



CHEMISTRY MDCAT

UNIT-9 (A + SERIES)

TOPIC:-

✓ **ALKYL HALIDES**

✓ **ALCOHOLS AND PHENOLS**

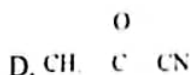
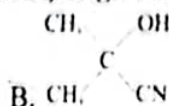
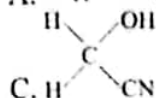
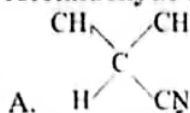
✓ **ALDEHYDE AND KETONE**

- Q.1 Alkyl halides are considered to be very reactive compounds towards nucleophile because
- They have nucleophilic carbon and a bad leaving group
 - They have nucleophilic carbon and a good leaving group
 - They have electrophilic carbon and a bad leaving group
 - They have electrophilic carbon and a good leaving group
- Q.2 Alcohols are acidic in nature, due to loss of proton, alcohols form alkoxide ion. The most stable alkoxide ion will be formed by
- 1-propanol
 - Isopropyl alcohol
 - 2-butanol
 - 2-methyl-2-propanol
- Q.3 If same number of carbon atoms are present in all types of monohydric alcohols, then which one will have highest boiling point?
- Primary alcohol
 - Secondary alcohol
 - Tertiary alcohol
 - Glycol
- Q.4 When phenol is reacted with aqueous bromine then phenol act as
- Free radical
 - An acid
 - Electrophilic center
 - Nucleophilic center
- Q.5 Which of the following statement about alkyl halide is correct?
- They show hydrogen bonding
 - They are soluble in water
 - They do not contain any polar bond
 - They are soluble in organic solvents
- Q.6 Aldehyde and ketones can be detected by
- 2,4- DNPH
 - Iodoform test
 - Tollen's test
 - Lucas test
- Q.7 Which of the following compound has lowest pKa value?
- Water
 - Acetylene
 - Ethanol
 - Methane
- Q.8 The IUPAC name for $\text{CH}_3\text{COCH}_2\text{COCH}_3$ is
- Pentane-1,4-dione
 - Pentane-2,4-dione
 - Pentane-2,2-dione
 - Pentane dione
- Q.9 What results from the reaction of 2-Bromopentane with alcoholic KOH?
- 1-Pentene
 - 2-Butene
 - 2-Pentene
 - 1-Pentanol
- Q.10 In tertiary alkyl halides, the halogen atom is attached to a carbon atom which is further attached to _____ carbon atoms.
- 1
 - 2
 - 3
 - 4
- Q.11 The intermediate formed during $\text{S}_{\text{N}}2$ mechanism has hybridization
- sp
 - sp^2
 - sp^3
 - d^2sp^3
- Q.12 The product formed when excess of ammonia is allowed to react with ethyl bromide
- Ethyl amine
 - Diethyl amine
 - Triethyl amine
 - Quaternary ethyl amine
- Q.13 What is the product formed in given reaction?
- $$\text{CH}_3\text{CH}_2\text{Cl} + \text{CH}_3\text{COONa} \rightarrow ?$$
- $\text{CH}_3\text{CH}_2\text{ONa}$
 - $\text{CH}_3\text{CH}_2\text{CH}_3$
 - $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_3$
 - $\text{CH}_3\text{COOCH}_2\text{CH}_3$
- Q.14 In β -Elimination reaction, nucleophile attacks on
- α - Carbon
 - β - Carbon
 - β - Hydrogen
 - Electrophilic halogen atom
- Q.15 $\text{CH}_3 - \text{CH}_2 - \text{Cl} \xrightarrow{\text{X}} \text{CH}_2 = \text{CH}_2$
X in the above reaction is:
- Acetone
 - Alcoholic KOH
 - Aqueous KOH
 - $\text{Cr}_2\text{O}_3 + \text{Al}_2\text{O}_3 + \text{SiO}_2$

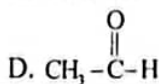
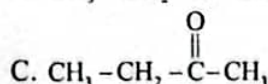
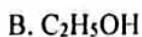
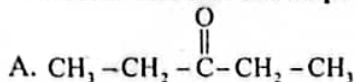


- Q.16 CN^- attacks on which alkyl halide to give propane nitrile?
 A. Propyl Chloride
 B. Iso-propyl chloride
 C. Bromobutane
 D. Chloroethane
- Q.17 If OH^- attacks on electrophilic carbon atom of alkyl halide, the product is _____ and if it attacks on β - hydrogen the product is _____.
 A. Alkanol, alkene
 B. Ether, alkene
 C. Alkene, Alkanone
 D. Alkene, Alkanol
- Q.18 The order of the given reaction is:
 $(\text{CH}_3)_3\text{CBr} + \text{OH}^- \rightarrow (\text{CH}_3)_3\text{COH} + \text{Br}^-$
 A. 1st
 B. 2nd
 C. 3rd
 D. 3/2
- Q.19 In which substitution mechanism of alkyl halides the attacking nucleophile experiences no hindrance from leaving group
 A. $\text{S}_{\text{N}}1$
 B. $\text{S}_{\text{N}}2$
 C. $\text{E}1$
 D. Both A and C
- Q.20 Which of the following compound will follow both $\text{S}_{\text{N}}1$ and $\text{S}_{\text{N}}2$ mechanism?
 A. CH_3Cl
 B. $\text{CH}_3\text{CH}_2\text{CH}(\text{Cl})\text{CH}_3$
 C. $(\text{CH}_3)_3\text{CBr}$
 D. $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{I}$
- Q.21 $\text{C}_n\text{H}_{2n+2}\text{O}$ is the general formula of
 A. Alkanol and ethers
 B. Alcohols and glycols
 C. Alcohols and Phenols
 D. Glycols and Glycerols
- Q.22 When aliphatic aldehyde is treated with Fehling's solution, a brick-red precipitate is formed in this reaction oxidation state of copper changes from _____ to _____.
 A. II, I
 B. II, III
 C. I, II
 D. III, II
- Q.23 Phenyl hydrazone is formed on treatment of carbonyl compound with
 A. Phenyl hydrazine
 B. Hydroxyl amine
 C. Oximes
 D. Urea
- Q.24 Which of the following reagent reacts with both aldehydes and ketones
 A. Tollen's reagent
 B. Fehling' solution
 C. Benedict' solution
 D. Grignard's reagent
- Q.25 Aldehydes and ketones are functional group isomers with general formula
 A. $\text{C}_n\text{H}_{2n}\text{O}$
 B. $\text{C}_n\text{H}_n\text{O}$
 C. $\text{C}_n\text{H}_{3n}\text{O}$
 D. $\text{C}_{2n}\text{H}_{2n}\text{O}$
- Q.26 3,3-Dimethyl-1-butanol on oxidation gives compound, which contains functional group of
 A. 3,3-Dimethyl-1-pentanal
 B. 3,3-Dimethyl-1-Propanal
 C. 3,3-Dimethyl butanal
 D. 2,2-Dimethyl-1-butanol
- Q.27 Why is it necessary to distill aldehyde formed from oxidation of primary alcohol through acidified potassium dichromate (VI) solution or acidified sodium dichromate (VI) solution?
 A. Aldehyde formed is unstable and decompose back to original precursor i.e. primary alcohol
 B. Aldehyde formed may react with primary alcohol, the original reactant
 C. Aldehyde may be oxidized further to a ketone
 D. Aldehyde formed may be oxidized further to carboxylic acid
- Q.28 What are X and Y in the given reaction
 $\text{CH}_3 - \text{CO} - \text{CH}_2 - \text{CH}_3 + 3[\text{O}] \xrightarrow{\text{K}_2\text{Cr}_2\text{O}_7/\text{H}_2\text{SO}_4} \text{X} + \text{Y}$
 A. X= Acetic acid, Y = Propionic acid
 B. X= Acetic acid, Y= Formic acid
 C. X = Formic acid, Y= Acetic acid
 D. X= Acetic acid, Y = Acetic acid
- Q.29 Which of the following is the strongest reducing agent?
 A. $\text{C}_6\text{H}_5\text{CHO}$
 B. HCHO
 C. CH_3CHO
 D. $\text{CH}_3\text{CH}_2\text{CHO}$
- Q.30 $\text{CH}_3 - \text{CH} = \text{CH} - \text{CHO} \longrightarrow \text{CH}_3 - \text{CH} = \text{CH} - \text{CH}_2\text{OH}$
 Which of the following reagent is used for above reaction?
 A. H_2/Ni
 B. $\text{K}_2\text{Cr}_2\text{O}_7/\text{H}_2\text{SO}_4$
 C. $\text{NaBH}_4/\text{H}_3\text{O}^+$
 D. LiAlH_4
- Q.31 OH^- act as nucleophile when reacts with
 A. Formaldehyde
 B. Benzaldehyde
 C. Trimethylacetaldehyde
 D. All of these
- Q.32 The condensation product between two acetaldehyde molecules is
 A. 2-Butenal
 B. Acetal
 C. Acetaldol
 D. 3-HydroxyButanal

