d) IV

(iv) The origin has the coordinates

(a) $(1,-1)$ (b) $(0\ ,\ 0)$ (c) $(2,-2)$ (d) $(3,-3)$

(v) Collinear points form a

(a) Triangle (b) circle (c) straight line (d) none

(vi) Non-collinear points form a

(a) Triangle (b) square (c) straight line (d) none

(vii) If A,B and C are three collinear points, then

(a) $|\overline{AB}| + |\overline{BC}| = |\overline{AC}|$ (b) $|\overline{AB}|^2 + |\overline{BC}|^2 = |\overline{AC}|^2$

(c) $|\overline{AB}| = |\overline{BC}| = |\overline{AC}|$ (d) $|\overline{AB}| \neq |\overline{BC}| \neq |\overline{AC}|$

(viii) If A,B and C are three points of a right triangle , then

(a) $|\overline{AB}| + |\overline{BC}| = |\overline{AC}|$ (b) $|\overline{AB}|^2 + |\overline{BC}|^2 = |\overline{AC}|^2$

(c) $|\overline{AB}| = |\overline{BC}| = |\overline{AC}|$ (d) $|\overline{AB}| \neq |\overline{BC}| \neq |\overline{AC}|$

(ix) If A,B and C are three points of a scalene triangle , then

(a) $|\overline{AB}| + |\overline{BC}| = |\overline{AC}|$ (b) $|\overline{AB}|^2 + |\overline{BC}|^2 = |\overline{AC}|^2$

(c) $|\overline{AB}| = |\overline{BC}| = |\overline{AC}|$ (d) $|\overline{AB}| \neq |\overline{BC}| \neq |\overline{AC}|$

(x) If A,B and C are three points of equilateral triangle , then

(a) $|\overline{AB}| + |\overline{BC}| = |\overline{AC}|$ (b) $|\overline{AB}|^2 + |\overline{BC}|^2 = |\overline{AC}|^2$

(c) $|\overline{AB}| = |\overline{BC}| = |\overline{AC}|$ (d) $|\overline{AB}| \neq |\overline{BC}| \neq |\overline{AC}|$

Q#2: Match the column:

If abscissa is positive , ordinate is positive in XY-Plane.	IV Quadrant
If abscissa is negative , ordinate is negative in XY-Plane.	I Quadrant
If abscissa is negative , ordinate is positive in XY-Plane.	II Quadrant
If abscissa is positive , ordinate is negative in XY-Plane.	origin
If abscissa is zero , ordinate is zero in XY-Plane.	III Quadrant

Q#3: Show that the points A(0,0) , B(-3,0) and C(0,2) are vertices of a right triangle.

Q#4: Show that the points A(-2,-1) , B(0,3) , C(1,5) are collinear.

Q#5: Show that the points A(3,1) , B(-2,-3) and C(2,2) are vertices of an isosceles triangle.

Q#6: Show that the points A(1,2) , B(-2,1) and C(2,1) are of a scalene triangle..

Q#7: Show that the points A(0,0) , B($\sqrt{3}$,1) and C($\sqrt{3}$,-1) are of an equilateral triangle.

Pakistan International School Al-Azizia Jeddah

Senior Boys Section (FSS)

Session: 2023-24

Pakistan Studies

Grade: 10th

Name :- _____ Class/section:- _____

Table of Contents: -

Pakistan International School Al-Azizia Jeddah

Chapter #1: History of Pakistan (P-II)

Q. Tick the correct answer. i.e. a/b/c/d

(1) The Prime Minister of Pakistan from 1985 to 1988 was:
a. Muhammad Khan Junejo b. Mian Muhammad Nawaz Sharif
c. Mir Zafar Ullah Jamali d. Shaukat Aziz
(2) President of Pakistan in 1988 Presidential election:
a. Fazal Elahi Chaudhry b. Ghulam Ishaq Khan
c. Sardar Farooq Laghari d. Rafique Tarar
(3) By which amendment, in the 1973 constitution was banning of floor crossing:
a. Eighth b. Thirteenth c. Fourteenth d. Eighteenth
(4) The Old name of Allama Iqbal University was;
a, Quaid-e-Azam University b. Punjab University
c. Islamic University d. Peoples Open University
(5) Repatriation of prisoners of the war of 1971, was made possible:
a. Tashqant Agreement b. Simla Agreement c. Geneva Agreement d. None of these.
(6) According to the article of constitution of Pakistan, the President of Pakistan, the Prime Minister and his cabinet can be dismissed:
a. 58-2B b. 212-204 B c. 226-213 d. 221-213D
(7) Anti-Polio campaign started:
a. General Zia-ul-Haq regime b. Nawaz Sharif regime
c. Benazir Bhutto regime d. Pervez Musharraf regime
(8) A Campaign was launched under the name of "Remove the Debt Adorn the Country'
a. Shaukat Aziz b. Benazir Bhutto c. Nawaz Sharif d. Yousaf Raza Ghelani
(9) The terrorist attacked on Army Public School Peshawar in;
a. 2013 b. 2014 c. 2015 d. 2016
(10) Through Constitutional amendment Federally Administered Territory of FATA was included in Khyber Pakhtunkhwa:
a. Eighteenth amendment 2010 b. Twentieth amendment 2012
c. twentieth two amendment 2016 c. Twentieth five amendment 2018

(11) For the first time in the history of Pakistan, the governor of state bank of Pakistan was made:

a. Fatma Jinnah b. Sarojini Naidu c. Shamshad Akhtar d. Begum Sehba Musharraf

Q.2 Answer the following questions:

1. What do you know about General Musharraf's enlightenment and moderation?

Ans: _____

_____

2. when and why Takbir Day is observed in Pakistan? Describe its importance.

Ans_____

_____

3. What is the importance of motorways and modern communications?

Ans_____

_____

4. How General Ziaul Haq made the Eighth amendment 1985 in the constitution of Pakistan?

Ans: _____

_____

5.What were the effects of Jihad-e-Afghan on Pakistan society?

Ans: _____

_____

6. What is the significance of 58-2B in the history of Pakistan?

Ans; _____

_____

Q. Match the columns:

Column- A	Column-B
Objective resolution is a regular part	Benazir Bhutto
Loan facility to the farmers	Kargil incident
The first women Prime Minister of the Islamic world	General Zia-ul Haq Era
Nawaz Sharif, Pervez Musharraf controversy	Fourteenth amendment
Establishment of Allama Iqbal Open University	10 April, 2022
Prime Minister Imran Khan deposed	1974
Ban on floor crossing	Kisan Bank

Pakistan International School Al-Azizia Jeddah

Chapter #2: Pakistan and the World Affairs

Q. Tick the correct answer.

Q.1 Tick the correct answer;

(1). Which country was the first to recognize Pakistan in 1947?

a. China b. Iran c. Afghanistan d. Turkey

(2) Connects China and Pakistan road and land route;

a. Highway of Friendship b. Highway of Silk

c. Highway of peace d. Highway of democracy

(3) A country formulates a policy of relations with other states for the protection of its interests, called:

a. foreign policy b. Internal policy c. Reform policy d. welfare policy

(4) The Durand line Agreement was signed between foreign minister Martin Durand and the Governor of Afghanistan;

a. Amir Abdur Rehman b. Amir Abdullah c. Amir Saifullah d. Amir Abdul Kareem

(5) Which is the most important production of Gulf countries:

a. oil b. Wheat c. Iron d. fruits

(6) Pakistan's northern border separates from Tajikistan:

a. Gilgit Baltistan b. Skardu c. Wakhan d. Waziristan

(7) Pakistan, Iran, and Turkey are core members of:

a. Economic Corporation Organization B. Baghdad Pact

c. SEATO d. Regional Corporation Organization

(8) According to Quaid-e-Azam, "the aorta of Pakistan" is:

a. Gilgit Baltistan b. 1aIslamabad c. Kashmir d. Peshawar

(9) Mobil company "Telenor" belongs to which country:

a. USA b. China c. Norway d. Holland

(10) Indonesia and Malaysia are situated in :

a. North east Asia b. South east Asia c. Central Asia d. None of these

Q.2 Answer the following questions appropriately:

1. what is the importance of Gwadar Port?

Ans_____

_____

2. Which Indian Prime Minister passed the ceasefire resolution in the Security Council, when and why?

Ans_____

_____

3. What is the importance of Central Asian countries for Pakistan?

Ans: _____

_____

4. What is meant by SAARC?

Ans: _____

_____

5. In which sectors of Pakistan, the Japan's government agency JICA is cooperating?

Ans: _____

_____

6. What were the effects of the September 11,2001 incident in America on Pakistan?

Ans_____

_____

Match the following events:

Column-A	Column-B
Nationalization	Pakistan
Tashkent Agreement	1954
Muslim Ummah Committee	United Arab Emirates
Al-Aqsa Mosque	18 billion Yen
Sheikh Zaid Hospital	1948,1965
SEATO	Zionist Conspiracy
Common Wealth	Zulfiqar Ali Bhutto
Rainy Regions	Russia
Ceasefire	Britain

Pakistan International School Al-Azizia Jeddah

Chapter #3: Economic Development

Q. Tick the correct answer.

1. Islam Barrage was constructed on:
a. River Indus b. River Chenab c. River Ravi d. River Sutlej
2. Economical and modern methods of irrigation are:
a. Conventional b. Fixed edge c. Row cropping cultivation d. sprinkles and drip
3. Punjab Agricultural College and Institute of Research was upgraded to Agricultural University Faisalabad in:
a. 1921 b. 1941 c. 1951 d. 1961
4. This precious metal is used to make aluminum:
a. Iron ore b. Manganese c. Bauxite d. Chromite
5. Most tube wells are found in the province of:
a. Sindh b. Punjab c. Khyber Pakhtunkhwa d. Baluchistan
6. River Chenab and Jhelum both join:
a. At the place of Haveli b. At the place of Rangpur
c. At the place of Trimuon d. At the place of Jang
7. The largest barrage of Sindh province is:
a. Sukkur b. Guddu c. Kotri d. Taunsa
8. Gilgit-Baltistan has a very important Dam:
a. Hub Dam b. Tanda Dam c. Mirani Dam d. Satpara Dam
9. Government formulated a program for development of poultry sector:
a. Two years b. Four years c. Five years d. Six years
10. It is transparent environment-friendly and reliable source of energy:
a. Coal b. Natural gas c. Electricity d. Mineral oil

Answer the following questions appropriately:

