

University of Health Sciences, Lahore

Total MCQs:220



Max. Marks:1100

ENTRANCE TEST 2017 (Reconduct) For F.Sc and Non-F.Sc Students Time Allowed: 150 Minutes

Instructions:

- Read the instructions on answer sheet carefully.
- Choose the **Single Best Answer** for each question.
- Candidates are strictly prohibited from giving any identification mark except Roll No. & Signature in the specified columns only.

COMPULSORY QUESTION FOR IDENTIFICATION:

Q.ID What is the colour of your question paper?

- A) White C) Pink
B) Blue D) Green

**Ans: Color of your Question Paper is Blue.
Fill the Circle corresponding to letter 'B'
against 'ID' in your MCQ response form
(Exactly as shown in the diagram).**

— ID
— 1
— 2
— 3
— 4

	A	B	C	D
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1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

BIOLOGY

Q.1 Which general formula satisfies for monosaccharides?

- A) $C_n(H_2O)_{2n}$ C) $(CH_2O)_n$
B) $C_{2n}(H_2O)_n$ D) Both A & C

Q.2 The type of carbohydrate which has high molecular weight and is sparingly soluble in water

- A) Monosaccharides C) Polysaccharides
B) Disaccharides D) Maltose

Q.3 Among the following, which acid is an unsaturated acid:

- A) Butyric Acid C) Palmitic Acid
B) Oleic Acid D) Both B & C

Q.4 Back bone of amino acids comprises of:

- A) R group C) Peptide bond
B) Amino group D) Carboxylic group

Q.5 The sequence of amino acids is major factor in which type of protein classification:

- A) Primary Proteins C) Tertiary Proteins
B) Secondary Proteins D) both A & C

Q.6 What is the subunit of DNA:

- A) Phosphoric Acid
- B) Base
- C) Nucleotide
- D) Sugar

Q.7 The type of bonding in α -Helix:

- A) 1,2 Glycosidic linkage
- B) Ionic bond
- C) Disulfide bond
- D) Hydrogen bond

Q.8 Enzymes has what effect on the end-product:

- A) They altered the product
- B) The nature of product is completely changed
- C) No effect
- D) End product is not obtained

Q.9 Lock and Key model was explained by:

- A) Koshland
- B) Emil Fischer
- C) De Duve
- D) Drake

Q.10 Name the inhibitors which can be neutralized by adding more substrate:

- A) Competitive inhibitors
- B) Permanent Inhibitors
- C) Non-competitive inhibitors
- D) Irreversible inhibitors

Q.11 What is the percentage of lipids in chemical composition of plasma membrane?

- A) 60-80%
- B) 20-40%
- C) 40-80%
- D) 20-60%

Q.12 A complex network of channels extending from plasma membrane to nuclear membrane:

- A) Mitochondria
- B) Lysosomes
- C) Endoplasmic reticulum
- D) Golgi apparatus

Q.13 Group of ribosomes attached with mRNA is called:

- A) Monosome
- B) Polysome
- C) Polypeptide
- D) Lysosome

Q.14 Which organelle has two Subunits:

- A) Endoplasmic reticulum
- B) Ribosomes
- C) Nucleus
- D) Plastids

Q.15 Ribosomes in prokaryotes sediments at:

- A) 40S
- B) 70S
- C) 80S
- D) 40S + 60S = 80S

Q.16 Identify the common organelle in plant and animals:

- A) Plastids
- B) Chromoplasts
- C) Mitochondria
- D) Leucoplasts

Q.17 Which function is associated with lysosomes:

- A) Oxidative enzymes production
- B) Conversion of fatty acids to carbohydrates
- C) Phagocytosis
- D) both B & C

Q.18 Engulfing of solid particle is termed as:

- A) Engulfing
- B) Pinocytosis
- C) Phagocytosis
- D) None of these

Q.19 Site for the synthesis of ribosomal RNA:

- A) Nucleus
- B) Cytosol
- C) Nucleolus
- D) Endoplasmic Reticulum

Q.20 Among the following which organelle has an outer membrane in it:

- A) Cell membrane
- B) Mitochondria
- C) Lysosome
- D) Vacuole

Q.21 Size of virus ranges in:

- A) 20 to 250 nm
- B) 25 to 250 nm
- C) 25 to 300 nm
- D) 20 to 300 nm

Q.22 Reverse transcriptase is the function of:

- A) Pox virus
- B) HIV
- C) Paramyxovirus
- D) Tobacco mosaic virus

Q.23 When cocci form long chain of cells, the arrangement is termed as:

- A) Staphylococcus
- B) Sarcina
- C) Streptococci
- D) Cocci

Q.24 Which type of bacteria has less amount of lipids in them:

- A) Positive bacteria
- B) Negative bacteria
- C) Gram negative bacteria
- D) Gram positive bacteria

Q.25 Which of the following characteristics belong to mycorrhizae:

- A) Fungi and algae
- B) Algae and root
- C) Fungi and lichen
- D) Fungi and root

Q.26 The site where *Isca* is present:

- A) Intestine
- B) Caecum
- C) Stomach
- D) Rectum

Q.27 The intermediate host for *Taenia* (tape worm) is:

- A) Fish
- B) Pig
- C) Anemone
- D) Coral

Q.28 Which one is correctly matched with tail of chlorophyll:

- A) Hydrophilic
- B) Hydrophobic
- C) Light absorbing
- D) Porphyrin ring

Q.29 Graph which shows effectiveness of absorbed light is called:

- A) Emission Spectrum
- B) Effective Spectrum
- C) Absorption Spectrum
- D) Action Spectrum

Q.30 Which light is mostly absorbed by chlorophyll a:

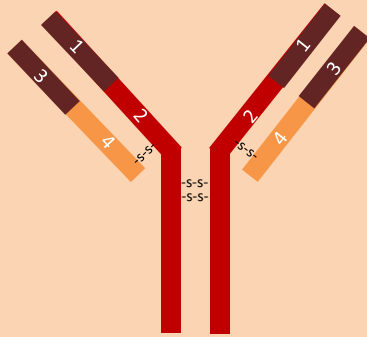
- A) Violet light
- B) Green light
- C) Red light
- D) Yellow light