Q.33 Acetaldehyde reacts with HCN (NaCN + HCl) to give a compound



Q.34 Iodoform test will not be positive with



Q.35 The reaction of aldehydes and ketones with ammonia derivative G-NH₂ to form compounds containing the group $\text{C} = \text{N} - \text{G}$ and water is known as _____ reaction.

A. Nucleophilic addition

B. Electrophilic addition

C. Nucleophilic substitution

D. Addition Elimination

Q.36 Which of the following give positive iodoform test and also gives aldol condensation?

A. Ethanol

B. Propanal

C. Ethanal

D. Butanone

Q.37 Point out the one that does not react with a saturated aqueous solution of sodium bisulphite to form a crystalline solid

A. Butanone

B. Ethanal

C. Acetone

D. Ethanol

Q.38 Aldehyde and ketone react with hydroxylamine to form Oxime by

A. Nucleophilic addition reaction

B. Electrophilic addition reaction

C. Electrophilic addition followed by acid catalyzed elimination

D. Nucleophilic addition followed by elimination

Q.39 The base added in reaction mixture when Ethanal combines with HCN (*in-situ*), facilitates the nucleophilic addition reaction by

A. Increasing nucleophilic character of Carbonyl group

B. Increasing electrophilic character of Carbonyl group

C. Increasing electrophilic character of Nucleophilic reagent

D. Generating CN⁻ which is stronger nucleophile than HCN itself

Q.40 Which of the following is deciding factor for reactivity of alkyl halide?

A. Bond polarity

B. Bond energy

C. Bond length

D. Both 'A' and 'B'

Q.41 2-Iodo-2-methylpentane is an example of

A. 1° alkyl halide

B. 2° alkyl halide

C. 3° alkyl halide

D. Dihalalkane

Q.42 By considering the factor 'Bond Energy' which is the correct order for reactivity of R-X?

A. $\text{R} - \text{I} > \text{R} - \text{Br} > \text{R} - \text{Cl} > \text{R} - \text{F}$

B. $\text{R} - \text{F} > \text{R} - \text{Br} > \text{R} - \text{I} > \text{R} - \text{Cl}$

C. $\text{R} - \text{I} > \text{R} - \text{Br} > \text{R} - \text{F} > \text{R} - \text{Cl}$

D. $\text{R} - \text{F} > \text{R} - \text{Cl} > \text{R} - \text{Br} > \text{R} - \text{I}$

Q.43 In S_N reactions of alkyl halides, Nucleophile attacks on

A. Nucleophilic Halogen atom

B. Electrophilic carbon atom

C. Leaving group

D. Can attack on both carbon atom and halogen atom

Q.44 Unit of rate constant (k) for S_N2 reaction

A. $\text{Mol} \text{dm}^{-3} \text{Sec}^{-1}$

B. Sec^{-1}

C. $\text{Mol}^{-2} \text{dm}^6 \text{Sec}^{-1}$

D. $\text{Mol}^{-1} \text{dm}^3 \text{Sec}^{-1}$

Q.45 During S_N1 mechanism, change in state of hybridization of carbon atom in first step is