1. What is meant by defense industry?

   Ans: _____

   _____

2. What are the negative effects on the country's economy in case of reduction in national production?

Ans: _____

_____

3. Explain the types of canals:

Ans: _____

_____

4. Write a note on the use of chromite:

Ans. _____

_____

5. **Mark the main areas of Rabi and Kharif crops:**

1. Rabi:

2. Kharif:

6. **Identify important minerals:**

7. **Mark the major source of irrigation:**

Pakistan International School Al-Azizia Jeddah

Chapter #4: Population, Society and Culture of Pakistan

Q. Tick the correct answer:

1. Was the Judge of Supreme Court of Pakistan:
   a. Peter Christie b. Dr Ruth Pfau c. William D Harley d. Badi-ul-Zaman Kekaus
2. The process of finding population data is called:
   a. Migration b. transfer of land c. Acquisition of land d. Census
3. Islamic festivals are celebrated on 12th Rabi Al-Awal:
   a. Miraj of the prophet ﷺ b. Eid Milad-ul-Nabi ﷺ
   c. Eid-ul-Fitr d. Shab-e-Barat
4. The largest province of Pakistan in the term of population.
   a. Sindh b. Baluchistan c. Khyber Pakhtunkhwa d. Punjab
5. According to the 2017 Census, the population density per square kilometer in Pakistan is:
   a. 261 people b. 535 people c. 339 people d. 300 people
6. Baba Guru Nanak 's birthday and Baisakhi are celebrated by the people of which faith?
   a. Hindus b. Christians c. Sikhs d. Parsi
7. Population of Pakistan is deprived of basic education:

a. 25 percent b. 30 percent c. 35 percent d. 40 percent

8. National dress of Pakistan is:
   a. Dhoti kurta b. pant shirt c. Shalwar kameez d. Vest kameez
9. The first ghazal poets of Urdu language are:
   a. Mir Taqi Mir b. Mir Dard c. Wali Dhakani d. Amjad Majeed
10. The most standard and literacy accent of the Kashmiri language is:

a. Hindi b. Gamy c. Musalmanki d. Gondour

Answer the following questions:

1. What is meant by gender discrimination?

   Ans: _____

   _____

   What is the importance of extracurricular activities?

   Ans_____

   _____

2. State the advantages of joint family system.

   Ans: _____

   _____

3. What is meant by religious harmony? Explain.

   Ans_____

   _____

4. What is meant by E.C.C.E and in which sector is working?

   Ans: _____

   _____

5. What role can play Pakistani people for the promotion of tourism?

Ans: _____

_____

Match the right Path Together:

Ghulam Ahmad Mahjoor, Khushal khan Khattak, Waris Shah, Shah Abdul Latif Bhitai and Mast Tawakli.

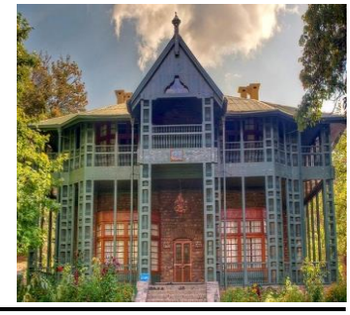
01		
02		
03		
04		
05		

پاکستان انٹرنیشنل سکول العزیزیہ جدہ

فیڈرل سینئر سیکشن

سیشن: **2023 -24**

مطالعہ پاکستان برائے جماعت دھم



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-: <u>فہرست</u>

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(2) 1988 کے صدارتی ایتخاب میں صدرپاکستان بنے:
الف) فضل الٰہی چودھری (ب) غلام اسحاق خان (ج) سردار فاروق احمد لغاری (د) رفیق تارڑ)
(3) 1973 آئین میں کونسی ترمیم کے ذریعے اراکین کے فلورکراسنگ پر پابندی لگا دی گئ تھی:
الف) آٹھویں (ب) تیرھویں (ج) چودھویں (د) اٹھارویں)
(4) علامہ اقبال اوپن یونیورسٹی کا پرانا نام تھا:
الف) قائداعظم یونیورسٹی (ب) پنجاب یونیورسٹی)
ج) اسلامک یونیورسٹی (د) پیپلز اوپن یونیورسٹی)
(5) 1971 کی جنگ کے قیدیوں کی وطن واپسی ممکن ہوئی:
الف) تاشقند معاہدہ (ب) شملہ معاہدہ (ج) جنیوا معاہدہ (د) ان میں سے کوئی نہیں)
(6) آئین پاکستان کےآرٹیکل کے رو سے صدر پاکستان، وزیراعظم اور اسکی کابینہ کو فارغ کرسکتاہے:
الف) 58 - 2 بی (ب) 204 - 212 بی (ج) 213 - 226 (د) 213 - 221 ڈی)
(7) انسداد پولیومہم شروع ہوئی:
الف) جنرل ضیا الحق دورحکومت (ب) نواز شریف دورحکومت)
ج) بے نظیر دورحکومت (د) جنرل پرویزمشرف دورحکومت)
(8) قرض اتارو ملک سنوارو کے نام سے مہم کا آغاز کیا گیا:
الف) شوکت عزیز (ب) بے نظیربھٹو (ج) میاں نواز شریف (د) یوسف رضا گیلانی)
(9) پشاور میں آرمی پبلک سکول پر دہشت گردوں نے حملہ کیا:
2016 (الف) 2013 (ب) 2014 (ج) 2015 (د)

:آئینی ترمیم کے ذریعے وفاق کے زیرانتظام علاقے فاٹا کو خیبر پختونخواہ میں ضم کردیاگیا (10)
2012 الف) اٹھارویں ترمیم 2010 (ب) بیسویں ترمیم)
2018 ج) بائیسویں ترمیم 2016 (د) پچیسویں ترمیم)
:پاکستان کی تاریخ میں پہلی بار سٹیٹ بینک آف پاکستان کا گورنر کو بنایاگیا (11)

الف) فاطمہ جناح (ب) سروجنی نائیڈو (ج) ڈاکٹرشمشاد اختر (د) بیگم صہبہ مشرف)

:مندرجہ ذیل سوالات کے مناسب جواب دیجئے

؟سوال نمبر1: جنرل مشرف کے روشن خیالی اور اعتدال پسندی کے بارے میں آپ کیا جانتے ہیں

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۔سوال نمبر2: یوم تکبیر پاکستان میں کب اور کیوں منایا جاتاہے،اسکی اہمیت بیان کریں

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؟سوال نمبر3: موٹرویز اور جدید مواصلات کی کیا اہمیت ہے

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؟سوال نمبر4: جنرل ضیاالحق نے آئین پاکستان میں آٹھویں آئینی ترمیم 1985 کس حوالے سے کی

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؟سوال نمبر5: جہاد افغانستان کے پاکستانی معاشرے پر کیا اثرات مرتب ہوئے

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؟سوال نمبر6: 58 ۔ 2 بی کا پاکستانی تاریخ میں کیا اہمیت ہے

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:آپس میں ربطہ ثابت کریں

کالم ۔ الف	کالم ۔ ب
قراردادمقاصد دستور کا باقاعدہ حصہ	1۔ بے نظیربھٹو
کسانوں کو قرضہ کی سہولت	2۔ کارگل واقعہ
اسلامی دنیا کی پہلی خاتون وزیراعظم	3۔ جنرل ضیا الحق دورحکومت
نواز شریف ۔ جنرل پرویز مشرف تنازعہ	4۔ چودھویں ترمیم
2022 علامہ اقبال اوپن یونیورسٹی کا قیام	5۔ 10اپریل
1974 وزیراعظم عمران خان معزولی	6۔ مئی
فلورکراسنگ پر پابندی	7۔ کسان بینک

پاکستان انٹرنیشنل سکول العزیزیہ جدہ

باب دوئم : پاکستان اور خارجی تعلقات

:درست جواب پر نشان لگائیں

(1) 1947 ہے کونسا والا کرنے تسلیم سے پہلے سب کو پاکستان میں:
الف) چین (ب) ایران (ج) افغانستان (د) ترکی)

(2) اورپاکستان کو باہم ملاتی ہے زمینی راستے سے چین اور بری:
الف) شاہراہ دوستی (ب) شاہراہ ریشم (ج) شاہراہ امن (د) شاہراہ ریشم جمہوریت)

(3) کوئی ملک اپنے مفادات کے تحفظ کی خاطر دیگر ریاستوں کے ساتھ تعلقات کی پالیسی بنائے:
الف) خارجہ پالیسی (ب) داخلی پالیسی (ج) اصلاحی پالیسی (د) فلاحی پالیسی)

(4) ڈیورنڈلائن کا معاہدہ وزیر امورخارجہ مارٹیمرڈیورنڈ اور والی افغانستان کے درمیان ہوا:
الف) امیرعبدالرحمان (ب) امیرعبداللہ (ج) امیرسیف اللہ (د) امیرعبدالکریم)

(5) خلیجی ممالک کی سب سے اہم پیداوار کونسی ہے:
الف) تیل (ب) گندم (ج) لوہا (د) پھل)

(6) پاکستان کی شمالی سرحد کو تاجکستان سے جدا کرتی ہے:
الف) گلگت بلتستان (ب) سکردو (ج) واخان (د) وزیرستان)

(7) پاکستان ، ایران اور ترکی بنیادی اراکین ہیں :
الف) اقتصادی تعاون تنظیم (ب) معاہدہ بغداد (ج) سینٹو (د) علاقائی تعاون تنظیم)
(8) قائداعظم کے بقول پاکستان کی شہہ رگ ہے :
الف) گلگت بلتستان (ب) کشمیر (ج) پشاور (د) اسلام آباد)
(9) موبائل کمپنی ٹیلی نار کا تعلق کس ملک سے ہے :
الف) امریکہ (ب) چین (ج) ناروے (د) ہالینڈ)
(10) انڈونیشیا اور ملائیشیا واقع ہیں :
الف) شمال مشرقی ایشیا (ب) جنوب مشرقی ایشیا (ج) وسطی ایشیا (د) ان میں سے کوئی نہیں)

مندرجہ ذیل سوالات کے مناسب جواب دیجئے:

سوال نمبر1: گوادر بندرگاہ کی کیا اہمیت ہے ؟

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سوال نمبر2: کس بھارتی وزیراعظم نے کب اور کیوں سلامتی کونسل میں جنگ بندی کی قرارداد منظور کروائی؟

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سوال نمبر3: پاکستان کے لیے وسطی ایشیائی ممالک کی کیا اہمیت ہے؟

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سوال نمبر4: سارک سے کیا مراد ہے ؟

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سوال نمبر5: جاپان کی سرکاری ایجنسی جائیکا پاکستان کی کن شعبوں میں تعاون کر رہی ہے؟

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؟سوال نمبر6: امریکہ میں 11 ستمبر 2001 کے واقعہ کے پاکستان پر کیا اثرات مرتب ہوئے

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:مندرجہ ذیل واقعات کو آپس میں ملائیں

قومیانہ / نیشنلائزیشن	پاکستان
1954	معاہدہ تاشقند
مسلم امت کمیٹی	متحدہ عرب امارات
مسجد اقصیٰ	18 بلین ین
1965 ،1948	شیخ زید ہسپتال
سیاٹو	صیہونی سازش
دولت مشترکہ	ذوالفقار علی بھٹو
بارانی علاقے	روس
جنگ بندی	برطانیہ