Q.31 The term glycolysis refers to the conversions of:

- A) Pyruvate to Glucose
- B) Glucose to Pyruvate
- C) Citric Acid to CO₂
- D) Both A & B

- Q.32** In Citric Acid Cycle Acetyl CoA combines with _____.:
- A) Glucose
B) CO₂
C) Rubisco
D) Oxaloacetate
- Q.33** Which one is CO₂ acceptor:
- A) Water
B) Chlorophyll
C) CO₂
D) Rubisco
- Q.34** Name the structure from which appendix is formed:
- A) Duodenum
B) Caecum
C) Kidney
D) Rectum
- Q.35** Identify the cells which secrete HCl:
- A) Parietal cells
B) Oxyntic cells
C) Zymogen cells
D) Both A and B
- Q.36** The site where all absorption takes place:
- A) Large intestine
B) Small Intestine
C) Ileum
D) Duodenum
- Q.37** In oral cavity, main function of sodium bicarbonate is:
- A) To act as antiseptic
B) To stabilize the pH of food
C) To act as lubricant
D) To make a slimy food
- Q.38** The site of gaseous exchange in humans is _____:
- A) Bronchioles
B) Trachea
C) Alveolar sacs
D) Alveoli
- Q.39** The disease in which there is a breakdown of thin walls of alveoli:
- A) Asthma
B) Emphysema
C) Tuberculosis
D) Cancer
- Q.40** The amount of CO₂ exhaled from lungs during expiration:
- A) 4%
B) 0.04
C) 0.004
D) 0.0045%
- Q.41** Gaseous exchange in animals takes place through:
- A) Active transport
B) Osmosis
C) Diffusion
D) Both A & C
- Q.42** Among the following, identify the agranulocytes:
- A) Neutrophil
B) Basophils
C) Monocytes
D) Both A & B
- Q.43** Bicuspid valve is present between:
- A) left atrium and left ventricle
B) right atrium and left ventricle
C) left atrium and right ventricle
D) right ventricle and right ventricle
- Q.44** A single cardiac cycle lasts about:
- A) 0.008 sec
B) 0.8 sec
C) 8 sec
D) 0.088 sec

Q.45 Following the diagram below, identify the portion of antibodies in which variable amino acids are present:



- A) 2, 2
B) 1, 2
C) 1, 3
D) 4, 3

Q.46 The induction of immunity by artificially introducing antigens refers:

- A) Passive immunity
B) Active immunity
C) Artificial active immunity
D) Passive active immunity

Q.47 An antibiotic molecule has total number of chains:

- A) 1
B) 2
C) 3
D) 4

Q.48 In case of snake bite, venom passive immunity is produced by antitoxins, so the serum is called as:

- A) Antivenom serum
B) Antiserum
C) Passive immunity serum
D) Anti snake serum

Q.49 The mechanism of regulation, generally between organisms and its environment, of solute and the gain and loss of water is termed as:

- A) Homeostasis
B) Osmoregulation
C) Thermoregulation
D) Excretion

Q.50 Among the following animals which ones are endotherm:

- A) Reptiles
B) Amphibians
C) Fishes
D) Birds

Q.51 Blood leaves the Bowman's capsule by:

- A) Afferent arteriole
B) Afferent capillaries
C) Efferent arteriole
D) Efferent capillaries

Q.52 End-stage renal failure is called:

- A) Kidney failure stage
B) Hyperoxaluria
C) Uremia
D) Hypercalcemia

Q.53 Which structure receives about 20% of total blood and has a weight less than 1% of the total body:

- A) Heart
B) Lungs
C) Kidney
D) Liver

Q.54 The structure which joins a muscle to a bone:

- A) Tendon
B) Ligament
C) Clavicle
D) Sternum

Q.55 Clavicle is present in:

- A) Back bone
- B) Skull
- C) Pelvic girdle
- D) Pectoral girdle

Q.56 Appendicular skeleton consists of:

- A) Pelvic girdle and appendages
- A) Pectoral girdle and appendages
- C) Both A & B
- D) Pectoral girdle and appendages ONLY

Q.57 Name of second vertebra in neck region:

- A) Atlas
- B) Axis
- C) Neck vertebra
- D) Floating rib

Q.58 Overlapping of thick filament doesn't occur in:

- A) I band
- B) A band
- C) M band
- D) Z band

Q.59 Name the organs which produce response:

- A) Inhibitors
- B) Receptors
- C) Neurons
- D) Effectors

Q.60 A band of axons between two hemispheres is termed as:

- A) Cerebrum
- B) Hemisphere band
- C) Corpus luteum
- D) Corpus Callosum

Q.61 Reflexes of eyes are received in:

- A) Hypothalamus
- B) Forebrain
- C) Hindbrain
- D) Midbrain

Q.62 Spinal cord is protected by how many layers of meninges:

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

Q.63 Which hormone in human body is antagonistic to insulin:

- A) Thyroxin
- B) Cortisol
- C) Calcitonin
- D) None of these

Q.64 The disease which is caused by deficiency of thyroxin:

- A) Grave's disease
- B) Goiter
- C) Cretinism
- D) Dwarfism

Q.65 Among the following, which hormone is interstitial cell stimulating hormone:

- A) FSH
- B) GH
- C) Luteinising hormone (LH)
- D) Prolactin

Q.66 Failure to produce insulin leads to a condition called:

- A) Diabetes insipidus
- B) Cretinism
- C) Diabetes mellitus
- D) Rickets

Q.67 Among the following which hormone is responsible for the suppression of ovulation:

- A) LH
- B) Progesterone
- C) FSH
- D) Oestrogen

- Q.68 The hormone which causes ovulation:**
A) Progesterone B) LH
B) FSH D) Oestrogen
- Q.69 Which structure is not present in male reproductive system:**
A) Urethra C) Vas deferens
B) Seminiferous tubules D) Cervix
- Q.70 In females, meiosis occurs during which stage:**
A) Spermatogenesis C) Ovulation
B) Gametogenesis D) None of these
- Q.71 Among the following, which one is commonly used as restriction enzyme:**
A) pBr 101 C) EcoR3
B) EcoR1 D) Both A & C
- Q.72 Polymerase synthesize DNA from _____:**
A) RNA C) Template RNA
B) Eco R1 D) Template DNA
- Q.73 DNA polymerase is an temperature insensitive enzyme extracted from:**
A) *Fishelsoni* C) *E.coli*
B) *Thermus aquaticus* D) both A and B
- Q.74 Method of producing thousands of seedlings is _____:**
A) PCR C) Micropropagation
B) Tissue Culture D) Macropropagation
- Q.75 Gene can be made from mRNA using _____:**
A) PCR C) Eco R1
B) pBr 103 D) Reverse transcriptase
- Q.76 The change in frequency of alleles at a locus that occurs by chance is termed as:**
A) Migration C) Mutation
B) Genetic drift D) Non-random mating
- Q.77 Organs that are functionally different but structurally alike are termed as:**
A) Vestigial organs C) Homologous organs
B) Comparative embryology organs D) None of these
- Q.78 The idea of inheritance of acquired characteristics was proposed by:**
A) Darwin C) Mendel
B) Lamarck D) Wallace
- Q.79 Succession in previously ecosystem is commonly known as:**
A) Primary succession C) Xeric succession
B) Secondary succession D) Ancestral succession
- Q.80 The reason why CO is highly stable is because it's _____.**
A) Highly stable C) Highly reactive
B) Covalent molecule D) Carbon compound

- Q.81** The process of DNA replication in which each strand acts as a template for new double helix, composed of one parental strand and one newly polymerized strand refers:
- A) PCR
B) Semi conservative model
C) conservative model
D) both A and B
- Q.82** The process in which an RNA copy of the DNA sequence encoding the gene is produced:
- A) Translation
B) Transcription
C) Polymerization
D) Genesis
- Q.83** DNA polymerase III adds nucleotides to DNA strand, replication always proceeds from:
- A) $3' \rightarrow 5'$
B) $5' \rightarrow 3'$
C) Sometimes A and sometimes B
D) none of these
- Q.84** XO-XX is associated with:
- A) Fishes
B) Man
C) Drosophila
D) Grasshopper
- Q.85** When an effect caused by a gene or gene pair at one locus interferes with or hides the effect caused by another gene or gene pair at another locus, the phenomena is called:
- A) Bombay phenotype
B) Codominance
C) Epistasis
D) Pleiotropy
- Q.86** The phenotype of heterozygote is distinct from those of the two homozygotes, not an intermediate expression, this is termed as:
- A) Dominance
B) Complete
C) Incomplete dominance
D) Codominance
- Q.87** _____:
- A) _____
B) _____
C) _____
D) _____
- Q.88** Human female differs from human male in having:
- A) Y chromosome
B) X chromosome
C) XY chromosomes
D) XX chromosomes

Answers Panorama

1	C	31	B	61	D
2	C	32	D	62	B
3	B	33	D	63	B
4	C	34	B	64	C
5	A	35	D	65	C
6	C	36	C	66	C
7	D	37	B	67	B
8	C	38	D	68	B
9	B	39	B	69	D
10	A	40	A	70	B
11	B	41	C	71	B
12	C	42	C	72	D
13	B	43	A	73	B
14	B	44	B	74	A
15	B	45	C	75	D
16	C	46	C	76	B
17	C	47	D	77	C
18	C	48	A	78	B
19	C	49	B	79	B
20	B	50	C	80	A
21	A	51	C	81	B
22	B	52	C	82	B
23	C	53	C	83	B
24	D	54	A	84	D
25	D	55	D	85	C
26	A	56	C	86	D
27	B	57	B	87	XX
28	B	58	B	88	D
29	D	59	D	XX	XX
30	C	60	D	XX	XX

Sorted Out & Compiled by:

FRAZ MALICK

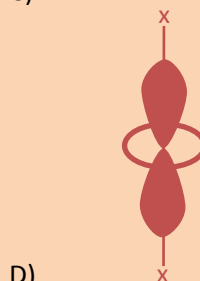
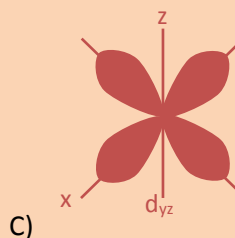
Group Courtesy:

MDCAT PANORAMA

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CHEMISTRY

- Q.89** Determine the number of moles of O_2 in 10.6g of $NaCO_3$:
- A) 0.4 moles
B) 0.3 moles
C) 0.2 moles
D) None of these
- Q.90** Calculate the grams of H_2O formed when 8 g of CH_4 burns in excess of oxygen:
- A) 21 grams
B) 19 grams
C) 18 grams
D) 15 grams
- Q.91** Choose the correct option regarding number of particles associated with one mole of a substance:
- A) 6.03×10^{23}
B) 6.01×10^{-19}
C) 6.02×10^{-23}
D) 6.02×10^{23}
- Q.92** A compound has an empirical formula CH_2Cl , and molecular formula mass as $99g\text{mol}^{-1}$, identify the compound:
- A) C_2H_4Cl
B) C_4H_8Cl
C) $C_2H_4Cl_2$
D) $C_2H_3Cl_3$
- Q.93** Identify the value of R at STP:
- A) $8.314 \text{ atm dm}^{-3} \text{ mol}^{-1}$
B) $0.0821 \text{ cal K}^{-1} \text{ mol}^{-1}$
C) $0.0821 \text{ atm dm}^3 \text{ K}^{-1} \text{ mol}^{-1}$
D) $8.314 \text{ cal K}^{-1} \text{ mol}^{-1}$
- Q.94** In the equation $\left(P + \frac{n^2 a}{V^2}\right)(V - nb) = RT$, 'b' represents the _____:
- A) Excluded volume
B) Excluded pressure
C) Actual volume
D) Excluded volume per mole
- Q.95** What is the reason that ice at 0°C occupies more volume than water:
- A) Empty spaces
B) Ionic bond
C) Intermolecular forces
D) Debye forces
- Q.96** Identify the correct option associated with the shape of p-orbital:



- Q.97** pi-bond is formed by sideways overlap of _____
- A) s-orbitals
C) d-orbitals

- B) p-orbitals
D) None of these
- Q.98 What is the exact value of angle in BF_3 :**
A) 90°
B) 119.5°
C) 104.5°
D) 120°
- Q.99 Determine the value of Enthalpy of formation of NH_4Cl :**
A) -788 kJmol^{-1}
B) $-314.55 \text{ kJmol}^{-1}$
C) -692 kJmol^{-1}
D) None of these
- Q.100 Enthalpy is measured at _____:**
A) 300 K and 2 atm
B) 300 K and 1 atm
C) 298 K and 1 atm
D) 295 K and 1 atm
- Q.101 During space flights, astronauts obtained water from _____:**
A) Nickel cadmium cells
B) Fuel cells
C) Lead accumulator
D) Alkaline battery
- Q.102 For the purification of copper, impure copper is made the _____:**
A) Cathode
B) Anode
C) Solution
D) Both A & B
- Q.103 $\text{Ca}(\text{OH})_2$ is sparingly soluble having solubility value 6.5×10^{-6} . What'll be its solubility:**
A) 2.75×10^{-2}
B) 2.75×10^2
C) 1.17×10^{-2}
D) 3.63×10^3
- Q.104 Unit of K in first order Reaction is:**
A) s^{-1}
B) $\text{moles dm}^{-3} \text{s}^{-1}$
C) moles dm^{-3}
D) $\text{mol}^{-1} \text{dm}^3$
- Q.105 Rate of first order reaction depends on _____:**
A) Concentration of one reactant
B) Concentration of two reactants
C) Concentration of three reactants
D) Independent of the initial concentration
- Q.106 Among the following, which contains same no. of electrons & protons but different no. of neutrons:**
A) Isobars
B) Isotopes
C) Isotones
D) None of these
- Q.107 Melting point of Na & Mg decreases down the group due to _____:**
A) Strong electronegativity
B) Strong attractive forces
C) Increment in size
D) High Ionization energy
- Q.108 Ionic radius decreases along the period due to:**
A) Addition of a new shell
B) Increase in nuclear charge
C) High ionization energy
D) Decrease in nuclear charge
- Q.109 Among the following, which one is least reactive metal:**
A) Mg
B) Ca
C) Na
D) Be
- Q.110 Identify the element that has maximum oxidation states:**
A) Zinc
C) Vanadium

- B) Chromium
D) Manganese
- Q.111** How many ligands $K_4[Fe(CN)_6]$ contains:
A) 4
B) 7
C) 6
D) 5
- Q.112** To avoid the oxidation of filaments which element is used in electric bulbs:
A) Krypton
B) Argon
C) Helium
D) Neon
- Q.113** Among the following, which is a catalyst in contact process:
A) V_2O_5
B) H_2SO_4
C) NH_4Cl
D) $NaOH$
- Q.114** In contact process, optimum temperature lies between _____:
A) 200-300°C
B) 300-400°C
C) 400-500°C
D) 300-500°C
- Q.115** Nitrogen is required by plants for the _____:
A) Formation of starch and sugar
B) Development of roots and leaves
C) Stimulation of early growth
D) Formation of fruit
- Q.116** Name the compound, which shows geometric isomerism:
A) 1-bromo-2-chloropropene
B) 2-pentene
C) 2,3-dimethylpropene
D) both A & B
- Q.117** Cyclobutane structure is categorized under:
A) Aromatic compounds
B) Alicyclic compounds
C) Aliphatic compounds
D) Heterocyclic compounds
- Q.118** What should be the temperature and pressure respectively for catalytic cracking:
A) 500°C, 2 atm
B) 900°C, 2 atm
C) 500°C, 4 atm
D) 900°C, 4 atm
- Q.119** At 25°C with phenol 2-4-Dinitrophenol is formed by the reaction of:
A) $(HNO_3 + H_2SO_4)$ with benzene
B) $(HNO_3 + H_2SO_4)$ with phenol
C) $NaOH$ with Benzene sulphonic acid
D) Sodium phenoxide with HCl
- Q.120** For halogenation of benzene, which reagent is used:
A) H_2SO_4
B) $AlCl_3$
C) HNO_3
D) HCl
- Q.121** Among the following, which one has electron withdrawing effect:
A) $-NH_2$
B) $-N(CH_3)_2$
C) $-CHO$
D) $-I$
- Q.122** Catalytic Oxidation of alkanes results in the formation of _____:
A) Carboxylic acid
B) Aldehyde
C) Ketone
D) Alcohol
- Q.123** Which is an intermediate compound in S_N1 :
A) Ethoxide ion
B) Alkyl halide
C) Alkene
D) Carbocation

Q.124 Among the alkyl halides, which always follows S_N2 mechanism:

- A) Primary alkyl halides
B) Secondary alkyl halides
C) Tertiary alkyl halide
D) Both B & C

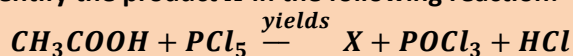
Q.125 Among the following, which one is a nucleophile:

- A) H^+
B) OH^-
C) Ca^{2+}
D) None of these

Q.126 In elimination reaction, _____ is used:

- A) Acidic $K_2Cr_2O_7$
B) $CuCl$
C) Acidic $NaOH$
D) Alcoholic KOH

Q.127 Identify the product X in the following reaction:



- A) CH_3COCl
B) CH_3COCl_2
C) $CH_3COCH_2Cl_2$
D) CH_2COCl_2

Q.128 Reaction of alcohol with hydrogen chloride yields _____:

- A) Ketone
B) Carboxylic acid
C) Aldehyde
D) Ester

Q.129 The acidity of Phenol is due to its _____:

- A) Nature of Benzene
B) Double bond in benzene ring
C) Nature of phenoxide
D) Hydroxal group

Q.130 Sodium phenoxide on treating with hydrochloric acids yields:

- A) Benzene
B) Benzoic acid
C) Phenol
D) Benzaldehyde

Q.131 Which reagent is responsible for the conversion of ketone to secondary alcohol:

- A) $NaAlH_4$
B) $NaBH_4$
C) Al
D) Red P

Q.132 Both aldehyde and ketones give _____:

- A) Tollen's Test
B) 2,4-DNPH test
C) Benedict's solution test
D) Sodium nitroprusside test

Q.133 To distinguish aldehyde from ketone which solution is used:

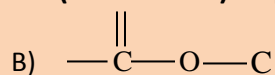
- A) Alkaline solution
B) Fehling's solution
C) A solution containing $K_2Cr_2O_7$
D) A solution containing acid only

Q.134 Identify the compound, which give iodoform test:

- A) Methanol
B) Methyl ketone
C) 3-Hexanol
D) Propionaldehyde

Q.135 Which one is a functional group of carboxylic acid:

- A) $\begin{array}{c} O \\ || \\ -C-OH \\ | \\ O \end{array}$
C) $\begin{array}{c} O \\ || \\ -C- \end{array}$



D) None of these

Q.136 Final product of hydrolysis of nitrile yield _____:

A) Ketone

C) Alcohol

B) Aldehyde

D) Carboxylic acid

Q.137 During esterification, the bond from alcohol that breaks is between _____:

A) Carbon and oxygen

C) Carbon and carbon

B) Oxygen and hydrogen

D) None of these

Q.138 2-propanate on oxidation gives _____:

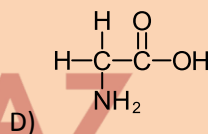
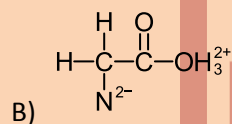
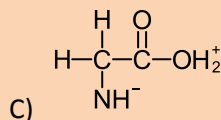
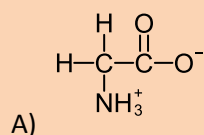
A) Aldehyde

C) Carboxylic Acid

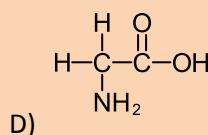
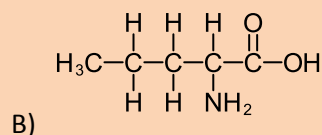
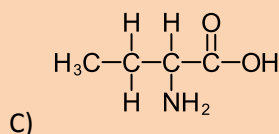
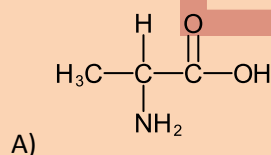
B) Ketone

D) Alcohol

Q.139 Among the following structure, Identify the one, which represents the structure of Zwitter ion:



Q.140 Among the following, choose the correct option regarding the structure of Alanine:



Q.141 Identify the monomers of Polyvinyl chloride:

A) Vinyl acetate

C) Styrene

B) Butyl maleate

D) Vinyl chloride

Q.142 Among the following, which compound is formed by addition polymerization:

A) Polystyrene

C) Nylon

B) Polyester

D) Both A & B

Q.143 Phosphoprotein comes under the type of proteins:

A) Simple protein

C) Derived protein

B) Conjugated Protein

D) Both B & C

Q.144 Which agent is responsible for the acid rain _____:

- A) O_2 C) NO_2
B) $Ca(SO_4)$ D) HNO_3 & H_2SO_4

Q.145 Chlorination and Bromination mostly uses _____:

- A) Radiowaves C) Infrared radiations
B Visible light D) U.V light

Q.146 _____.

- A) ----- C) -----
B) ----- D) -----





ANSWERS PANORAMA

Number	Answer	Number	Answer	Number	Answer
89	B	109	D	129	C
90	C	110	D	130	C
91	D	111	C	131	B
92	C	112	B	132	B
93	C	113	A	133	B
94	D	114	B	134	B
95	A	115	B	135	A
96	B	116	D	136	D
97	B	117	B	137	B
98	D	118	A	138	B
99	B	119	B	139	A
100	C	120	B	140	A
101	B	121	C	141	D
102	B	122	A	142	A
103	C	123	D	143	B
104	A	124	A	144	D
105	A	125	B	145	D
106	B	126	D	146	--
107	C	127	A	XX	XX
108	B	128	C	XX	XX

Sorted Out & Compiled by:

FRAZ MALICK

DISCLAIMER:

ALL QUESTIONS ARE PUT DOWN WITH UTMOST CARE, BUT AS 'TO ERR IS TO MAN', OUR HUMBLE APOLOGIES IF ANY SORT OF TYPING ERROR IS FOUND. IF FOUND, JUST DROP US A SINGLE MESSAGE AT

www.facebook.com/frazsays

GROUP COURTESY:

MDCAT PANORAMA

University of Health Sciences, Lahore

Total MCQs:220



Max. Marks:1100

ENTRANCE TEST 2017 (Reconduct) For F.Sc and Non-F.Sc Students Time Allowed: 150 Minutes

Instructions:

- Read the instructions on answer sheet carefully.
- Choose the **Single Best Answer** for each question.
- Candidates are strictly prohibited from giving any identification mark except Roll No. & Signature in the specified columns only.

COMPULSORY QUESTION FOR IDENTIFICATION:

Q.ID What is the colour of your question paper?