A. sp³ to sp²

B. sp³ to sp

C. sp² to sp³

D. sp² to sp

Q.46 The rate equation, Rate = k [Alkyl Halide] can be considered for

A. E1 and E2 mechanism

B. E1 and S_N1 mechanism

C. S_N2 and S_N1 mechanism

D. S_N2 and E2 mechanism

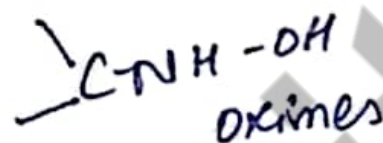
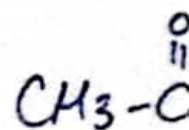
- Q.47 S_N1 reaction can be best carried out with _____
 A. Primary alkyl halides
 B. Secondary alkyl halides
 C. Tertiary alkyl halides
 D. CH_3Br
- Q.48 The mechanism involved in the given reaction is
 $CH_3-CH_2-CH_2Cl + KOH \xrightarrow{\text{Alcohol}} CH_3-CH=CH_2 + KCl + H_2O$
 A. S_N1 reaction
 B. S_N2 reaction
 C. E1 reaction
 D. E2 reaction
- Q.49 Hydroxy derivatives of paraffins are
 A. Ethers
 B. Alkanone
 C. Alcohols
 D. Phenol
- Q.50 In the reaction of alcohol, if the intermediate forms is a carbocation, this means that
 A. Alcohols is reacting with Na
 B. Alcohol is reacting with acetic acid
 C. Alcohol ionizes as carbocation and OH^- ion in water
 D. C - O bond of alcohol breaks
- Q.51 Alcohol + Carboxylic acid $\xrightleftharpoons{H_2SO_4}$ Ester + Water
 For above reaction, reactivity order of alcohols is:
 A. 3° Alcohol > 2° Alcohol > 1° Alcohol
 B. 1° Alcohol > 2° Alcohol > 3° Alcohol > CH_3OH
 C. CH_3OH > 1° Alcohol > 2° Alcohol > 3° Alcohol
 D. 1° Alcohol > 3° Alcohol > 2° Alcohol
- Q.52 Ethers can be obtained from alcohols by which type of reaction.
 A. Oxidation
 B. Esterification
 C. Dehydration
 D. Dehydrogenation
- Q.53 Due to involvement of negative charge of oxygen in the ring of benzene
 A. Phenoxide ion attains stability
 B. Four resonating structures form
 C. pH of its solution becomes less than 4
 D. Reactivity of phenol increases
- Q.54 The order of reactivity of alcohols when alcohol reacts with ammonia in the presence of ThO_2
 A. 1° Alcohol > 2° Alcohol > 3° Alcohol
 B. 3° Alcohol > 2° Alcohol > 1° Alcohol
 C. 3° Alcohol > 1° Alcohol > 2° Alcohol
 D. 1° Alcohol > 3° Alcohol > 2° Alcohol
- Q.55 2-Bromopropane + $KOH(aq) \xrightarrow{K_2Cr_2O_7, H_2SO_4} X \xrightarrow{[O]} Y$
 What are X and Y in above reaction?
 A. Propene and Propanol
 B. Propene and Propylene oxide
 C. 2-Propanol and Propanone
 D. Propane and Propanal
- Q.56 Phenol on reaction with concentrated nitric acid produces _____ involving _____ mechanism
 A. ortho-nitrophenol, electrophilic substitution
 B. 2,5-Dinitrophenol, Nucleophilic substitution
 C. 2,4,6-Trinitrophenol, Electrophilic substitution
 D. 2,4,6-Trinitrophenol, Electrophilic addition
- Q.57 Which pair is incorrectly matched?
 A. Iso-Propyl alcohol, Secondary alcohol
 B. Propanol, Primary alcohol
 C. Iso-Butyl alcohol, Secondary alcohol
 D. Neopentyl alcohol, primary alcohol
- Q.58 In which reaction phenol loses its aromaticity
 A. Nitration
 B. Bromination
 C. Sulphonation
 D. Hydrogenation
- Q.59 Carbocation of S_N1 has _____ geometry and _____ hybridization
 A. Tetrahedral, sp^3
 B. Linear, sp
 C. Trigonal planar, sp^2
 D. None of these
- Q.60 Wurtz's synthesis reaction is particularly useful for the preparation of
 A. Symmetrical alkenes
 B. Symmetrical alkanes
 C. Symmetrical alkynes
 D. Unsymmetrical alkanes

iso-propyl \rightarrow sec only

C-O break 3° stable
C-H break 1° "

Strong acid α 1 pKa

100% form



Class Test

3 branch
1 B.P

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- Please Fill In The Roll No. Correctly.
- It Is Important That The Circle Is Filled Completely And Correctly As Shown In The Example Below, Otherwise

Correct Example: ✓

Incorrect Examples: X
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SUBJECT: Chemistry CH/UNIT# 09

PKa = 0.

NAME: _____

R. NO. (IN WORDS): _____

CLASS: _____ SESSION: _____

SIGN: _____ DATE: _____

BIOLOGY MDCAT

UNIT-9 (A+ Series)

TOPICS:

✓ **Reproduction**

✓ **Support and Movement**

Q.1 Process that produces new generations and maintains a species population is:

- A. Respiration
B. Coordination
C. Homeostasis
D. Reproduction

Q.2 Human male reproductive system is not associated with:

- A. Spermatogenesis
B. Secretion
C. Hormone production
D. Lactation

Q.3 Which one of the following is referred to as the endocrine gland?

- A. Prostate gland
B. Seminal vesicle
C. Cowper's gland
D. Testes

Q.4 All of the following are accessory glands of male reproductive system except:

- A. Seminal vesicles
B. Copulatory organ
C. Cowper's glands
D. Prostate gland

Q.5 All of the following belongs to male reproductive system in humans except:

- A. Seminiferous tubules
B. Epididymis
C. Urethra
D. Corpus albicans

Q.6 Testes in males are located outside _____ cavity but inside the _____.

- A. Scrotum, abdominal
B. Abdominal, scrotum
C. Ribs, scrotum
D. Pericardial, peritoneum

Q.7 Each lobule of testes contains _____ tightly coiled seminiferous tubules.

- A. 5-10
B. 1-4
C. 4-6
D. 20-30

Q.8 These are said to be the nutritive cells found in the seminiferous tubules:

- A. Sertoli cells
B. Interstitial cells
C. Leydig cells
D. Germinal epithelial cells

Q.9 Epididymis is not related to:

- A. Motility of sperms
B. Maturation of sperms
C. Storage of sperms
D. Production of sperms

Q.10 Site for the testosterone production in human males is:

- A. Adrenal medulla
B. Leydig cells
C. Germinal epithelium
D. Sertoli cells

Q.11 The process of spermatogenesis is under the control of:

- A. FSH
B. Prolactin
C. ACTH
D. STH

Q.12 All of the following are formed as a result of mitosis except:

- A. Germinal epithelial cells
B. Spermatogonia
C. Primary oocyte
D. Secondary spermatocyte

Q.13 Which is not a paired structure?

- A. Fallopian tube
B. Ovary
C. Male gonads
D. Uterus

Q.14 Which one of the following is not a part of female reproductive system?

- A. Ovaries
B. Fallopian tubes
C. Vagina
D. Urethra

Q.15 Copulatory organ in female reproductive system is referred to as:

- A. Uterus
B. Womb
C. Vagina
D. Oviduct

Q.16 A glandular structure, responsible for producing progesterone is:

- A. Primary follicle
B. Corpus luteum
C. Endometrium
D. Corpus callosum



- Q.17** In male reproductive system, the term 'urinogenital duct' is used for:
 A. Epididymis
 B. Rete testis
 C. Urethra
 D. Ureters
- Q.18** Oogenesis starts:
 A. After birth
 B. At puberty
 C. Before birth
 D. After fertilization
- Q.19** Normal number of follicle/s ripe/s during each menstrual cycle in human females is/are:
 A. Two
 B. Several
 C. One
 D. Three
- Q.20** In humans, ovulation takes place under the influence of:
 A. Physical stimulus
 B. LH
 C. Progesterone
 D. LTH
- Q.21** It correctly trace the path of sperms from penis to the site of fertilization:
 A. Oviduct → Uterus → Cervix → Vagina
 B. Vagina → Cervix → Uterus → Oviduct
 C. Vagina → Uterus → Oviduct → Cervix
 D. Vagina → Oviduct → Cervix → Uterus
- Q.22** It is the longest phase of the female menstrual cycle:
 A. Ovulatory phase
 B. Menstrual phase
 C. Follicular phase
 D. Secretory phase
- Q.23** Which one of the following is not related to human females?
 A. Menstrual cycle
 B. Circadian rhythms
 C. Oestrous cycle
 D. Placenta formation
- Q.24** End or complete stop of the menstrual cycle is called:
 A. Andropause
 B. Menopause
 C. Miscarriage
 D. Menarche
- Q.25** Which one of the following is a superficial STD which can be treated with anti-viral drugs?
 A. AIDS
 B. Genital Herpes
 C. Gonorrhoea
 D. Syphilis
- Q.26** Genital soreness and ulcers are the symptoms of:
 A. Genital herpes
 B. AIDS
 C. Gonorrhoea
 D. Syphilis
- Q.27** It is an example of incurable sexually transmitted disease:
 A. AIDS
 B. Genital herpes
 C. Syphilis
 D. Gonorrhoea
- Q.28** Muscles are associated with bones through:
 A. Periosteum
 B. Ligaments
 C. Tendons
 D. Epiphysis
- Q.29** A muscle is divided into:
 A. Muscle fascicles
 B. Myofibrils
 C. Muscle fibers
 D. Myofilaments
- Q.30** The thickness of thin filaments is:
 A. 16nm
 B. 7nm
 C. 100nm
 D. 7 μ m
- Q.31** The sarcoplasm of skeletal muscles does not contain:
 A. Creatine phosphate
 B. Glycogen
 C. Myoglobin
 D. Hemoglobin
- Q.32** Muscle fatigue is not associated with:
 A. Deficit of ATP
 B. Rise in pH
 C. Ionic imbalance
 D. Accumulation of lactic acid
- Q.33** These are widely distributed throughout the body and are more variable in function than the other muscle type:
 A. Smooth muscles
 B. Striped muscles
 C. Skeletal muscles
 D. Cardiac muscles