پاکستان انٹرنیشنل سکول العزیزیہ جدہ

باب سوئم : معاشی ترقی

:درست جواب پر نشان لگائیں

:اسلام بیراج تعمیر کیا گیا ہے (1)

الف) دریائے سندھ (ب) دریائے چناب (ج) دریائے راوی (د) دریائے ستلج)

:آب پاشی کے کفایتی اور جدید طریقے ہیں (2)

الف) روایتی (ب) پختہ کنارے (ج) فصلوں کی پٹڑی پر کاشت (د) سپرنکلز اور ڈرپ)

:پنجاب زرعی کالج اور ادارہ تحقیق کو اپ گریڈ کر کے زرعی یونیورسٹی فیصل آباد بنایا گیا (3)

1961 (الف) 1921 (ب) 1941 (ج) 1951 (د)

:یہ قیمتی دھات ایلومینیم بنانے میں استعمال ہوتی ہے (4)

الف) خام لوہا (ب) مینگانیز (ج) باگسائیٹ (د) کرومائیٹ)

:سب سے ذیادہ ٹیوب ویلز پائے جاتے ہیں (5)
الف) صوبہ سندھ (ب) صوبہ پنجاب (ج) صوبہ خیبرپختونخوا (د) صوبہ بلوچستان)
:دریائے چناب اور جہلم دونوں آپس میں مل جاتے ہیں (6)
الف) حویلی کے مقام پر (ب) رنگ پور کے مقام پر (ج) تریموں کے مقام پر (د) جنگ کے مقام پر)
: صوبہ سندھ کا سب سے بڑا بیراج ہے (7)
الف) سکھر (ب) گدو (ج) کوٹری (د) تونسہ)
:گلگت بلتستان میں بہت اھم ڈیم ہے (8)
الف) حب ڈیم (ب) میرانی ڈیم (ج) تانڈا ڈیم (د) ستپارہ ڈیم)
:حکومت نے پولٹری کے شعبے کی ترقی کے لیے پروگرام ترتیب دیا (9)
الف) 02 سالہ (ب) 04 سالہ (ج) 05 سالہ (د) 06 سالہ)
:یہ ایک صاف شفاف ماحول دوست اور مستند انرجی کا ذریعہ ہے (10)
الف) کوئلہ (ب) قدرتی گیس (ج) بجلی (د) معدنی تیل)

:مندرجہ ذیل سوالات کے مناسب جواب دیجئے

؟سوال نمبر1: دفاعی صنعت سے کیا مراد ہے

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سوال نمبر2: قومی پیداوار میں کمی کی صورت میں ملکی معشیت پر کونسے منفی اثرات مرتب ہوتے ؟ہیں

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۔سوال نمبر3: نہروں کی اقسام بیان کریں

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۔سوال نمبر4: کرومائیٹ کے استعمال پر نوٹ لکھیں

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: ربیع اور خریف کی اہم فصلوں کے علاقوں کی نشان دہی کریں

ربیع -1

خریف -2

: اہم معدنیات کی نشان دہی کریں

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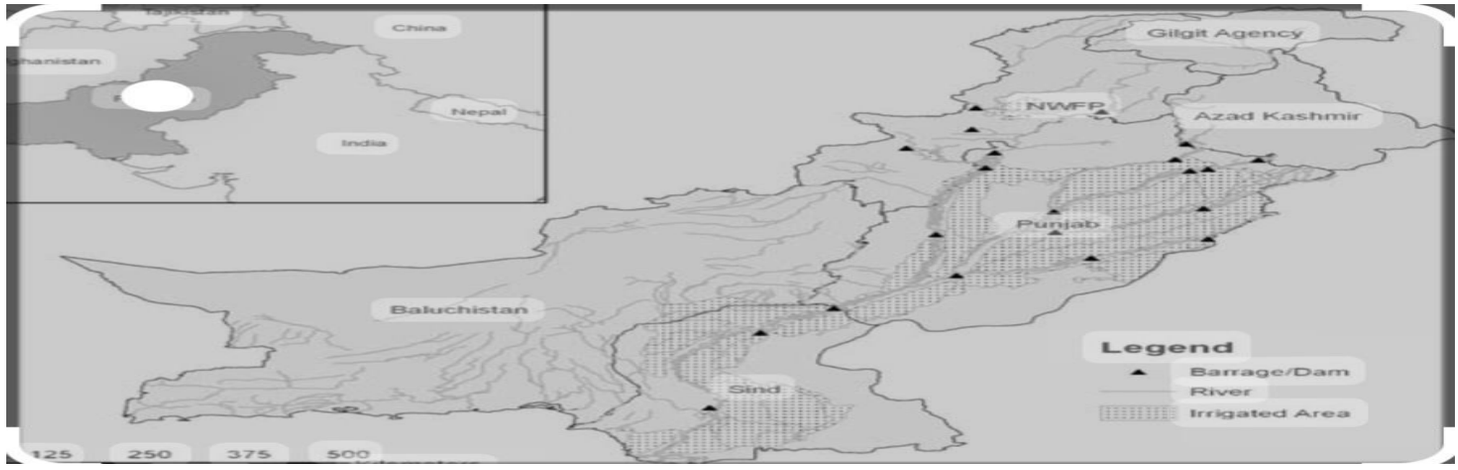
: آبپاشی کےاہم ذرائع کی نشان دہی کریں



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پاکستان انٹرنیشنل سکول العزیزیه جده

باب چہارم : آبادی، معاشرہ اور پاکستان کی ثقافت

:درست جواب پر نشان لگائیں

:سپریم کورٹ آف پاکستان کے جج رہے (1)
الف) پیٹر کرسٹی (ب) ڈاکٹر روتھ فاو (ج) ولیم ڈی ہارولے (د) بدیع الزمان کیکاوس)
:آبادی کے کوائف جاننے کے عمل کو کہا جاتاہے (2)
الف) نقل مکانی (ب) انتقال اراضی (ج) اشتمال اراضی (د) مردم شماری)

(3) 12 ربیع الاول کواسلامی تہوار منایا جاتاہے:
الف) معراج النبیﷺ (ب) جشن میدالنبیﷺ (ج) عیدالفطر (د) شب بارات)
(4) پاکستان کا سب سے بڑا صووبہ ہے کے لحاظ سے آبادی:
الف) سندھ (ب) بلوچستان (ج) خیبر پختونخوا (د) پنجاب)
(5) 2017 ہے کی مردم شماری کے مطابق پاکستان میں آبادی کی گنجانیت فی مربع کلومیٹر:
الف) 261 افراد (ب) 535 افراد (ج) 339 افراد (د) 300 افراد)
(6) بابا گرونانک کا جنم دن اور بیساکھی کس عقیدہ کے لوگ مناتے ہیں :
الف) ہندو (ب) مسیحی (ج) سکھ (د) پارسی)
(7) پاکستان کی آبادی بنیادی تعلیم سے محروم ہے:
الف) 25 فیصد (ب) 30 فیصد (ج) 35 فیصد (د) 40 فیصد)
(8) پاکستان کا قومی لباس ہے:
الف) دھوتی کرتہ (ب) پتلون شرٹ (ج) شلوار قمیص (د) واسکٹ قمیص)
(9) اردو زبان کے سب سے پہلے غزل گو شاعر ہیں:
الف) میرتقی میر (ب) میر درد (ج) ولی دکنی (د) مجید امجد)
(10) کشمیری زبان کا سب سے معیاری اور ادبی لہجہ ہے:
الف) ہندکی (ب) گامی (ج) مسلمانکی (د) گندور)

مندرجہ ذیل سوالات کے مناسب جواب دیجئے:

سوال نمبر1: صنفی امتیاز سے کیا مراد ہے ؟

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سوال نمبر2: غیر نصابی سرگرمیوں کی کیا اہمیت ہے؟

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سوال نمبر3: مشترکہ خاندانی نظام کے فوائد بیان کریں۔

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۔سوال نمبر4: مذہبی ہم آہنگی سے کیا مراد ہے ؟ بیان کیجئے

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؟سوال نمبر5: ای ۔ سی۔سی۔ ای سے کیا مراد ہر اور یہ کس شعبے کام کر رہی ہے

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؟سوال نمبر6: سیاحت کے فروغ کےلیے پاکستانی عوام کیا کردار ادا کرسکتی ہے

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:آپس میں ملائیں

غلام احمد ماہجور ، خوشحال خان خٹک ، وارث شاہ ، شاہ عبدالطیف بھٹائی ، مست توکلی

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	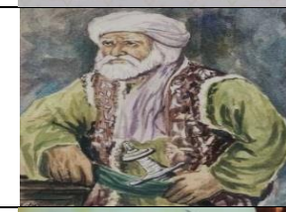	4
		5

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

ورک شیٹ: عنوان: ترکیبِ نحوی

جملہ فعلیہ اور جملہ اسمیہ کی ترکیب نحوی کرنا

(کسی جملے کے اجزا کو الگ الگ کرنے اور ان کے باہمی تعلق کو ظاہر کنے کو ترکیب نحوی کہتے ہیں)

۱۔جملہ فعلیہ کے اجزا۔

۔فعل تام، فاعل، مفعول اور متعلق خبر۔

۲۔جملہ اسمیہ کے اجزا۔

مبتدا، خبر، متعلق خبر، فعل ناقص۔

درج ذیل کی اسمیہ جملوں کی ترکیب نحوی کریں۔

نمبر شمار	جملہ	مسند الیہ (مبتدا)	مسند (خبر)	متعلق خبر	فعل ناقص
1	اسلم بیمار ہے۔				
2	احمد نیک ہے				
3	تندرستی ہزار نعمت ہے				

مندرجہ ذیل فعلیہ جملوں کی ترکیب نحوی کریں

نمبر شمار	جملہ فعلیہ	فاعل	علامت فاعل	مفعول	علامت مفعول	متعلق فعل	فعل تام
1	احمد نے روٹی کھائی						
2	علی نے قلم سے خط لکھا						
3	زید نے بکر کو مارا						

نام طالب علم: ---------- جماعت/سیکشن ---------

تاریخ:-----

تزکیر و تا نیث

درج ذیل کو اس طرح جملوں میں استعمال کریں کہ ان کی تزکیر و تانیث واضح ہو جاے۔

غم _____

خوشی----------

لحاظ----------

دھی ----------

۵۔مذہب----------

جملہ معترضہ

جملہ معترضہ ایسا جملہ (----)ہوتا ہے جو عبارت میں وضاحت یا طنز کے لیے لکھا جاتا ہے،مثلا۔علامہ اقبال(شاعر مشرق) سیالکوٹ میں پیدا ہوے۔

جملہ معترضہ کی مثالیں لکھیں۔

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نام طالب علم: ---------- جماعت: --------- تاریخ:-----