- A) White C) Pink
B) Blue D) Green

**Ans: Color of your Question Paper is Blue.
Fill the Circle corresponding to letter 'B'
against 'ID' in your MCQ response form
(Exactly as shown in the diagram).**

— ID
— 1
— 2
— 3
— 4

A	B	C	D
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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PHYSICS

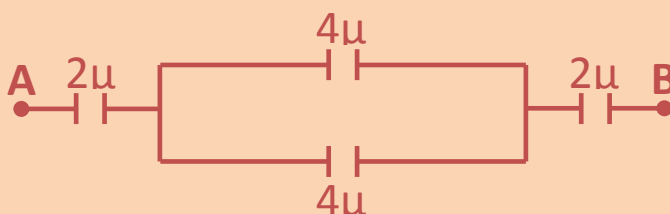
Q.147 The young's modulus of elasticity of a wire is "Y" and stress is "F". The elastic P.E per unit volume in the wire be _____:

- A) $F^2/2Y$ C) F^2/Y
B) $Y^2/2F$ D) Y^2/F^2

Q.148. The modulus of elasticity depends upon:

- A) Nature of the material C) Area of cross-section
B) Temperature D) Both "A" & "B"

Q.149. The equivalent capacitance of four capacitors, connected as shown, between A and B is:



- A) 11 mF C) $8/9 \mu F$

B) 5 mF

D) $8/13 \mu\text{F}$

Q.150 A wire of resistance 4 W is bent in the form of a circle. The resistance between the ends of any diameter is:

A) 1 W

C) 4 W

B) 2 W

D) 8 W

Q.151 Which of the following is a supplementary physical quantity?

A) Radian

C) Both "A" & "B"

B) Steradian

D) None of these

Q.152. In YDSE if we use white light in place of a monochromatic light, then:

A) Centre will be bright and red colour will be closer to it

B) Centre will be bright and blue colour will be closer to it

C) Centre will be dark and red colour will be closer to it

D) Centre will be dark and blue colour will be closer to it

Q.153. The vertical extension in a light spring by a weight of 1 kg suspended from the wire is 9.8 cm, the period of the oscillation is:

A) 20p sec

C) $2\pi/10$ sec

B) 2p sec

D) 200p sec

Q.154 The velocity and acceleration of a particle performing S.H.M have a steady phase relationship. The acceleration shows a phase lead over the velocity of:

A) π C) $-\pi/2$ B) $\pi/2$ D) $-\pi$

Q.155 The rms speed of gas molecules is:

A) $\sqrt{\frac{m}{3kT}}$ C) $\sqrt{\frac{3kT}{m}}$ C) $\frac{m}{3kT}$ D) $\left(\frac{3kT}{m}\right)^2$

Q.156 During an adiabatic compression work done is equal to 200 J. What will be the change in internal energy?

A) -200 J

C) 100 J

B) +200 J

D) 0 J

Q.157 If heat energy of 100 J is taken out but 400 J work is done on the system, the change in internal energy is:

A) -300 J

C) -100 J

B) 300 J

D) -400 J

Q.158 A conductor of length 1 m carrying current of 1 A is placed parallel to a magnetic field of 1 gauss. The magnetic force acting on the conductor is:

A) Zero

C) 10^{-4} newton

B) 1 newton

D) 1 dyne

Q.159 The hardest photon coming out from a Coolidge tube belongs to:

A) Characteristic x-rays

C) Both "A" & "B"

B) Continuous x-rays

D) None of these

Q.160 Which of the following X-rays has largest intensity?

A) K_{α} X-rayC) K_{γ} X-ray

B) K_{β} X-ray

D) All have the same intensity

Q.161 The half life of radium is about 1600 years. If 100 g radium existing now, 25 g will remain un-decayed after:

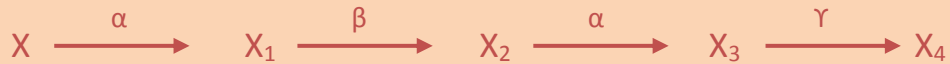
A) 4800 years

C) 2400 years

B) 6400 years

D) 3200 years

Q.162 A radioactive nucleus X undergoes a series of decay according to the scheme:



If the mass number and atomic number of X are 180 and 72 respectively, the corresponding number of X_4 are:

A) 176, 69

C) 172, 69

B) 176, 7

D) 172, 71

Q.163 A resistor of 6 W with a tolerance of 10% and another of 4 W with a tolerance of 10% are connected in series. The tolerance of combination is about:

A) 5%

C) 10%

B) 12%

D) 13%

Q.164 The value of ratio of displacement to distance is:

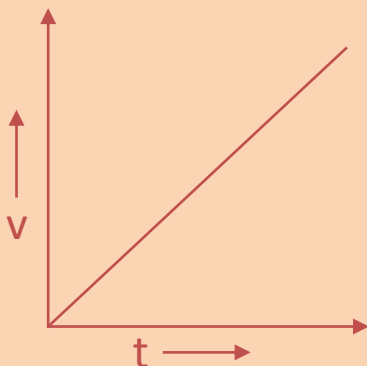
A) Always one

C) More than one

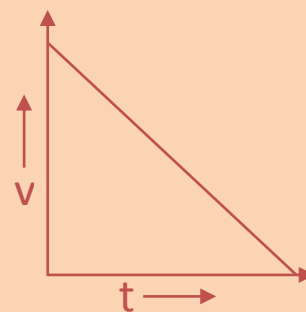
B) Always less than one

D) Equal or less than one

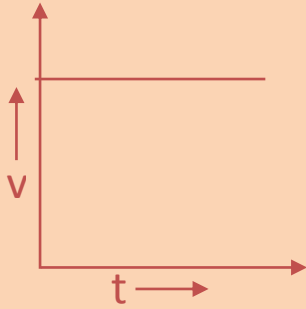
Q.165 Which of the following v-t graph represents the constant acceleration:



A)



C)



B)

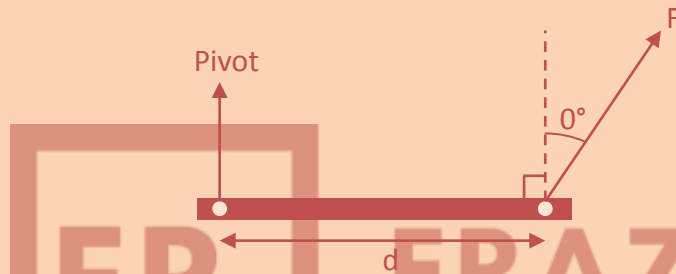
D) All of them

Q.166 Angular speed of minutes hand of mechanical watch is:

A) $\pi/30 \text{ rad min}^{-1}$ C) $\pi/2 \text{ rad min}^{-1}$ B) $\pi \text{ rad/min}$

D) None of these

Q.167 A force F is applied to a beam at a distance d from a pivot. The force acts at an angle q to a line perpendicular to the beam:



Which combination will cause the largest turning effect about the pivot?