- Q.34** Cartilage does not have:
A. Minerals
B. Living cells
C. Collagen
D. External covering
- Q.35** Pinna of ears is composed of _____ cartilage.
A. Hyaline
B. Fibro
C. Elastic
D. Calcified
- Q.36** The outer covering of cartilage is:
A. Perimysium
B. Pericardium
C. Peritoneum
D. Perichondrium
- Q.37** A gradual loss of the cartilage is an indication of:
A. Gouty arthritis
B. Osteoarthritis
C. Muscle fatigue
D. Rheumatoid arthritis
- Q.38** Most abundant type of cartilage in human body is:
A. Hyaline cartilage
B. Fibrocartilage
C. Elastic cartilage
D. Fibrous cartilage
- Q.39** Identify a point where a bone articulate with another bone or cartilage:
A. Ampulla
B. Sphincter
C. Joint
D. Foramen
- Q.40** The joints present between cranial bones are:
A. Synovial joints
B. Fibrous joints
C. Freely moveable joints
D. Cartilaginous joints
- Q.41** Pubic symphysis is an example of:
A. Gliding joint
B. Fibrous joint
C. Hinge joint
D. Cartilaginous joint
- Q.42** Synovial joint is surrounded by:
A. Fibrous cartilage
B. Fibrous capsule
C. Tendons
D. Elastic cartilage
- Q.43** Rotation is possible due to presence of _____ between bones.
A. Ball and socket joint
B. Saddle joint
C. Pivot joint
D. Hinge joint
- Q.44** Knee joint is an example of:
A. Ball and Socket joint
B. Hinge joint
C. Pivot joint
D. Fibrous joint
- Q.45** Which type of muscle is shown in diagram?



- A. Skeletal muscle
B. Cardiac muscle
C. Smooth muscle
D. Sphincter muscle
- Q.46** Which type of muscles can be controlled by our own will?
A. Skeletal muscles
B. Cardiac muscles
C. Smooth muscles
D. Unstriated muscles
- Q.47** Which type of muscles can regulate the body temperature mainly by contraction?
A. Smooth muscles
B. Skeletal muscles
C. Cardiac muscles
D. Sphincter muscles
- Q.48** Which one is not related to smooth muscles?
A. Presence of one nucleus per cell
B. Involuntary
C. Fatigue
D. Visceral
- Q.49** Intermediate speed of contraction is the character of:
A. Muscles of myometrium
B. Muscles of myocardium
C. Muscles of food pipe
D. Muscles of forelimbs



- Q.50 Contractile portion of skeletal muscles is:**
 A. Belly
 B. Origin
 C. Insertion
 D. Tendon
- Q.51 In skeletal muscles, these are the outermost in terms of location:**
 A. Perimysium
 B. Epimysium
 C. Endomysium
 D. Sarcolemma
- Q.52 In the muscles, carbohydrates are stored in the form of:**
 A. Glycolipids
 B. Cellulose
 C. Starch
 D. Glycogen
- Q.53 The smallest contractile unit of muscle is:**
 A. Motor unit
 B. Triad
 C. Myofilament
 D. Sarcomere
- Q.54 A-band consists of:**
 A. Actin filaments only
 B. Myosin filaments only
 C. Both actin and myosin filaments
 D. Tropomyosin only
- Q.55 Which of the following part of dark band has myosin filaments only?**
 A. Z-line
 B. A-I junction
 C. H-zone
 D. I-band
- Q.56 _____ and _____ proteins are also associated with actin in a thin myofilament.**
 A. Myosin, tropomyosin
 B. Myosin, troponin
 C. Tropomyosin, troponin
 D. Myoglobin, tropomyosin
- Q.57 All of the following options are true regarding skeletal muscles except:**
 A. Convert chemical energy into mechanical energy
 B. Ectodermal in origin
 C. Functional partner of skeleton
 D. Multinucleated
- Q.58 Ca^{2+} are stored in _____ of skeletal muscle fibers.**
 A. Mitochondria
 B. SER
 C. Nuclei
 D. Cytoplasm
- Q.59 ATP providing molecule in skeletal muscle is:**
 A. Myoglobin
 B. Phosphocreatine
 C. Tropomyosin
 D. Lactic acid
- Q.60 It is not the effect of exercise on muscles:**
 A. Hypertrophy
 B. Increase strength
 C. Increased number of mitochondria
 D. Hyperplasia

47) Shivering
Thermogenesis

A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D				
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14	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	29	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	44	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	59	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
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SUBJECT: Bio CH/UNIT# 09

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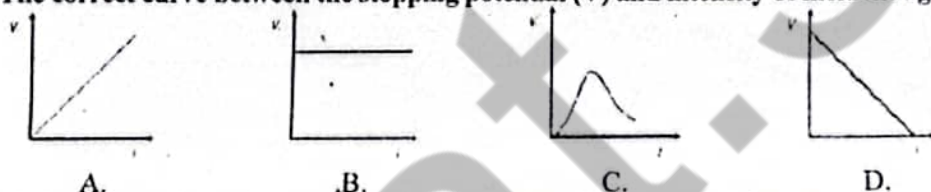
PHYSICS MDCAT

UNIT-9 (A+ SERIES)

TOPICS:

- ✓ **Electronics**
- ✓ **Dawn of Modern Physics**

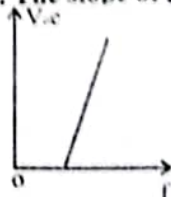
- Q. 1 For a given kinetic energy which of the following has smallest de Broglie wavelength?
 A. Electron
 B. Proton
 C. Deuteron
 D. Alpha-particle
- Q. 2 Kinetic energy with which the electrons are emitted from the metal surface due to photoelectric effect is
 A. Independent of the intensity of illumination
 B. Independent of the frequency of light
 C. Inversely proportional to the intensity of illumination
 D. Directly proportional to the intensity of illumination
- Q. 3 The work function of aluminium is 4.2 eV. If two photons, each of energy 3.5 eV strike an electron of aluminium, then emission of electrons will be
 A. Possible
 B. Not possible
 C. Data is incomplete
 D. Depend upon the density of the surface
- Q. 4 The correct curve between the stopping potential (V) and intensity of incident light (I) is