ورک شیٹ: عنوان: تشبیہ/استعارہ

س1۔تشبیہ کی تعریف کریں اور ایک نثری مثال کی مدد سے وضاحت کریں۔

ہستی اپنی حباب کی سی ہے یہ نمائش سراب کی سی ہے

اس شعر کی مدد سے ارکان تشبیہ کی وضاحت کریں۔

س2۔استعارہ کی تعریف کری اور مثالوں سے وضاحت کریں اور ارکان استعارہ کی تعداد بتایں۔

پاکستان انٹر نیشنل اسکول،عزیزیہ،جدہ

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

ورک شیٹ: عنوان: ذو معنی الفاظ

ایسے الفاظ جن کا املا تو ایک ہوتا ہے لیکن ان کے معنی دو ہوتے ہیں۔

ذیل کے جملوں سے ذو معنی الفاظ الگ کر کے ان کے معنی لکھیے۔

1۔بارشوں سے آئینے کی آب جاتی رہی۔

آب،۱----------۲----------

2۔سوات میں کون سی کان ہے۔ کان،1---------- ۲----------

3۔جہاں چاہ وہاں راہ۔ چاہ ،1---------- ۲----------

4۔احمد نے آم کی قلم لگا ئی۔ قلم،1----------۲----------

5۔براہ مہربانی میری عرض سن لیں۔ عرض۱---------- ۲----------

مندرجہ ذیل ذومعنی الفاظ کو اپنے جملے میں اس طرح استعمال کریں کہ معنی واضح ہوجائیں ۔

1۔تکرار

_____

_____

2۔ہار

_____

_____

3۔بیت

_____

_____

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

ورک شیٹ: عنوان: روز مرہ و محاورہ

روز مرہ کی تعریف لکھیں اور تین مثالیں بھی دیں

_____

_____

_____

_____

محاورہ کی تعریف لکھیں اور تیں مثالیں بھی دیں۔

_____

_____

_____

روز مرہ اور محاورہ میں فرق بیان کریں ۔

نمبر شمار	روز مرہ	محاورہ
1		
2		
3		
4		

مندرجہ ذیل جملوں کو روز مرہ اور محاورے کے اعتبار سے درست کریں۔

نمبر شمار	غلط جملے	درست جملے
1	میرے ساتھ چار پانچ مت کرو	
2	آپ نا وقت آئے	
3	پولس کو دیکھ کر چور کے ہاتھوں کے کبوتر اڑ گئے	
4	اسلم ناک پر مچھر نہیں بیٹھنے دیتا	

فہرستِ عنوانات برائے ورک شیٹ

دہم اردو-2023-2024

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

ورک شیٹ: عنوان: عبارت کی تفہیم

پیراگراف کو پڑھ کر دیے گئے سوالات کے جوابات تحریر کریں۔

استنبول ترکی کا ایک شہر ہے۔ استنبول کے شہر پرمسلمانوں کا پہلا حملہ ٦٧٢ء میں ہوا تھا لیکن وہ سات سال تک محاصرے کے بعد ناکام واپس ہوئے۔ اس محاصرے کی تاریخی اہمیت یہ ہے کہ اس میں جلیل القدر صحابی حضرت ابو ایوب انصاری رضی اللہ تعالی عنہ شریک تھے۔ اسی مہم کے دوران میں ان کا انتقال ہوا اور وہ استنبول میں مدفون ہوئے۔ استنبول (قسطنطنیہ) کی فتح، مراد ثانی کے بیٹے محمد ثانی کے لیے، جسے محمد فاتح بھی کہا جاتا ہے ، مقد ر ہوچکی تھی ۔ سلطان محمد فاتح نے ١۴۵٢ء میں شہر استنبول پر پوری منصوبہ بندی کے ساتھ حملہ کیا۔ ٢٩ مئی ١۴۵٣ء کو استنبول پر مسلمانوں کا مکمل قبضہ ہو گیا۔ سلطان فاتحانہ انداز سے شہر میں جب مسلمانوں نے -داخل ہوا اور سب سے پہلے اس نے ایا صوفیہ میں جمعے کی نماز پڑھی قسطنطیہ کوفتح کیا تو یہاں کے لوگ دور نکل گئے۔ ان کا خیال تھا کہ جب فاتحین یہاں پہنچیں گے تو آسمان سے ایک فرشتہ اتر کر ان کو واپس دھکیل دے گا ۔ سلطان محمد فاتح گھوڑے سے اتر کر کلیسا کے اندر داخل ہوا اور اس نے وہیں نماز ادا کی۔

سوال نمبر1 – استنبول پر مسلمانوں کے پہلے حملے کی خاص بات کیا ہے؟

_____

_____

_____

_____

سوال 2 – مسلمانوں نے قسطنطیہ کوفتح کیا تو وہاں کے لوگوں کا خیال تھا ؟

_____

_____

_____

سوال نمبر 3 – استنبول کو کس نے اور کب فتح کیا ؟

_____

_____

_____

_____

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

ورک شیٹ: عنوان: مختلف انداز بیاں

اندازِ بیان کیا ہے؟ مختلف اندازِ بیان کی وضاحت کریں۔

دفتری اندازِ بیان:۔

صحافتی اندازِ بیان:۔

قانونی اندازِ بیان:۔

تکنیکی اندازِ بیان:۔

ادبی اندازِ بیان:۔

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

ورک شیٹ: عنوان: عبارت کی تشریح

دیئے گئے پیراگراف کی تشریح کریں

نہ کاغذ ہے، نہ ٹکٹ ہے، اگلے لفافوں میں سے ایک بیرنگ لفافہ پڑا ہے۔ کتاب میں سے یہ کاغذ پھاڑ کر تم کو خط لکھتا ہوں اور بیرنگ لفافے میں لپیٹ کر بھیجتا ہوں غمگین نہ ہونا کل شام کو کچھ فتوح کہیں سے پہنچ گئی ہے، آج کاغذ اور ٹکٹ منگا لوں گا۔ شہر کا حال کیا جانوں کیا ہے؟ "پون ٹوٹی" کوئی چیز ہے، وہ جاری ہوگئی ہے۔ سوائے اناج اور اُپلے کے کوئی چیز ایسی نہیں، جس پر محصول نہ لگا ہو۔ جامع مسجد کے گرد پچیس پچیس فٹ گول میدان نکلے گا دکانیں حویلیاں ڈھائی جائیں گی۔ حاکم اکبر کی آمد سن رہے ہیں۔ دیکھیے دلی آئیں یا نہیں؟ آئیں تو دربار کریں یا نہیں؟ دربار کریں تو میں گنہگار بلایا جاؤں یا نہیں؟ بلایا جاؤں تو خلعت پاؤں یا نہیں؟ پنسن کا تو نہ کہیں ذکر ہے، نہ کسی کو خبر ہے۔

تشریح :-

PAKISTAN INTERNATIONAL SCHOOL AZIZYAH JEDDAH
SENIOR BOY'S WINGS Work sheet: Chapter # 9

مضمون: مبادیاتِ تعلیم

باب نمبر9

رہنمائی و مشاورت

نام طالب علم:_____ جماعت:_____ فریق:_____

درست جواب کے گرد دائرہ بنائیں۔

1۔رہنمائی میں پوری توجہ _____ پر ہوتی ہے۔

الف۔ حل ب۔ سزا ج۔ تجاویز د۔ تردید

2۔ مشاورت میں _____ پر توجہ ہوتی ہے۔

2۔الف۔ حل ب۔ سزا ج۔ تردید د۔ تجاویز

3۔ اسکول میں رہنمائی کا فریضہ ادا کرنے والا طلباء کے لیے _____ ہونا چاہیے۔

الف۔ استاد ب۔ اصول ج۔ مثالی شخصیت د۔ ہم جماعت

4۔ صحت کے مسائل میں گھرے طلباء دوسرے _____ کو کھیلتے اور پڑھتے دیکھتے ہیں۔

الف۔ طلباء ب۔ کسی کو ج۔ استاد د۔ دوسروں کو

5۔ معاشرتی عدم مطابقت ایک _____۔ مشکل ہے۔

الف۔ موروثی ب۔ معاشرتی ج۔ جذباتی د۔ ذہنی

6۔ ایک رہنما کو مشکلات کے _____ کو سمجھنا ضروری ہے۔

الف۔ نکات ب۔ والدین ج۔ طلباء د۔اسباب

7۔ اکثر والدین اپنے بچوں کے مضامین کے انتخاب میں انہیں _____ کرتے ہیں۔

الف۔ مدد ب۔ سرزنش ج۔ مجبور د۔ حکم

8۔ پیشہ ورانہ رہنمائی ایک _____ کا عمل ہے۔

الف۔ اتالیقی ب۔ تربیتی ج۔ سہولیاتی د۔ ان میں سے کوئی نہیں

9۔ مشاورت _____ کے عمل کا ایک جزو ہے۔

الف۔ سزا ب۔ رہنمائی ج۔ پیشے د۔ تربیت

10۔ مشاورت کے عمل میں _____ افراد شامل ہوتے ہیں۔

الف۔ دو ب۔ تین ج۔ چار د۔ پانچ

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

ورک شیٹ: عنوان: استعارہ

علم بیان کی اصطلاح میں حقیقی اور مجازی معنوں کے درمیان تشبیہ کا علاقہ ہونا۔ یعنی حقیقی معنی کا لباس عاریۃً لے کر مجازی معنوں کو پہنانا۔ مثلا نرگس کہہ کر آنکھ مراد لینا۔ استعارہ اور تشبیہ میں یہ فرق ہے کہ استعارہ تشبیہ سے زیادہ بلیغ ہوتا ہے۔ تشبیہ میں ایک چیز کو دوسری جیسا قرار دیا جاتا ہے جب ان میں کوئی صفت یا خوبی مشترک ہو لیکن استعارے میں ایک چیزکوہوبہودوسری چیزمان لیا جاتاہے۔

ارکان استعارہ

- **مستعار لہ**: وہ فرد یا چیز جس کے لیے کوئی لفظ یا خوبی ادھار لیا جائے۔
- **مستعار منہ**:وہ شخص یا چیز جس سے کوئی لفظ یا خوبی مستعار لیا جائے۔
- **وجہ جامع**: مستعار لہ اور مستعار منہ میں جو وصف اور خوبی مشترک ہو اسے وجہ جامع کہا جاتا ہے۔

مندرجہ ذیل اشعار میں سے مستعار لہ، مستعار منہ اور وجہ جامع تلاش کریں۔

1۔پلکوں سے گر نہ جائیں یہ موتی سنبھال لو دنیا کے پاس دیکھنے والی نظر کہاں

2۔ ایک روشن دماغ تھا نہ رہا شہر میں ایک چراغ تھا نہ رہا

3۔فلک یہ تو ہی بتا دے کہ حسن و خوبی میں زیادہ تر ہے تیرا چاند یا ہمارا چاند کا

4۔ یہ تو ہم کارخانہ ہے یاں وہی ہے جو اعتبار کیا

5۔ وہ دیکھو شیر آرہا ہے۔

6۔ماننے کہا،" چاند اسکول سے آگیا ".