	F	d	q
A)	Large	Large	Large
B)	Large	Large	Small
C)	Small	Small	Large
D)	Small	Large	Small

Q.168 A body is moving in a circular path with constant speed. The magnitude of tangential and centripetal acceleration are:

Which combination will cause the largest turning effect about the pivot?

	Tangential	Centripetal
A)	rv^2	0
B)	0	0
C)	0	v^2/r
D)	v^2/r	v^2/r

Q.169 Which one of the following is a greater work?

A) +100 J

C) -1000 J

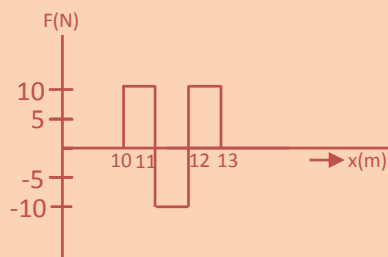
B) -100 J

D) +200 J

Q.170 AT what angle work done will be maximum?

- A) 0°
- B) 90°
- C) 45°
- D) 30°

Q.171 The figure shows the force distance curve of a body moving along a straight line. The work done by the force:



- A) 10 J
- B) 20 J
- C) 30 J
- D) 40 J

Q.172 A particle executes S.H.M with frequency f . The frequency of variation of its maximum or minimum kinetic energy is:

- A) $f/2$
- B) f
- C) $2f$
- D) $4f$

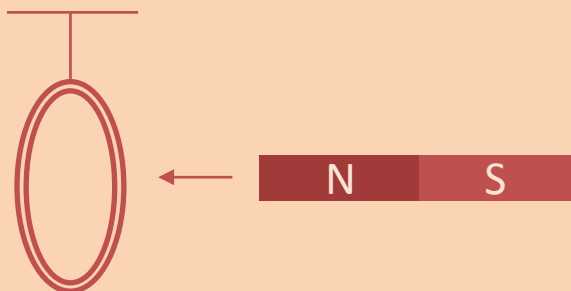
Q.173 A source of sound moves towards a stationary observer with a speed one third of sound. If the frequency of the sound from the source is 100 Hz, the apparent frequency of the sound heard by the observer is:

- A) 60 Hz
- B) 100 Hz
- C) 200 Hz
- D) 150 Hz

Q.174 For a certain organ pipe, three successive resonance frequencies are observed at 425, 595 and 765 Hz. The speed of the sound in air is 300 m/s. The pipe is:

- A) Closed pipe of length 1 m
- B) Closed pipe of length 2 m
- C) Open pipe of length 1 m
- D) Open pipe of length 2 m

Q.175 A metallic circular ring is suspended by a string and is kept in a vertical plane. When a magnet is pushed towards the ring, then it will:

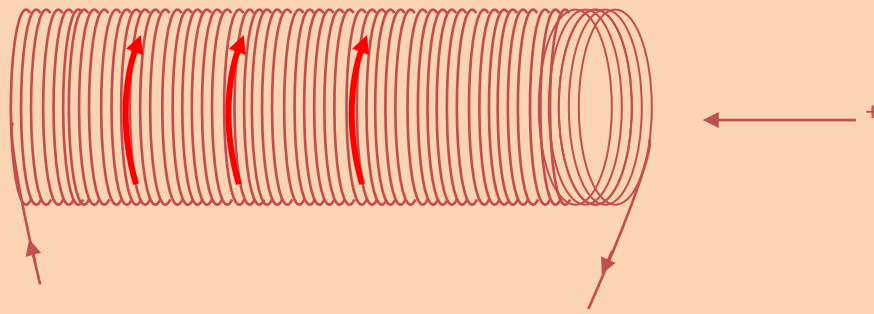


- A) Get displaced towards the magnet
- B) Get displaced away from the magnet
- C) Remain stationary:
- D) Nothing can be said

Q. 176 The cause of induced emf is:

- A) Rate of change of magnetic flux
- B) Decrease in magnetic flux
- C) Increase in magnetic flux
- D) Change in magnetic flux

- repulsion between two charges is considered as:
- C) May be +ve or -ve
D) Cant' be predicted
- ing a charge from point "A" to "C" which statement is true?
-
- 10 μ F A B C 10 μ F
- 10cm



- A) Radially inward
 B) Radially outward
 C) No force acts
 D) Radially outward

Q.184 The De-Broglie wavelength of particle of mass “m” moving with the kinetic energy “E” can be written as:

- A) $\sqrt{\frac{h}{2mE}}$
 B) $\frac{h}{2mE}$
 C) $\frac{h}{\sqrt{2mE}}$
 D) $\frac{\sqrt{h}}{2mE}$

Q.185 When light has exactly the same energy as the work function of a metal surface then:

- A) No photo electrons are produced
 B) No photo electric effect is observed
 C) No photo electric current is produced
 D) All of these

Q.186 In above question if we use a light of photons having energy 2.4 eV then the stopping potential required will be:

- A) 2.4 V
 B) 2.6 V
 C) 2.5 V
 D) 0 V

Q.187 Which of the following has maximum ionizing power?