- Q. 5 The incident photon involved in the photoelectric effect experiment.
 A. Completely disappears
 B. Comes out with an increased frequency
 C. Comes out with a decreased frequency
 D. Comes out without change in frequency
- Q. 6 Wavelength of a 1 keV photon is $1.24 \times 10^{-9} m$. What is the frequency of 1 MeV photon?
 A. $1.24 \times 10^{15} Hz$
 B. $2.4 \times 10^{20} Hz$
 C. $1.24 \times 10^{18} Hz$
 D. $2.4 \times 10^{23} Hz$
- Q. 7 In a half wave rectifier, the input sine wave is $250 \sin 100 \pi t$. The output ripple frequency of rectifier will be
 A. 100Hz
 B. 200Hz
 C. 50Hz
 D. 25Hz
- Q. 8 Rectifier allows unidirectional current through load during entire 360° of input cycle is
 A. Halfwave rectifier
 B. Full wave rectifier
 C. Comparator
 D. Amplifier
- Q. 9 In pair production..... are produced:
 A. Positron & electron
 B. Photons
 C. Electron & neutron
 D. B & C are correct
- Q. 10 Calculate the energy of a photon of wavelength 6600 angstroms.
 A. $0.3 \times 10^{-19} J$
 B. $3 \times 10^{-19} J$
 C. $30 \times 10^{-19} J$
 D. $300 \times 10^{-19} J$
- Q. 11 What is the de Broglie wavelength associated with an electron, accelerated through a potential difference of 100 volts?
 A. 1nm
 B. 0.12nm
 C. 0.27 nm
 D. None of these
- Q. 12 The relation between energy "E" and momentum "P" for photon is
 A. $E^2 = P^2 c^2$
 B. $E^2 = \frac{P^2}{c^2}$
 C. $E^2 = Pc^2$
 D. $E^2 = P^3 c$
- Q. 13 With the increase in temperature of black body, the peak of distribution curve shifts to
 A. Shorter wavelength
 B. Longer wavelength
 C. Remain same
 D. Sometime shorter and sometime longer wavelength
- Q. 14 The factor $\frac{h}{m_0 c}$ has dimension of
 A. Mass
 B. Length
 C. Time
 D. Frequency



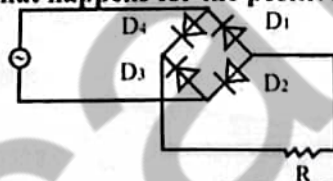
- Q. 15 The graph shows the relation between max energy of photo electrons and the frequency of incident radiation. The slope of graph is equal to



- A. Linear momentum
B. Angular momentum
C. Energy
D. Planck's constant
- Q. 16 A particle of mass $3m$ at rest decays into two particles of masses m and $2m$ having non-zero velocities. The ratio of the de-Broglie wavelengths of particle is (λ_1 / λ_2) is
A. $1/2$
B. $1/4$
C. 2
D. 1
- Q. 17 p-n junction when reversed biased acts as a
A. Capacitor
B. Inductor
C. On switch
D. Off switch
- Q. 18 De-Broglie waves are associated with
A. Moving charged particles only
B. Moving neutral particles only
C. Accelerated charged particle
D. All particles in motion
- Q. 19 Frequency of photon having energy 66 eV is
A. $8 \times 10^{13} \text{ Hz}$
B. $12 \times 10^{15} \text{ Hz}$
C. $16 \times 10^{15} \text{ Hz}$
D. None of these
- Q. 20 A radiation of energy E falls normally on a perfectly absorbing surface. The momentum transferred to the surface is
A. $\frac{E}{c}$
B. $\frac{2E}{c}$
C. Ec
D. $\frac{E}{c^2}$
- Q. 21 A device based on photoelectric effect is called
A. Photosensitive detection
B. Photo diode
C. Photosynthesis
D. Photocell
- Q. 22 The name of the photon for the quantum of light was proposed by
A. Ampere
B. Plank
C. Thomson
D. Einstein
- Q. 23 A photon of wavelength 900 nm behaves like a particle of mass
A. $5.53 \times 10^{-36} \text{ kg}$
B. 0 kg
C. $2.46 \times 10^{-36} \text{ kg}$
D. $1.84 \times 10^{-44} \text{ kg}$
- Q. 24 The energy radiated is directly proportional to the fourth power of Kelvins temperature is
A. Karl-Weins law
B. Rayleigh-Jeans law
C. Stephens law
D. Planck's
- Q. 25 Identify the process in which an electron escapes from the metal surface.
A. Electron emission
B. Electron displacement
C. Electron movement
D. None of these
- Q. 26 What happens to the wavelength of a photon after it collides with an electron?
A. Increases
B. Decreases
C. Remains the same
D. Infinite
- Q. 27 The stopping potential in an experiment on the photoelectric effect is 1.5 V . What is the maximum kinetic energy of the photoelectrons emitted?
A. 1.5 eV
B. 3 eV
C. 4.5 eV
D. 6 eV
- Q. 28 If K.E. of free electron is doubled, its de Broglie wavelength will change by factor
A. $1/\sqrt{2}$
B. $\sqrt{2}$
C. $1/2$
D. 2
- Q. 29 The de Broglie wavelength of a gas molecule at a temperature $T \text{ K}$ is:
A. $\frac{h}{\sqrt{3mKT}}$
B. $\frac{h}{3mKT}$
C. $\frac{h}{\sqrt{2mKT}}$
D. $\sqrt{2mKT}$
- Q. 30 The basic purpose of filter is to
A. Minimize variations in ac input signal
B. Suppress harmonics in rectified output
C. Remove ripples from the rectified output
D. Stabilize dc output voltage



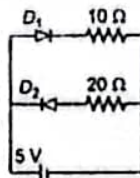
- Q. 31 The applied input a.c. power to a half-wave rectifier is 100 watts. The d.c. output power obtained is 40 watts. What is the rectification efficiency?
 A. 50% B. 80%
 C. 40% D. 95%
- Q. 32 Find E in eV "Photon Wavelength was given 1440nm"
 A. 0.867 eV B. 18.67 eV
 C. 9.32 eV D. 0.932 eV
- Q. 33 Minimum energy required for pair production is:
 A. 939 MeV B. 942 MeV
 C. 1.02 MeV D. 0.51 MeV
- Q. 34 Charge of photon is
 A. 0 B. Negative
 C. Positive D. Positive/negative
- Q. 35 To detect a signal of radio wave _____ of photons are needed.
 A. One B. Infinite no
 C. Few hundred D. Millions
- Q. 36 Energy of photon is E and Planck's constant is h the angular frequency of electromagnetic wave is
 A. $\frac{E}{h}$ B. $\frac{E}{2\pi h}$ C. $\frac{2E}{h}$ D. $\frac{2\pi E}{h}$
- Q. 37 A proton and an α -particle are accelerated through same voltage, the ratio of their de-Broglie wavelength will be
 A. 1:2 B. $2\sqrt{2}:1$ C. $\sqrt{2}:1$ D. 2:1
- Q. 38 If momentum of a particle is doubled then de-Broglie wavelength become
 A. Double B. Half
 C. Unchanged D. Four times
- Q. 39 In the following figure what happens for the positive half cycle of the input?