نمبر شمار	مستعار لہ	مستعار لہ	وجہ جامع
1			
2			
3			
4			
5			
6			

PAKISTAN INTERNATIONAL SCHOOL AZIZYAH JEDDAH

SENIOR BOY'S WINGS Work sheet: Chapter # 8

مضمون: مبادیاتِ تعلیم

باب نمبر 8

مدرسے کی سر گرمیوں کی تنظیم

نام طالب علم:_____ جماعت:_____ فریق:_____

ہر جملے کے سامنے درست/غلط لکھیے۔

1۔ ہم نصابی سرگرمیوں کا اسکول کو ایک ادارے کی حیثیت سے چلانے میں کوئی کردار نہیں ہوتا۔
_____

2۔اسکوم میں دفتری امور ہم نصابی سرگرمیوں میں شامل ہوتے ہیں۔
_____

3۔ اسکول طالباء کی شخصیت کے کئی پہلوؤں کی ترقی کا ضامن ہوتا ہے۔
_____

4۔ہم نصابی سرگرمیاں کئی طرح سے اسکول کے لیے اہم ہوتی ہیں۔
_____

5۔طلباء کے لیے ضروری ہے کہ ان کے لیے کوئی فارغ وقت نہ ہو۔
_____

6۔ اسکول طلباء کو سرگرمیوں کے انتخاب کے لیے سرگرمیوں کا ایک گلدستہ پیش کرتا ہے۔ _____

7۔طلباء کی دلچسپیوں کی تکمیل دراصل ان کی شخصیت کی تکمیل ہے۔
_____

8۔ طلباء ساکت و جامد بیٹھنا نہیں چاہتے۔
_____

9۔ ایم متوازن نظام الاوقات طلباء کی صحت کے لیے مناب نہیں۔
_____

10۔ ایک مشہور کہاوت کے مطابق ،" ایک خالی دماغ شیطان کا گھر نہیں ہوتا"۔
_____

11۔ ہم نصابی سرگرمیاں طالب علم میں خوش دلی پیدا نہیں کر پاتیں۔
_____

12۔ تحریری اور ترسیمی سرگرمیاں طلباء کے دماغ کو تیز کرتی ہیں۔

PAKISTAN INTERNATIONAL SCHOOL AZIZYAH JEDDAH

SENIOR BOY'S WINGS Work sheet: Chapter#6

مضمون: مبادیاتِ تعلیم

باب 8

ہم نصابی سرگرمیوں کی تنظیم

نام طالب علم:_____ جماعت:_____ فریق:_____

کالم ملائیے اور درست جواب کالم ج میں لکھیئے۔

کالم الف	کالم ب	کالم ج
نصابی سرگرمیاں	موثر توانائی	
ہم نصابی سرگرمیاں	اپنے بارے میں تصور	
حرکی توانائی	متوازن معمولات	
مضبوط جسم	فارغ وقت کا مفید استعمال	
خود افادیت	بھاگ دوڑ	
کھیلو ،جب کھیلنا کا وقت ہو	ادبی سرگرمیاں	
مشاغل یقینی بناتے ہیں	مضبوط دماغ	
مقابلہ خوشخطی	جماعت کے اندر اور باہر،دونوں	
کرکٹ	انسانی وسائل	
بزمِ ادب	تحریری سرگرمی	
اساتذہ	تعلیمی سرگرمی	
مدرسے کی عمارت	مادی مقصد	

PAKISTAN INTERNATIONAL SCHOOL AZIZYAH JEDDAH

SENIOR BOY'S WINGS Work sheet: Chapter#8

جماعت۔دہم
مضمون: مبادیاتِ تعلیم

عنوان: ہم نصابی سرگرمیوں کی تنظیم

نام طالب علم:_____ جماعت:_____ فریق:_____

درست جواب کے گرد دائرہ بنائیں۔

1۔ اسکول ایک ــــــــــــــ ترتیب ہے۔

الف۔ چھوٹی ب۔ بہت چھوٹی ج۔ وسیع د۔ پیچیدہ

2۔ تعلیمی سرگرمیوں کو تعلق ــــــــــــــ سے ہے۔

الف۔ اساتذہ ب۔ طریقہ تدریس ج۔ مرکزی نصاب د۔ان میں کوئی نہیں

3۔ انتظامی سرگرمیوں کا تعلق اسکول کو ایک ــــــــــــــ کی حیثیت سے چلانا ہے۔

الف۔ عمارت ب۔ دفتر ج۔ گھر د۔ ادارے

4۔ تفریح کا مطلب اسکول کے مختصر اور طویل ــــــــــــــ ہیں۔

الف۔ کھیل ب۔ مباحث ج۔ دورے د۔ عمارتیں

5۔ طلباء کی نفسیات دراصل نصاب کی ترتیب کا/کی ایک ــــــــــــــ ہے۔

الف۔ تصور ب۔ اصول ج۔ عنصر د۔ نمونہ

6۔ تمدنی شعور دراصل طلباء کے ــــــــــــــ رویوں کی تربیت سے متعلق ہے۔

الف۔ جذباتی ب۔ جسمانی ج۔ ذہنی د۔ معاشرتی

7۔ کھیل کود ایک اہم ــــــــــــــ سرگرمی ہے۔

الف۔ نصابی ب۔ ہم نصابی ج۔تعلیمی د۔ انتظامی

8۔ اسکول کا ہدف طلباء کی کثیر الجہتی ــــــــــــــ ہوتا ہے۔

الف۔ سزا ب۔ نشوونما ج۔ ان میں سے کوئی نہیں د۔ یہ سب

9۔وہ تمام سرگرمیاں جو نصابی خاکے کا حصہ ہوتی ہیں، ــــــــــــــ کہلاتی ہیں۔

الف۔ معاشرتی سرگرمیاں ب۔تعلیمی سرگرمیاں ج۔ پیشہ ورانہ سرگرمیاں د۔کھیل کود کی سرگرمیاں

10۔ اسکول کا مقصد ــــــــــــــ کی کثیر الجہتی نشوونما ہے۔

الف۔ اساتذہ ب۔ طلباء ج۔ والدین د۔ ملازمین

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

ورک شیٹ: عنوان: صنائع بدائع (تلمیح)

صنعت تلمیح کی تعریف کریں اور مثال سے وضاحت کریں۔

تعریف:

_____

_____

مثال: _____

وضاحت:

_____

_____

مندرجہ ذیل اشعار میں صنعت تلمیح تلاش کریں اور ان کی وضاحت کریں۔

ابنِ مریم ہوا کرے کوئی میرے درد کی دوا کرے کوئی

وضاحت:

_____

_____

اڑ بیٹھے کیا سمجھ کے بھلا طور پر کلیم طاقت ہو دید کی تو تقاضہ کرے کوئی

وضاحت:

_____

_____

بے خطر کود پڑا آتشِ نمرود میں عشق عقل ہے محو تماشائے لبِ بام ابھی

وضاحت:

_____

_____

_____

_____

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

ورک شیٹ: عنوان: خط نگاری

دو افراد کی تحریری گفتگو کو " خطوط نویسی" کہتے ہیں۔

خط کے اجزاء:

سر نامہ یا پیشانی:

_____

_____

القابات:_____

_____

-

تسلیمات:_____

_____

نفسِ مضمون:

_____

_____

اختتامیہ:

_____

_____

خطوط کی اقسام:

رسمی خط:_____

عمومی خط: _____

سرکاری خط: _____

غیر رسمی خط:_____

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

ورک شیٹ: عنوان: مجازِ مرسل

تعریف:

_____

_____

_____

_____

_____

_____

_____

_____

مجاز مرسل کی اقسام

مجاز مرسل کی کل چھ اقسام ہیں جو زیادہ استعمال ہوتی ہیں جن میں یہ شامل ہیں۔

جزو بول کر کل مراد لینا۔کل بول کر جز مراد لینا ،سبب بول کر مسبب مراد لینا
،مسبب بول کر سبب مراد لینا ، مظروف بول کر ظرف مراد لینا ،
ظرف بول کر مظروف مراد لینا

نمبر شمار	مجاز مرسل کی مثال	مجاز مرسل کی قسم
1	حکیم نے مریض کی نبض پر ہاتھ رکھا	
2	درود کے ساتھ الحمد پڑھنا باعث برکت ہے	
3	بجلی جلاؤ	
4	آگ جل رہی ہے	
5	سارا شہر مجھے جانتا ہے	
6	پانی ڈھک دو	
7	چائے چولھے پر رکھ دو	
8	میں پاکستان میں رہتا ہوں	
9	چھت ٹپک رہی ہے	
10	بادل برس رہا ہے	

PAKISTAN INTERNATIONAL SCHOOL AZIZYAH JEDDAH

SENIOR BOY'S WINGS Work sheet: Chapter#6

مضمون: مبادیاتِ تعلیم

باب 7

پاکستان میں نصاب سازی

نام طالب علم:_____ جماعت:_____ فریق:_____

سوال نمبر 1۔ درست جواب کے گرد دائرہ بنائیں۔

1۔ نصاب سیکھنے کے مواقع مہا کرتا ہے۔

الف۔ کتب ب۔ کورس ج۔ استاد د۔ طلباء

2۔ نصاب حاصل کرتا ہے۔

الف۔ افراد ب۔ مقاصد ج۔ تعریف د۔ منزل

3۔ نصاب سازی میں طلباء کی عمر اور _____ بنیادی حیثیت کے حامل ہیں۔

الف۔ اقدار ب۔ مقام ج۔ خاکہ د۔ نفسیات

4۔ "طلباء کی نفسیات" نصاب سازی میں ایک _____ ہے۔

الف۔ نمونہ ب۔ أصول ج۔ عنصر د۔ مثالی

5۔ نصاب _____ کا ایک منظم گروپ ہے۔

الف۔ کتب ب۔ کورس ج۔ اساتذہ د۔ طلباء

6۔ جائزہ، نصاب کا _____ ہے۔

الف۔نمونہ ب۔ أصول ج۔ عنصر د۔ تصور

7۔ اس دنیا میں ہر سرگرمی _____ بنیادی سوالات کے گرد گھومتی ہے۔

الف۔ دو ب۔ تین ج۔ چار د۔ پانچ

8۔ مضمونی مواد جو کمرہ جماعت میں پڑھایا جاتا ہے،کہلاتا ہے۔

الف۔ تدریسی مواد ب۔ سرگرمیاں ج۔ طریقہ تدریس د۔ ان میں سے کوئی نہیں

9۔ ارتقاء کو نصاب کا _____ عنصر کہا جاتا ہے۔

الف۔ پہلا ب۔ دوسرا ج۔ تیسرا د۔ چوتھا

10۔ نصاب سرگرمیوں کا ایک مجموعہ ہے جو _____۔ میں سرانجام پاتی ہیں۔

الف۔ گھر ب۔ مدرسہ ج۔ گاؤں د۔ عدالت

PAKISTAN INTERNATIONAL SCHOOL AZIZYAH JEDDAH

SENIOR BOY'S WINGS Work sheet: Chapter#6

مضمون: مبادیاتِ تعلیم

باب 7

پاکستان میں نصاب سازی

نام طالب علم:_____ جماعت:_____ فریق:_____

سوال2۔ کالم ملائیں اور درست جواب کالم ج میں لکھیں۔

الف	ب	ج
نصابی سرگرمیوں کا کل مجموعہ	موادی مقاصد	
مذہبی سوسائٹی	طریقہ جائزہ	
صنعتی سوسائٹی	پر اثر	
مشاہدہ	یکساں مقاصد	
إحساس	ارتقاء	