- A) α
 B) β
 C) γ
 D) Neutron

Q.188 When we apply input at the non-inverting input of an operational amplifier then the output appears after:

- A) Amplification, phase shift of 180°
 B) Amplification, phase shift of 60°
 C) Amplification, no phase shift
 D) None of these

Q.189 Which of the following is false?

- A) In P-type substance majority charge carriers are holes
 B) In during forward biasing of a diode width of depletion region decreases
 C) Leakage current flows to minority charge carriers
 D) None of these

Q.190 For an LED what is true?

- A) It is always forward biased
 B) It releases a photon when covalent bonds breaks

- C) It releases photon when electron combines with hole
- D) Both "A" & "C"



ENGLISH

Directions: Each sentence below has a blank indicating that something has been omitted. Choose the word that best fits in with the meaning of the sentence as a whole.

- Q.191 Indolence gives vent to _____ disposition in human life.
 A) Static C) Energetic
 B) Enthusiastic D) Filthy
- Q.192 The Quaid's _____ enthusiasm led the Muslims Indo-Pak to independence.
 A) Simplified C) Onerous
 B) Latent D) Threatening
- Q.193 He _____ the incident to the back of his mind.
 A) Revered C) Reagitated
 B) Regulated D) Relegated
- Q.194 She managed to _____ a ticket for the cricket match.
 A) Procure C) Improvise
 B) Obscure D) Preclude

Directions: Some segments of each sentence are underlined. Your task is to identify that underlined segment of the sentence which contains the mistake that need to be corrected. Fill the circle corresponding to that letter under the segment in the MCQ Response form.

- Q.195 She looked at him, and he seemed almost as younger as their eldest son.
 A B C D
- Q.196 Only twice my father stopped to wipe the sweat from his eyes.
 A B C D
- Q.197 A tree down the slope learned against and settled heavily to the ground.
 A B C D
- Q.198 The latter continued: "You see how is it – Ralston filled the place up with young men."
 A B C D
- Q.199 The delegates in Anatolia could transfer their activities to Istanbul, put Mustafa Kamal's ideas into practice and
 A B C
 yet not longer stand in opposition to the Padishah.
 D
- Q.200 Female workers are entitled 56 days' rest on full salary before giving birth to children.
 A B C D

Directions: In each of the following questions, four alternative sentences are given. Choose the CORRECT one and fill the Circle corresponding to that letter in the MCQ Response Form.

Q.201

- A) You can't satisfy you're conscious by writing a cheque for a few guineas.
- B) You can't satisfy your conscience by writing a cheque for a few guineas.
- C) You can't satisfy your conscience by writing a check for a few guineas.
- D) You can't satisfy your conscience by writing cheque of a few guineas.

Q.202

- A) They had not post the Court acrobat and never had had.
- B) They had no post of Court acrobat and never have had.
- C) They had no post of Court acrobat and never has had.
- D) They had no post by Court acrobat and never had had.

Q.203

- A) He was drenched with the hotness of his fear.
- B) He was drenched in the hotness of his fear.
- C) He was drenched by the hotness of his fear.
- D) He was drenched of the hotness of his fear.

Q.204

- A) Initially, He devoted his attention to fishing and making sketches of his companions in the new school.
- B) Initially, He devoted his attention to fish and making sketches of his companions in the new school.
- C) Initially, He devoted his attention to fishing and make sketches of his companions in the new school.
- D) Initially, He devoted his attention to fishing and making sketches of his companions on the new school.

Q.205

- A) Don't you stuff your head by things you do not understand.
- B) Don't you stuff your head with things you do not understand.
- C) Don't you stuff your head for things you do not understand?
- D) Don't you stuff your head in things you do not understand.

Q.206

- A) Then he set down in corner and remained quiet.
- B) Then he sat down in corner and reminded quiet.
- C) Then he sat down in corner and remained quite.
- D) Then he sat down in corner and remained quiet.

Q.207

- A) Mr. Bittering raised the mirror to his face.
- B) Mr. Bittering raised the mirror for this face.
- C) Mr. Bittering rised the mirror by his face.
- D) Mr. Bittering raised the mirror into his face.

Q.208

- A) These rings came of his fingers five time a day before ablutions.
- B) These rings came from his fingers five times day before ablutions.
- C) These rings came by his fingers fives times a day before ablutions.
- D) These rings came off his fingers five times a day before ablutions.

Q.209

- A) I'm sure you'll be much happier and it will be great fun to me.
- B) I'm sure you'll be much happy and it will be great fun for me.
- C) I'm sure you'll be much happier and it will be great fun for me.
- D) I'm sure you'll be very happier and it will be great fun for me.

Q.210

- A) The room is comfortably balanced between the expensively decorated and the homely.
- B) The room is comfortable balanced between the expensively decorated or the homely.
- C) The room is comfortably balanced between the expensive decorated and the homely.
- D) The room is comfortably balanced among the expensively decorated and the home.

Directions: Select the most suitable synonym for the given words.

Q.211 MOTIF

- A) Tough
- B) Stuff
- C) Motion
- D) Design

Q.212 INIQUITY:

- A) Inequality
- B) Injustice
- C) Wickedness
- D) Efficiency

Q.213 FECKLESS

- A) Useless
- B) Careless
- C) Dauntless
- D) Fearless

Q.214 MOSAIC

- A) Pattern
- B) Mortal
- C) Ordinary
- D) Musical

Q.215 INSCRUTABLE

- A) Immoral
- B) Unethical
- C) Enigmatic
- D) Unaccountable

Q.216 JUXTAPOSE

- A) Justify
- B) Compare
- C) Expos
- D) Jettison

Q.217 LACERATING

- A) Landing



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- B) Tearing
- C) Flagging
- D) Lactating

Q.218 EMPATHY

- A) Fictitious
- B) Facility
- C) Ability
- D) Felicity

Q.219 EVANESCENT

- A) Evident
- B) Permanent
- C) Event
- D) Transitory

Q.220 MUSE

- A) Wander
- B) Fonder
- C) Robust
- D) Ponder



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