- A. D₁ and D₃ conducts B. D₄ and D₂ conducts
 C. D₁ and D₂ conducts D. D₄ and D₃ conducts
- Q. 40 In Davison and Germer experiment, the angle between incident beam and diffracted beam is called:
 A. Angle of incidence B. Angle of diffraction
 C. Glancing angle D. Angle
- Q. 41 A transmitter radiates 30 μ W at 6.63 mm wavelength. The number of photons emitted per second are:
 A. 6.63×10^{-34} B. 6.63×10^{34}
 C. 10^{18} D. 10^{11}
- Q. 42 An atomic particle of mass m moving at speed v is found to have wavelength λ . What is the wavelength of second particle with three times the speed and twice the mass?
 A. $\frac{3\lambda}{2}$ B. 6λ C. $\frac{2\lambda}{3}$ D. $\frac{\lambda}{6}$
- Q. 43 A photon in motion has a mass
 A. $\frac{c}{hf}$ B. hf C. $\frac{h}{f}$ D. $\frac{hf}{c^2}$
- Q. 44 What will be the ratio of de-Broglie wavelengths of proton and alpha particle of same energy
 A. 2 : 1 B. 1 : 2
 C. 4 : 1 D. 1 : 4
- Q. 45 When light is incident on a metal surface the maximum kinetic energy of emitted electrons
 A. Vary with intensity of light B. Vary with frequency of light
 C. Vary with speed of light D. Vary irregularly



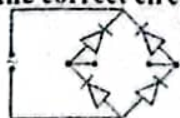
- Q. 46 Output of half wave rectifier is suitable only
 A. To operate radio
 B. Charging batteries
 C. For running a D.C motor
 D. All of these
- Q. 47 Two ideal diodes are connected to a battery as shown in the circuit. The current supplied by the battery is



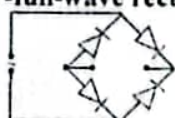
- A. 0.75 A
 B. Zero
 C. 0.25 A
 D. 0.5 A
- Q. 48 The width of depletion region of a junction
 A. Increase under forward bias
 B. Is independent of applied voltage
 C. Increase under reverse bias
 D. Remains same
- Q. 49 For full wave rectification using two diodes _____ is used.
 A. Center Tap Transformer
 B. Transistor
 C. Oscillator
 D. All of these
- Q. 50 Sources of red, blue, and yellow light each emit light with a power of 50mW. The source which emits more photons is
 A. Red
 B. Blue
 C. Yellow
 D. They all emit the same number per second.
- Q. 51 Of the following energies for photons, which is the least energy that could result in photoelectron production if the work function is 3.00 eV?
 A. 1.50 eV
 B. 2.90eV
 C. 3.50eV
 D. 6.01eV
- Q. 52 If X-rays are scattered from protons instead of electrons, the change in its wavelength for a given angle of scattering
 A. Increases
 B. Decreases
 C. Is unchanged
 D. Is one radian
- Q. 53 Absorption power of perfect black body is:
 A. Zero
 B. 1
 C. Infinity
 D. 5
- Q. 54 Compton shift in the wavelength of photon when it scattered at angle 60° is:
 A. $\frac{h}{m_0c}$
 B. $\frac{3h}{2m_0c}$
 C. $\frac{h}{2m_0c}$
 D. $\frac{4h}{3m_0c}$
- Q. 55 Two photos approach each other their relative velocity will be
 A. $2c$
 B. c
 C. Zero
 D. $c/2$
- Q. 56 A photocell is illuminated by a small bright source placed 1 m away. When the same source of light is placed 1/2 m away, the number of electrons emitted by photo cathode would
 A. Decrease by a factor of 4
 B. Decrease by a factor of 2
 C. Increase by a factor of 2
 D. Increase by a factor of 4
- Q. 57 Which diagram is the correct circuit for full-wave rectification?



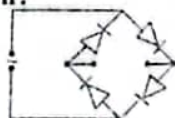
A.



B.



C.



D.

- Q. 58 The stopping potentials are V_1 and V_2 with incident lights of wavelengths λ_1 and λ_2 respectively. Then $V_1 - V_2 =$
 A. $\frac{hc}{e} \frac{\lambda_1 \lambda_2}{\lambda_1 - \lambda_2}$
 B. $\frac{hc}{e} \left(\frac{1}{\lambda_1} - \frac{1}{\lambda_2} \right)$
 C. $\frac{hc}{e} \left(\frac{1}{\lambda_1} - \frac{1}{\lambda_2} \right)$
 D. $\frac{hc}{e \lambda_1 \lambda_2} (\lambda_1 - \lambda_2)$
- Q. 59 The ratio of momenta of an electron and an α -particle which are accelerated from rest by a potential difference of 100 V is
 A. 1
 B. $\sqrt{\frac{2m_e}{m_\alpha}}$
 C. $\sqrt{\frac{m_e}{m_\alpha}}$
 D. $\sqrt{\frac{m_e}{2m_\alpha}}$
- Q. 60 Davisson and Germer indicates _____ in their experiment.
 A. Electron reflection
 B. Electron refraction
 C. Electron polarization
 D. Electron diffraction

$$A^{\circ} = 10^{-10}$$

$$K.E = \frac{3KT}{2} = \frac{h^2}{3mKT}$$

$$E = \frac{hc}{\lambda} = mc^2$$

$$\frac{h\nu}{\lambda c} = m$$

$$K.E_{max} = eV_0$$

$$P = \sqrt{2m eV}$$

$$P \propto \sqrt{mav}$$

$$i \propto I$$

$$\lambda' - \lambda = \frac{h}{m_0 c}$$

$$\frac{P_e}{P_0} = \frac{m_e}{m_0} \sqrt{\frac{2m_0 eV}{2m_0}}$$

$$K.E \propto f \propto \frac{1}{\lambda} \propto V_0$$

Class Test

$$\lambda \propto \frac{1}{\sqrt{m}}$$

$$hf = eV_0$$

$$E = hf$$

$$E = \frac{hc}{\lambda}$$

$$\lambda = \frac{h}{\sqrt{2m_0 eV_0}}$$

$$\lambda \propto \frac{1}{\sqrt{P}}$$

full wave 81-2%

$$E = \sigma T^4$$

$$\lambda \propto \frac{1}{\sqrt{m_0}}$$

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Roll No.