سوال3۔مختصر جوابات تحریر کریں

1۔ " نصاب" کی تعریف لکھیں

_____

_____

2۔نصاب کی بنیادیں کون کون سی ہیں؟

_____

_____

3۔تعلیمی عمل میں نصاب کی اہمیت بیان کریں۔

_____

_____

4۔نصاب کس طرح ہمارے اقدار کو پروان چڑھاتا ہے؟

_____

_____

5۔ نصاب کے عناصر تحریر کریں۔

_____

_____

PAKISTAN INTERNATIONAL SCHOOL AZIZYAH JEDDAH

SENIOR BOY'S WINGS Work sheet: Chapter#6

مضمون: مبادیاتِ تعلیم

باب 7

پاکستان میں نصاب سازی

نام طالب علم:_____ جماعت:_____ فریق:_____

نصاب کے مختلف تصورات پر بحث کریں۔

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

ورک شیٹ: عنوان: صنائع بدائع (حسن تعلیل/لف و نشر)

صنائع بدائع کی تعریف لکھیں اور شاعری میں اس کی اہمیت بتائیں

حسن تعلیل کی تعریف کریں اور دو شعری مثالیں بھی دیں۔

تعریف:

_____
_____
_____

مثال

_____

وضاحت:_____

_____

صنعت لف و نشر کی تعریف کریں اور ایک شعری مثالیں بھی دیں

تعریف _____

_____

مثال _____

وضاحت:

_____

نام طالب علم: ---------- جماعت: --------- تاریخ:---------

درج ذیل نثری اصناف کی مختصر تعریف لکھیں۔

داستان:

_____

_____

ناول:

_____

_____

افسانہ:

_____

_____

ڈراما:

_____

_____

لوک کہانی:

_____

_____

روداد:

_____

_____

آپ بیتی:

_____

_____

خاکہ نگاری:

_____

_____

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

ورک شیٹ: عنوان: نظم کی اقسام (معنوی اعتبار سے)

نظم کی معنوی اعتبار سے کون کون سی اقسام ہیں۔ سب کی مختصر تعریف لکھیں۔

حمد:

_____

_____

نعت:

_____

_____

منقبت:

_____

_____

قصیدہ:

_____

_____

مرثیہ:

_____

_____

مندرجہ ذیل نظم کی اصطلاحات کی تعریف کریں۔

ٹیپ کا مصرعہ:_____

ٹیپ کا شعر: _____

مخمس:_____

مخمس ترجیع بند:_____

مخمس ترکیب بند:_____

مسدس:_____

_____

مسدس ترجیع بند:_____

_____

مسدس ترکیب بند:_____

_____

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

عنوان: قافیہ/ردیف

قافیہ اور ردیف کی تعریف کریں اور مثال بھی دیں

قافیہ:

_____

_____

مثال

وضاحت:

_____

_____

ردیف:_____

_____

مثال:

وضاحت:

مندرجہ ذیل اشعار میں سے قافیہ اور ردیف کی نشاندہی کریں

نمبرشمار	اشعار	قافیہ	ردیف
1	**زندگی سے یہی گلہ ہے مجھے تو بہت دیر سے ملا ہے مجھے**		
2	**ابنِ مریم ہوا کرے کوئی میرے درد کی دوا کرے کوئی**		
3	**ہستی اپنی حباب کی سی ہی یہ نمائش سراب کی سی ہے**		
4	**اثر اس کو ذرا نہیں ہوتا رنج، راحت فزا نہیں ہوتا**		
5	**کچھ غلط بھی تو نہ تھا مرا تنہا ہونا آتش و آب کا ممکن نہیں ،یکجا ہونا**		
6	**نقش فریادی ہے کس کی شوخی تحریر کا کاغذی ہے پیراہن ہر پیکرِ تصویر کا**		

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

ورک شیٹ: عنوان: کنایہ

کنایہ کی تعریف بیان کریں اور شعری اور نثری مثالیں دیں۔کنایہ کی اقسام بھی بیان کریں

تعریف:

----------شعری مثال:

1-

2-

نثری مثال:

1-

2۔کنایہ کی اقسام

کنایہ قریب:----------

مثال:

وضاحت:

کنایہ بعید:

تعریف

مثال:

وضاحت:

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

مرکب یا کلام کی تعریف:

مثالیں:

مرکب یا کلام کی اقسام:

مرکب یا کلام کی دو اقسام ہیں۔

1. **مرکب تام یا کلام تام مرکب ناقص یا کلام ناقص**

مرکب تام یا کلام تام:

_____

_____

مثالیں:

مرکبِ ناقص کلام ناقص:

_____

_____

مرکبِ ناقص کی اقسام کے نام لکھیں اور تین تین مثالیں لکھیں۔

1۔مرکب اضافی:

_____

2۔مرکب عطفی:---

_____

3۔ مرکب توصیفی:_____

4۔ مرکب عددی:

_____

5۔ مرکب جاری:

_____

6۔ مرکب اشاری:

_____

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

ورک شیٹ: عنوان: مطلع/مقطع

مطلع اور مقطع کی تعریف کریں اور شاملِ نصاب غزلوں میں سےدو ود مثالیں بھی دیں

تعریف:

مثال1

مثال2

وضاحت:

_____
_____
_____
_____
_____

مقطع:

تعریف:

_____
_____
_____

مثال1

مثال2

وضاحت:

_____
_____
_____
_____

نام طالب علم: ---------- جماعت: --------- تاریخ:-----

ورک شیٹ: عنوان: صنائع بدائع (استعارہ)

ورک شیٹ

استعارہ کی تعریف لکھیں ، اور مثالیں بھی دیں۔

ارکانِ استعارہ لکھیں، اور وضاحت کریں۔

مندرجہ ذیل جملوں کے ارکانِ استعارہ الگ کریں۔

پاکستانی شیروں نے بھارتی گیدڑوں کو مار بھگایا۔

ماں نے کہا !میرا چاند آ گیا ہے۔

PAKISTAN INTERNATIONAL SCHOOL JEDDAH

COMPUTER SCIENCE **Chapter 01** **CLASS X**

Worksheet: 01

Q#1 Fill the Bubbles of Correct Option.

1.A Finite set of steps which is used to accomplish a task is called:

A. Algorithm ○ **B. Flowchart** ○

C. Coding ○ **D. Program** ○

2. The first step for developing a Computer program:

A. Draw flow chat ○ **B. Coding** ○

C. Documentation ○ **D. Formulating an Algorithm** ○

3. What is represented by a small circle in a flow chat?

A. Start/Stop ○ **B. Decision** ○

C. Processing ○ **D. Connector** ○

4. Which symbol is used for decision in a flow chat?

A. Rectangle ○ **B. Parallelogram** ○

C. Diamond ○ **D. Oval** ○

5. Which symbol is used for processing in a flow chat?

A. Rectangle ○ **B. parallelogram** ○

C. Diamond ○ **D. Oval** ○

ANSWER THE FOLLOWING QUESTION

Q1. What is the importance of flowchart?

ANS._____

_____

_____

_____

_____

_____

Q2. What does significance of decision symbol in order to draw flow chart?

ANS._____

_____

_____

_____

_____

Q3. Write down steps for drawing Flow chart.

ANS._____

_____

_____

_____

Q4. Draw a flow chart to find acceleration of a moving object for Mass and the force.

ANS.

Q5. Write a difference between flow chart and algorithm.

ANS.

Q6. Draw a Flowchart to find the largest of three unequal numbers.

ANS.

Q7. Write an algorithm Find the sum of even numbers upto 100.

ANS.

Q8. Draw a flow chart to convert temperature from Fahrenheit to Celsius.

ANS.

Q9. Write some advantages of using flow charge in programming.

ANS.

Q10. What is algorithm and what is the role of algorithm in problem solving?

ANS.

Q11. Write an algorithm that inputs length in inches and calculates and prints it in centimeters.

ANS.

PAKISTAN INTERNATIONAL SCHOOL JEDDAH

COMPUTER SCIENCE **Chapter 02** **CLASS X**

Worksheet: 02

Q#1 Fill the Bubbles of Correct Options.

1. A Set of Instruction Written in a Programming Language Is Called:

A. Program ◯ **B. Software Design** ◯

C. Algorithm ◯ **D. Flowchart** ◯

2. Each Statement of Programming Language has Its Own:

A. Syntax ◯ **B. Semantic** ◯

C. Coding ◯ **D. Both (A) & (B)** ◯

3. Examples of Selection Structure Statements are Except:

A. IF ◯ **B. Else-IF** ◯

C. Switch ◯ **D. +=** ◯

4. A Programming Method that is based on Objects is Called:

A. OOPS ◯ **B. Mnemonics** ◯

C. Fortran ◯ **D. Algol** ◯

5. Which of The Following Is not a type of Object-Oriented Language?

A. C++ ◯ **B. PHP** ◯

C. C# ◯ **D. BASIC** ◯

Q#2 Write the Uses of The Following Special Characters In "C" Language.

SPECIAL CHARACTERS	USES OF SPECIAL CHARACTERS
%	
*	
$	
#	

ANSWER THE FOLLOWING QUESTIONS.

1. Differentiate Between Syntax and Semantic Function.

2. How Can You Differentiate Between Low Level Language and High-Level Language? Give Examples.

Ans._____

3. What Is Object-Program?

Ans._____

4. Write Is Source Program?

Ans._____

5. What is Meant by IDE?

Ans._____

6. How A Linker Works in C Language?

Ans.

PAKISTAN INTERNATIONAL SCHOOL JEDDAH

COMPUTER SCIENCE **Chapter 03** **CLASS X**

Worksheet: 03

Q#1 Fill the Bubbles of Correct Option.

1. What Will Be the Output of The Expression 5+3*3-1

A. 16 ◯ **B. 23** ◯

C. 13 ◯ **D. 12** ◯

2. Which Character Terminates a "C" Statement?

A. Colon ◯ **B. Semicolon** ◯

C. Period ◯ **D. Comma** ◯

3. Which of The Following Is a Logical Operator?

A. % ◯ **B. &&** ◯

C. <= ◯ **D. +=** ◯

4. Which Function Is Used to Print Text and Values on The Screen in A Specified Format?

A. Printf( ) ◯ **B. Putchar( )** ◯

C. Puts( ) ◯ **D. Getche( )** ◯

5. Which of The Following Is an Increment Operator?

A. + ◯ **B. ++** ◯

C. += ◯ **D. =+** ◯

Q#2 Write the Uses of The Following Format Specifiers.