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1. Use Blue Ball Point Pen Only.
2. Please Fill In The Roll No. Correctly.
3. It Is Important That The Circle Is Filled Completely And Correctly As Shown In The Example Below, Otherwise

Correct Example: ✓

Incorrect Examples: X
 X
 X

$$P = \frac{W}{t}$$

$$n \propto \frac{1}{f}$$

SUBJECT: Physics CH/UNIT# 09

NAME: _____

R. NO. (IN WORDS): _____

CLASS: _____ SESSION: _____

SIGN: _____ DATE: _____

$$hf = mc^2$$

ENGLISH MDCAT

TEST-9 (A+ SERIES)

TOPICS:

PRONOUN & DETERMINER
VOCABULARY (126-150)

Directions:

Spot the Error:

- Q.1 I have always said a writer could watch things little while, and get a whole book out of it.
A. A. B. B. C. C. D. D.
- Q.2 I could have stayed all night with friend, but I thought I had enough gas to get home.
A. A. B. B. C. C. D. D.
- Q.3 He left school at a young age, and lived for a number of years as a peddler and beggar in USA and England.
A. A. B. B. C. C. D. D.
- Q.4 After I take the shower, I usually eat dinner and watch television.
A. A. B. B. C. C. D. D.
- Q.5 Our biology teacher told us that a orangutan is strong enough to lift up the side of a small car.
A. A. B. B. C. C. D. D.
- Q.6 He always carried a walking stick, a sort of scepter with decorative bands of the brass and gilt.
A. A. B. B. C. C. D. D.
- Q.7 A young woman's laugh fills the darkness of a space, joined-by a second woman's laughter until both abruptly stop.
A. A. B. B. C. C. D. D.
- Q.8 I am going to the store tomorrow to get a cat and dog so I can walk them every day.
A. A. B. B. C. C. D. D.
- Q.9 In a state of Nebraska, you are not allowed to drive a donkey-pulled cart on the road during the month of September.
A. A. B. B. C. C. D. D.
- Q.10 To think this is really 20th century, I must sit down a moment and collect myself.
A. A. B. B. C. C. D. D.
- Q.11 My father started to move slowly up the path again, supporting him with his cane.
A. A. B. B. C. C. D. D.
- Q.12 I want you to marry someone hard-working, a man whom will make his mark in the world.
A. A. B. B. C. C. D. D.
- Q.13 When the question arose of choosing an athlete to fill the newly-made post, who could they choose?
A. A. B. B. C. C. D. D.
- Q.14 It was a small but very comfortable and sunny room that Mrs. Wickett let to himself.
A. A. B. B. C. C. D. D.
- Q.15 His face has a slightly rakish quality to him, his eyes gleaming with charm, and cunning.
A. A. B. B. C. C. D. D.
- Q.16 It was him who came running into the class room with the news.
A. A. B. B. C. C. D. D.
- Q.17 I stopped here twenty-four years ago because I decided I wasn't looking for something anymore.
A. A. B. B. C. C. D. D.
- Q.18 Being ascetic, he starts loving God, Who blesses himself with great love.
A. A. B. B. C. C. D. D.
- Q.19 The flying object who has given rise to so much irresponsible conjecture is nothing more than a meteor passing through the earth's orbit.
A. A. B. B. C. C. D. D.
- Q.20 How am I ever going to teach them the principles of truth with an influence like you to fight against?
A. A. B. B. C. C. D. D.

Directions:

Choose the correct options

Q.21

- A. Open the oyster, so Clay will see for him that there is no pearl in it.
B. Open the oyster, so Clay will see for itself that there is no pearl in it.
C. Open the oyster, so Clay will see for himself that there is no pearl in them.
D. Open the oyster, so Clay will see for himself that there is no pearl in it.



- Q.22 A. Be good to I, because I sold it for you. B. Be good to me, because I sold it for himself.
C. Be good to me, because she sold it for himself. D. Be good to me, because I sold it for you.
- Q.23 A. I and your mother, when she was nineteen and I was twenty-two cleared this mountain slope together.
B. Your mother and I, when I was twenty-two and she was nineteen cleared this mountain slope together.
C. I and your mother, when I was twenty-two and she was nineteen cleared this mountain slope together.
D. Your mother and I, when she was nineteen and I was twenty-two cleared this mountain slope together.
- Q.24 A. He got married again a year later, which surprised everybody.
B. He got married again a year later, what surprised everybody.
C. He got married again a year later, that surprised everybody.
D. He got married again a year later, whom surprised everybody.
- Q.25 A. He has written a book whose name I have forgotten.
B. He has written a book which name I have forgotten.
C. He has written a book that name I have forgotten.
D. He has written a book whom name I have forgotten.

Directions:

Fill in the Blanks

- Q.26 They found a flimsy rocket frame rusting in _____ empty shop.
A. a B. the C. an D. zero article
- Q.27 Have you ever seen _____ hopper swarm on the march?
A. a B. the C. an D. zero article
- Q.28 Her father is _____ SP in the Punjab Police.
A. a B. the C. an D. zero article
- Q.29 This new legislation will help _____ unemployed.
A. a B. the C. an D. zero article
- Q.30 As he came to _____ first he looked up for a moment with a slightly sad expression.
A. a B. the C. an D. zero article

Directions:

Choose the correct SYNONYM:

- Q.31 **PLOPPED**
A. Plumped B. Levitated C. Swelled D. Sprouted
- Q.32 **PRESUME**
A. Substantiate B. Deduce C. Corroborate D. induce
- Q.33 **PRE-CAUTIONS**
A. Provocation B. Laxness C. Wariness D. Delinquency
- Q.34 **PANTING**
A. Strangling B. Breathly C. Mouthful D. Respiring
- Q.35 **PERSISTED**
A. Yielded B. Subsided C. Suspended D. Subsisted

Directions:

Choose the correct ANTONYM

- Q.36 **PURCHASE**
A. Curtail B. Deal Out C. Bargain D. Dispense
- Q.37 **PRIME**
A. Core B. Vintage C. Tributary D. Attributive

Directions:

Choose the correct SPELLING

- Q.38 A. Paraphernalia B. Praphernalia C. Parafernalialia D. Parafarnalia
- Q.39 Repair leaky faucets _____; a leaky faucet wastes gallons of water in a short period.
A. Elaborately B. Practically C. Precisely D. Promptly
- Q.40 Water buffalo and goats grazed _____ alongside the track; elegant white cranes glided serenely across the paddy fields.
A. Passionately B. Gingerly C. Placidly D. Occasionally

A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
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1. Use Blue Ball Point Pen Only.
2. Please Fill In The Roll No. Correctly.
3. It Is Important That The Circle Is Filled Completely And Correctly As Shown In The Example Below, Otherwise

Correct Example: ✓

Incorrect Examples: X
 X
 X

SUBJECT: English CH/UNIT# 09

NAME: _____

R. NO. (IN WORDS): _____

CLASS: _____ SESSION: _____

SIGN: _____ DATE: _____



LOGICAL REASONING MDCAT

UNIT-5 (A+SERIES)

TOPIC:

✓ CAUSE AND EFFECT

Q.1 Statements:

- I. English-medium schools and institutes teaching spoken English, are mushrooming even in small towns.
- II. Today, more than ever before, there is a craving among people to learn and speak English.

- A. Statement I is the cause and statement II is its effect
- B. Statement II is the cause and statement I is its effect
- C. Both the statements I and II are independent causes
- D. Both the statements I and II are effects of independent causes
- E. Both the statements I and II are effects of some common cause

Q.2 Statements:

- I. The shortage of employable talent has become severe.
- II. There are more job opportunities than there are qualified professionals.

- A. Statement I is the cause and statement II is its effect
- B. Statement II is the cause and statement I is its effect
- C. Both the statements I and II are independent causes
- D. Both the statements I and II are effects of independent causes
- E. Both the statements I and II are effects of some common cause

Q.3 Statements:

- I. Company X is opening an office in city Y for marketing the company's products.
- II. Company X has chalked out an expansion plan, involving raising production capacity at its existing plants.