FORMAT SPECIFIERS	USES OF FORMAT SPECIFIERS
%d	
%e	
%s	
%g	

ANSWER THE FOLLOWING QUESTIONS.

1. Differentiate Between Getch( ) and Getche( ) Function.

2. What Is the Purpose of Escape Sequence in C Language?

Ans._____

_____

_____

_____

_____

3. How Can You Differentiate Between Relational and Logical Operators?

Ans._____

_____

_____

_____

_____

4. Write A Program That Reads the Length of One Side of a Cube and Prints Its Volume.

Ans._____

_____

_____

_____

_____

_____

_____

_____

5. Write A Program That Reads Three Numbers and Prints Their Sum, Product and Average.

Ans._____

_____

6. Write A Program That Reads Temperature in Celsius, Converts It in To Fahrenheit and Prints It on The Screen.

Ans.

PAKISTAN INTERNATIONAL SCHOOL JEDDAH

COMPUTER SCIENCE **Chapter 04** **CLASS X**

Worksheet: 04

Q#1 Fill the Bubbles of Correct Option.

1. For which purpose if structure is used in programming?

a. Repetition ○ **b. Selection** ○

c. Sequence ○ **d. Input of Data** ○

2. Which statement is suitable to use in a situation where there are only two choices based on a condition?

a. If-Statement ○ **b. If-else-statement** ○

c. If-else statement ○ **d. Switch Statement** ○

3. Which statement can be used in place of conditional operator?

a. If-Statement ○ **b. If-else-If statement** ○

c. If-else statement ○ **d. Switch Statement** ○

4. Which of the following is a multiple selection statement?

a. If-Statement ○ **b. If-else-If statement** ○

c. If-else statement ○ **d. Switch Statement** ○

5. Which of the selection structures tests only for equality?

a. If-Statement ○ **b. If-else-If statement** ○

c. If-else statement ○ **d. Switch Statement** ○

ANSWER THE FOLLOWING QUESTIONS.

i. Different between if-else-if and switch statement.

i. Explain the concept of control structure.

Ans._____

_____

_____

_____

_____

ii. What is conditional statement?

Ans._____

_____

_____

_____

_____

iii. Write a program to show the use of IF-ELSE statement.

Ans._____

_____

_____

_____

_____

_____

_____

_____

iv. What do you know about switch statement?

Ans.

vi. Why break statement is used in switch() structure?

Ans.

vii. What is the purpose of default statement in switch structure?

Ans.

viii. What is nested selection structure?

Ans._____

_____

_____

_____

_____

_____

_____

ix. Write a program that reads two numbers and prints the larger

Ans._____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

x. Write the above program using conditional operator.

Ans.

PAKISTAN INTERNATIONAL SCHOOL JEDDAH

COMPUTER SCIENCE **Chapter 05** **CLASS X**

Worksheet: 05

Q#1 Fill the Bubbles of Correct Option.

1. which structure enables the programmer to execute a set of instructions repeatedly until a particular is met?

A. Selections ◯ **B. Sequence.** ◯

C. Choice ◯ **D. Loop.** ◯

2. Which of the following is also called counter loop?

A. do-while ◯ **B. while** ◯

C. for ◯ **D. if-else** ◯

3. Which of the following ends of multiple statement while loop.

A. for loop ◯ **B. right brace** ◯

C. semicolon ◯ **D. colon** ◯

4. Which loop is used to execute a set of statements when the number of iterations are not known ?

A. for loop ◯ **B. Do while loop** ◯

C. While loop ◯ **D. nested loop** ◯

5. Which loop is used when it is required to execute the loop at least once?

A. for loop ◯ **B. do while loop** ◯

C. while loop ◯ **D. nested loop** ◯

ANSWER THE FOLLOWING QUESTIONS

Q1. Define Loop, what are the uses of loops?

ANS._____

_____

_____

_____

_____

_____

Q2. Enlist different types of loop in C language.

ANS._____

_____

_____

_____

_____

Q4. Where do we use for loop in C ?

ANS._____

_____

_____

_____

_____

Q5. Differentiate between for and while statement.

ANS._____

Q6. Differentiate between while and Do-While loop.

ANS.

Q7. What is the use of continuous statement?

ANS.

Q8. What is the Nested loop?

ANS.

Q9. Write a program to print the sum of squares of all the numbers from 1 to 10 using a loop. Sum + ($1^2 + 2^2 + 3^2 + 4^2 + 5^2 + 6^2 + 7^2 + 8^2 + 9^2 + 10^2$).

ANS._____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Q10. Write a program that reads a number and prints it table using While loop.

ANS._____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Q11. Write a program that prints a line of 60 Asterisks (*) using do while loop.

ANS.

PAKISTAN INTERNATIONAL SCHOOL JEDDAH

COMPUTER SCIENCE **Chapter 06** **CLASS X**

Worksheet: 06

Q#1 Fill the Bubbles of Correct Option.

1.Which logic gate is represented by the function, = $\overline{(xy)}$?

A. Nand ◯ **B. Nor** ◯

C. Exclusive-OR ◯ **D. Exclusive-NOR** ◯

2.What is the maximum number od possible input combinations in a truth table that has three variables?

A. 3 ◯ **B. 6** ◯

C. 8 ◯ **D. 9** ◯

3.How many AND gates are required to create the logic of the Boolean function: F = $\bar{x}$z + yz + xyz?

A.1 ◯ **B. 2** ◯

C. 3 ◯ **D. 4** ◯

4.Which of the following gate gives the output as 1 only if all the inputs signals are 1.

A. AND ◯ **B. OR** ◯

C. EXOR ◯ **D. NOR** ◯

5.The gate which is called an inverter is called?

A. NOR ◯ **B. NAND** ◯

C. EXOR ◯ **D. NO** ◯

ANSWER THE FOLLOWING QUESTIONS.

Q.1 Differentiate between AND & OR Gate.

Ans:

AND Gate	NAND Gate

Q.3 Differentiate between digital logic and logic gates.

Ans:

Digital Logic	Logic Gate

Q.4 What is meant by Boolean function?

Ans:_____

_____

_____

_____

_____

_____

_____

Q.5 What is logic gate?

Ans:_____

_____

_____

_____

Q.6 Describe Karnaugh Map (K-Map).

Ans:_____

_____

_____

_____

Q.7 Write down the rules to simply three-variable Boolean function by using K-map.

Ans:_____

_____

_____

_____

_____

_____

Q.8 Simply Boolean function $F_3 = \bar{A}BC + A\bar{B}C + ABC + \overline{ABC}$.

Ans:_____

_____

_____

Q.9 What is truth table?

Ans:

Q.10 Write down any three properties of truth table.

Ans:

Q.11 What is truth table? Explain its properties.

Ans:

Q.12 Draw the logic circuits of the following Boolean functions.

$$F_1 = \overline{xy}z + x\overline{y}z$$

Ans:_____

Q.13 Draw the logic circuits of the following Boolean functions.

$$F_3 = x\overline{y} + x\overline{y}z + xyz$$

Ans:_____

Q.14 Draw truth table of the following Boolean functions.

$$F_2 = \overline{x}z + y\overline{z} + xyz$$

$$F_3 = \overline{xyz} + \overline{xy}z + \overline{x}yz + xy\overline{z}$$

Ans:_____

PAKISTAN INTERNATIONAL SCHOOL JEDDAH

COMPUTER SCIENCE **Chapter 07** **CLASS X**

Worksheet: 07

Q#1 Fill the Bubbles of Correct Option.

1. How Many Types of Lists Are Commonly Used in HTML Pages?

A. 2 ◯ **B. 3** ◯

C. 4 ◯ **D. 5** ◯

2. Which Language Is Used for Creating Webpages?

A. HTML ◯ **B. C Language** ◯

C. URL ◯ **D. Web Browser** ◯

3. What Is Text or Image in A Web Page Called That Links It to Another Web Page When User Clicks on It?

A. Web Link ◯ **B. Browser Link** ◯

C. Hyperlink ◯ **D. Search Link** ◯

4. Anything Types Inside Which Tags Is Displayed in The Browser Window?

A. <Body></Body> ◯ **B. <HTML></HTML>** ◯

C. <Head></Head> ◯ **D. <Title></Title>** ◯

5. Webpages Are Sorted at the:

A. Server ◯ **B. Client** ◯

C. Domain ◯ **D. Mail Server** ◯

Q#2 Write the Uses of The Following Tags.

TAGS	USES OF THE TAGS
<hr>	
<Table></Table>	

Answer The Following Questions.

1. Differentiate Between Web Page and Website.

2. What Are the Names of Different Parts Of URL?

Ans._____

_____

_____

3. What Is Web Portal?

Ans.

4. What Is the Main Purpose of Service-Based Business Website?

Ans.

5. How to Create and Display the First HTML Documents?

Ans.

6. How Can We Insert Spaces in HTML Documents?

Ans.

PAKISTAN INTERNATIONAL SCHOOL JEDDAH

WORKSHEETS: Class X

Subject: Education

PREPARED BY: SYED MEHDI SHAH

EDUCATION

PAKISTAN INTERNATIONAL SCHOOL AZIZYAH JEDDAH

SENIOR BOY'S WINGS Work sheet: Chapter#6

مضمون: مبادیاتِ تعلیم

پاکستان میں تعلیم- باب6

نام طالب علم: _____ جماعت: _____ فریق: _____

جواب تحریر کریں۔

1۔ وعلم آدم الأسماء کلھا۔ ترجمہ کریں۔

_____

2۔ پہلی پاکستان تعلیمی کانفرنس کب اور کہاں منعقد ہوئی تھی؟

_____

3۔ "مقاصد" کا مفہوم بیان کریں۔

_____

_____

4۔ موجودہ قومی تعلیمی پالیسی 2010-1998 کب نافذ العمل ہوئی؟

_____

5۔ پاکستان میں کتنی اقسام کی تعلیم دی جاتی ہے؟ نام لکھیے

_____

6۔ پاکستان میں بہت سے ٹیچرز ٹریننگ کے ادارے کام کر رہے ہیں۔ ان میں سے اہم یہ ہیں:

_____

_____

PAKISTAN INTERNATIONAL SCHOOL AZIZYAH JEDDAH

SENIOR BOY'S WINGS Work sheet: Chapter#6

مضمون: مبادیاتِ تعلیم

پاکستان میں تعلیم-باب

خالی جگہیں پر کریں۔

7۔اس دنیا میں ہر چیز ــــــــــــ ہے۔

8۔کنگ ایڈورڈ کالج ایک ــــــــــــ کالج ہے۔

9۔ایک رسمی ادارے میں تعلیم دینا ــــــــــــ کہلاتا ہے۔

10۔اس دینا کا واحد مرکز ــــــــــــ ہے۔

11۔تعلیمی جامعہ ایک ــــــــــــ ادارہ ہے۔

12۔ہمارے ملک میں انجینئرنگ تعلیم ــــــــــــ کے لیے لازمی ہے۔

13۔قانون کے گریجویٹ ــــــــــــ کی ملازمت کے لیے پورے اترتے ہیں۔

14۔بزنس اور کامرس کی تعلیم میں ــــــــــــ پر بحث کی جاتی ہے۔

سوال: ہر جملے کے سامنے درست / صحیح لکھیے۔

15۔تعلیم کا بنیادی مقصد پیسے کمانا ہے۔ _____

16۔دنیا کی تمام رونقیں انسان کے لیے ہیں۔ _____

17۔پاکستان میں شرح خواندگی 80٪ ہے۔ _____

18۔اسکول سے بچوں کا غیر حاضر رہنا کہلاتا ہے۔ _____

19۔ لڑکیوں کی تعلیم بہت اہم ہے۔ _____

20۔ لکھنا اور پڑھنا سیکھنا ایک انتہای بیزور کن عمل ہے _____

PAKISTAN INTERNATIONAL SCHOOL AZIZYAH JEDDAH

SENIOR BOY'S WINGS Work sheet: Chapter#6

مضمون: مبادیاتِ تعلیم

پاکستان میں تعلیم

سوال: مختصر جواب تحریر کریں۔

21- پہلی آل پاکستان تعلیمی کانفرس جو کہ کراچی میں منعقد ہوئی تھی، وفاقی وزیر تعلیم جناب فضل الرحمان نے کیا پیغام دیا تھا؟

_____

_____

_____

22۔قائد اعظم نے با مقصد تعلیم کے سلسلے میں طلباء کو کیا نصیحت کی؟

_____

_____

_____

23- ایلیمنٹری ایجوکیشن کے بارے میں آپ کیا جانتے ہیں؟

_____

_____

_____

کالم ملائیں

الف	ب	ج
ایل ایل بی	اعلٰی تعلیم	
پیشہ ورانہ تعلیم	پیشہ ورانہ تعلیم	
جماعت 1-5	پرائمری تعلیم	
پی۔ایچ۔ڈی	ہدف	
مقصد	قانونی تعلیم	

PAKISTAN INTERNATIONAL SCHOOL AZIZYAH JEDDAH

SENIOR BOY'S WINGS Work sheet: Chapter#6

مضمون: مبادیاتِ تعلیم

پاکستان میں تعلیم-باب

سوال: مفصل جواب تحریر کریں۔

تعلیمی مقاصد پر ایک تفصیلی جواب لکھیں۔

PAKISTAN INTERNATIONAL SCHOOL AZIZYAH JEDDAH

SENIOR BOY'S WINGS Work sheet: Chapter#6

Education in Pakistan

Subject: Education

Name: ---------- Class 10th Section: ----------

Q. Write the correct answer:

1 "We thought Adam the names of all things" (Sura name)

_____

2. First All Pakistan Educational Conference was held in:

_____

_____

3. The meaning of the Aims:

_____

4.The current National education policy `1998-2010 was in plemented

_____

_____

_____

_____

in:

_____

_____

5. In Pakistan, mainly how many types of education: ----------

6. Many teacher training institutions are working in the country. The most important of them are:

_____

7. Every object in this world is: ----------

8. King Edward is a ---------- college:

9. Education in regular institution is called ----------

10. The sole axis of the universe is ----------

11. Education university is a ---------- institute:

12. Engineering education is a must for ---------- in our country.

13. The law graduates qualify for the posts of;

14.Business and Commerce education deals with:

Write True or Fales:

15. The main purpose of education is to earn money. Ture/ False

16. All the colour of life has been created for man. Ture/ False

17. First educational conference was held in Lahore. True/False

18. Pakistan's literacy rate is 80%. True/False

19. Truancy means ruing away from school. True/False

20. Female education is very important. True/False

21. It is very boring to know how to read and write. True/False

22. First All Pakistan Educational Conference held in Karachi, Federal Minister of Education Mr. Fazlul – Rehman said:

Ans: ---

23. Quaid-e-Azam advice to the students about purposeful education:

Ans: ---

24.What do you know about Elementary education?

Ans: ---

---

25. Match the Columns and write correct answer in columns C

A	B	C
LLB	High Education	----------
Vocational Education	Professional Education	----------
Class 1-5	Primary Education	----------
PHD	Destination	----------
Aim	Legal Education	----------

Q. Write detailed note on Aims of Education.

Work Sheet Chapter#7

Curriculum Development in Pakistan

Subject: Education

Name ---------- Class 10th Section: ---------

Q.1 Circle the correct option:

1. Curriculum provides learning opportunities to the ----------

a. books b. course c. teachers d. students

2. Curriculum achieves ----------

a. people b. objectives c. praise d. pathway

3.Tthe age and ---------- of students is the key factors in designing the curriculum:

a. values b. position c. structure d. psychology

4. Keeping in view students' psychology is ---------- of curriculum designing:

a. pattern b. principle c. element d. ideal

5. Curriculum is a systematic group of ----------

a. books b. course c. teachers d. students

6. Evaluation is ----------of curriculum:

a. pattern b. principle c. element d. ideal

7. Every activity on this earth is based on ---------- basic questions:

a. two b. three c. five d. six

8. The material content or the subject matter to be taught in the class room is called,

a. teaching material b. activities c. method of teaching d. none of these

9. Evolution is the ---------- element of the curriculum.

a. First b. second c. third d. last

10. Curriculum is a set of activities held in the ----------

a. home b. school c. village d. court

Q.2 Match these columns and write correct answer in column C

Column- A	Column -B	Column- C
Subtotal of all curriculum activities	Material objectives	----------
Religious society	Method of evaluation	----------
Industrial society	Affective	----------
Observation	Likewise objectives	----------
Feeling	Evaluation	----------

Q.3: Short answer, Be precise in your answer.

1. Definition of the curriculum.

Ans:----------

---

2. Describe the basics of curriculum:

Ans: ----------

---

3. Write a short note on importance of curriculum;

Ans: ----------

---

4. How curriculum inculcates values.

Ans: ----------

5.Elements of curriculum.

Ans: ----------

---

6. Write a short note on Principles of curriculum development.

Ans; ----------

Q. Discuss various concepts concept of curriculum.

Work Sheet Chapter#8

Organization of School Activities

Subject: Education

Name ---------- Class 10TH section: ----------

Write True or False.

1. Co-curricular activities not relate to the running of school as an institution. --------

2. Co-curricular activities include the office work related in the school. ---------

3. School aims at multi-dimensional nourishment of the students. ---------

4. Co-curricular are important in school in many ways. --------

5. The best pursuit of students is they're not leisure time. ---------

6. School presents an anthology of co-curricular activities. ---------

7. Fulfillment of interest means the fulfillment of personality. --------

8. Students don't want to sit still. --------

9. This balanced schedule affects does not students' health positively. --------

10. The famous proverb says" An empty mind is not devil's place. -------

11. Co-curricular activities do not create sportsmanship in the students. ------

12. Graphic and written activities do not sharpen students' creativity. -----

Match these columns and write correct answer in column C.

Column-A	Column-B	Column-C
Curricular activities	Motor energy	----------
Co-curricular activities	Concept about the self	----------
Kinesthetic energy	Balance routine	----------
Sound body	Productive use of leisure time	----------
Self-efficacy	graphic activity	----------
Play when its time to play	Athletics	----------
And study when is time to study		
Hobbies ensure	Literary Activities	----------
Handwriting competition	Human Resource	----------
Cricket	Sound mind	----------
Bazm-e-Adab	Both inside and outside the class	----------
Teachers	Academic activities	----------
School building	Material object	----------

Circle the correct option.

1.School is ---------- setting

a. minute b. miniature c. panoramic d. complex

2. Academic activities are related to the ----------

a. teacher b. teacher methodology c. core-curriculum d. none -of these

3. Administrative activities are related with running of the school as an----------.

a. building b. office c. home d. institution

4. Excursion means long and short school ----------

a. games b. debates c. trips building

5. Keeping in view students Psychology is ---------- of curriculum designing.

a. ideal b. principle c. element d. pattern

6.Civice sense is related with the with the training of ----------behaviors.

a. emotional b. physical c. cognitive d. social

7.Ganmes are an important ---------- activity.

a. curricular b. co-curricular c. academic d. administrative

8. School aims at multi-dimensional ---------- of the students.

a. punishment b. nourishment c. none of these d. all of these

9.Those activities which are organized in a accordance with the curriculum-plan are called ---

a. social activities b. academic activities c. professional activities d. game activities

10. School aims at multi-dimensional nourishment of the ----------

a. teachers b. students c. parents d. servants

Work Sheet Chapter#9

Guidance & Counseling

Subject: Education

Name: ---------- Class 10th Section ----------

Write Short Answers:

1.Define Guidance.

Ans: ----------
---

2. Define counseling.

Ans: ----------
---

3. Why do some students behave aggressively?

Ans: ----------

---

4. Write four principles of guidance.

Ans: ----------

---

5. Define educational guidance.

Ans: ----------

---

6. What do you know about Vocational guidance?

Ans; ----------

Write True OR false:

I. Guidance counseling must not be relevant to job needed in the society. ----------

II. Thing habits and manipulative habits should be coordinated. ----------

III. Guidance must capitalize the interest, attitude, aptitude and intrinsic ability an individual. ----------

IV. The city guidance worker should be role model of positive human. ----------

V. Relationship, healthy personality traits self-actualization are bad qualities. ----------

VI. Sometimes it happens that parents force their interest over. ----------

VII. The subject is the person who is facing some problem. ----------

VIII. Guidance is information provided by a company director. ----------

IX. Guidance is always negative. ----------

X. The counselor gives suggestions about the solution of a problems. ----------

Circle the correct option:

In Guidance, the focus is ----------

a. Solution b. Punishment c. Suggestions d. rejection

2. In counseling, ---------- is the focus

a. solution b. punishment c. rejection d. suggestion

3. The school guidance worker must be a ---------- for the students.

a. teacher b. principle c. role model d. class fellow

4. The students with health hazards see ---------- playing or studying.

a. students b. somebody c. teachers d. others

5. Social inadaptability is a ---------- problems.

a. inherited b. social c. emotional d. cognitive

6. The guide must identify the ---------- of the problems.

a. points b. parents c. students d. causes

7. Parents often ---------- their children to select the subjects of their choice.

a. reward b. punishes c. compel d. decide

8. Vocational guidance is the process of ----------

a. Coaching b. training c. facility d. none of these

9. Counseling is the part of the process of ----------

a. punishment b. guidance c. vocation d. coaching

10. There are ---------- persons involved in counseling process.

a. three b. two c. four d. five

Q. Write a detailed note on the social problems of the students.