- A. Statement I is the cause and statement II is its effect
- B. Statement II is the cause and statement I is its effect
- C. Both the statements I and II are independent causes
- D. Both the statements I and II are effects of independent causes
- E. Both the statements I and II are effects of some common cause

Q.4 Statements:

- I. Senior students ragged junior students.
- II. Senior students were suspended.

- A. Statement I is the cause and statement II is its effect
- B. Statement II is the cause and statement I is its effect
- C. Both the statements I and II are independent causes
- D. Both the statements I and II are effects of independent causes
- E. Both the statements I and II are effects of some common cause

Q.5 Statements:

- I. Police resorted to lathi-charge to disperse the unlawful gathering of large number of people.
- II. The citizens' forum called a general strike in protest against the police atrocities.

- A. Statement I is the cause and statement II is its effect
- B. Statement II is the cause and statement I is its effect
- C. Both the statements I and II are independent causes
- D. Both the statements I and II are effects of independent causes
- E. Both the statements I and II are effects of some common cause



Q.6 Statements:

- I. A disease called conjunctivitis prevailed in the Province of Panjab where one in every five people was effected.**
- II. A large number of people from Sindh migrated to Punjab.**
- A. Statement I is the cause and statement II is its effect
B. Statement II is the cause and statement I is its effect
C. Both the statements I and II are independent causes
D. Both the statements I and II are effects of independent causes
E. Both the statements I and II are effects of some common cause

Q.7 Statements:

- I. The single child family seems to be fast becoming the norm in the present day urban set up.**
- II. People think that parenting is easier when they have only one child.**
- A. Statement I is the cause and statement II is its effect
B. Statement II is the cause and statement I is its effect
C. Both the statements I and II are independent causes
D. Both the statements I and II are effects of independent causes
E. Both the statements I and II are effects of some common cause

Q.8 Statements:

- I. Now-a-days nefarious activities like bomb blasts and kidnappings are on the increase.**
- II. Nefarious activities are done deliberately to create panic among the people.**
- A. Statement I is the cause and statement II is its effect
B. Statement II is the cause and statement I is its effect
C. Both the statements I and II are independent causes
D. Both the statements I and II are effects of independent causes
E. Both the statements I and II are effects of some common cause

Q.9 Statements:

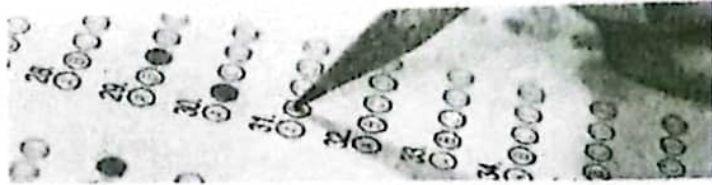
- I. Pakistan cricket team won the match.**
- II. The bowlers and the batsman of the Pakistani cricket team performed badly.**
- A. Statement I is the cause and statement II is its effect
B. Statement II is the cause and statement I is its effect
C. Both the statements I and II are independent causes
D. Both the statements I and II are effects of independent causes
E. Both the statements I and II are effects of some common cause

Q.10 Statements:

- I. An earthquake of magnitude 8.2 rocked the islands of Maldives.**
- II. A devastating Tsunami struck the coastal belt of Maldives.**
- A. Statement I is the cause and statement II is its effect
B. Statement II is the cause and statement I is its effect
C. Both the statements I and II are independent causes
D. Both the statements I and II are effects of independent causes
E. Both the statements I and II are effects of some common cause

Q.11 Statements:

- I. The government has decided to take up the irrigation projects on war footing and complete all of them in the next two years.**
- II. Scientists predicted very low rainfall for the next seven years.**
- A. Statement I is the cause and statement II is its effect
B. Statement II is the cause and statement I is its effect
C. Both the statements I and II are independent causes
D. Both the statements I and II are effects of independent causes
E. Both the statements I and II are effects of some common cause



Q.12 Statements:

- I. A large number people prefer platinum ornaments to gold ornaments.**
 - II. The difference in the prices of gold and platinum ornament became very narrow and wearing platinum ornaments has become a fashion now?**
- A. Statement I is the cause and statement II is its effect
 - B. Statement II is the cause and statement I is its effect
 - C. Both the statements I and II are independent causes
 - D. Both the statements I and II are effects of independent causes
 - E. Both the statements I and II are effects of some common cause

Q.13 Statements:

- I. Majority of people residing in the locality have decided to protest against the municipality authority's decision to allow construction of a shopping mall in the locality.**
 - II. Many shopping malls have been opened all over the city in the recent time.**
- A. Statement I is the cause and statement II is its effect
 - B. Statement II is the cause and statement I is its effect
 - C. Both the statements I and II are independent causes
 - D. Both the statements I and II are effects of independent causes
 - E. Both the statements I and II are effects of some common cause

Q.14 Statements:

- I. The school authority has decided to increase tuition fee by 30 percent from the next academic year.**
 - II. The government has urged the local public to enroll all their children to schools in the area.**
- A. Statement I is the cause and statement II is its effect
 - B. Statement II is the cause and statement I is its effect
 - C. Both the statements I and II are independent causes
 - D. Both the statements I and II are effects of independent causes
 - E. Both the statements I and II are effects of some common cause

Q.15 Statements:

- I. A recent tiger census in the tiger reserve in the state has reported significant reduction over the last census.**
 - II. The government has initiated an enquiry to ascertain the facts relating to tiger population in the state.**
- A. Statement I is the cause and statement II is its effect
 - B. Statement II is the cause and statement I is its effect
 - C. Both the statements I and II are independent causes
 - D. Both the statements I and II are effects of independent causes
 - E. Both the statements I and II are effects of some common cause

Q.16 Statements:

- I. The centre has suspended all tourist visas till April 15 in a bid to contain spread of novel coronavirus**
 - II. PIA announces temporary suspension of its flight services to Rome, Milan & Seoul.**
- A. Statement I is the caused and statement II is its effect
 - B. Statement II is the cause and statement I is its effect
 - C. Both the statements I and II are independent causes
 - D. Both the statements I and II are effects of independent causes
 - E. Both the statements I and II are effects of some common causes



Q.17 Statements:

Some books are pens. No pen is pencil.

Conclusions:

- I. Some pens are books.
- II. Some pencils are books.
- III. Some books are not pencils.
- IV. All pencils are books.

A. Only I follows

B. Only II and III follow

C. Only I and III follow

D. Only I and II follow

Q.18 Statements:

All the tulips in Zoe's garden are white.

All the pansies in Zoe's garden are yellow.

All the flowers in Zoe's garden are either white or yellow

If the first two statements are true, the third statement is

A. True

B. False

C. Uncertain

D. None of these

Q.19 Statement:

Nuclear power cannot make a country secure.

Courses of Action

I. We should stop further increasing our nuclear power.

II. We should destroy out nuclear capability.

III. We should focus on improving diplomatic relations.

A. Only I follows

B. Only II follows

C. Only III follows

D. I and II follow

Q.20 Identify the wrong number in the series: 69, 55, 26, 13, 5

A. 5

B. 13

C. 26

D. 55