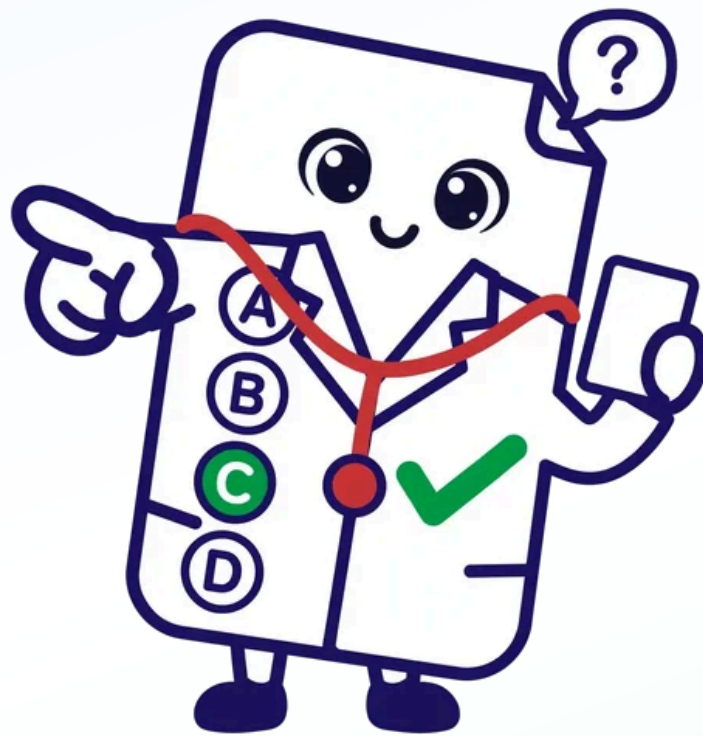




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NUMS MDCAT Preparation Book 2026

A full model paper in the real NUMS pattern, with answer key



150 MCQs

Real NUMS subject split

Answer key + online explanations

How to use this book

1. Sit each model paper in one go, in 165 minutes, with a pen and the answer sheet of your choice.
2. Mark yourself with the answer key at the back.
3. Every answer in the key is a link. Tap it to read why that option is right on TestUstad, free.

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What is in this book

150 MCQs across one paper, each drawn in the same subject split as the real NUMS paper:

- Biology: 55 MCQs per paper
- Chemistry: 40 MCQs per paper
- Physics: 40 MCQs per paper
- English: 15 MCQs per paper



MODEL PAPER 1 OF 1

NUMS MDCAT

150 MCQs · 165 minutes · answer key at the back

**Biology**

55 MCQs

1. The reactants on which enzyme works are:

- ☐ A Products
- ☐ B Metabolites
- ☐ C Substrates
- ☐ D Catabolites

2. Hormone inhibin is produced by:

- ☐ A Hypothalamus
- ☐ B Pituitary gland
- ☐ C Prostate
- ☐ D Sertoli cells

3. In the human body all the given organs are vestigial except:

- ☐ A Appendix
- ☐ B Leg muscles
- ☐ C Coccyx
- ☐ D Nictitating membrane

4. Secondary xylem is produced by the activity of :

- ☐ A Apical meristem
- ☐ B cork cambium
- ☐ C Vascular cambium
- ☐ D intercalary meristem

5. Extra embryonic membranes like amnion and chorion appeared for the first time in

- ☐ A Fish
- ☐ B Amphibian
- ☐ C Reptiles
- ☐ D None

6. Cells that kill cells that display foreign motifs on their surface are:

- ☐ A Platelets
- ☐ B Cytotoxic T cells
- ☐ C Antigens
- ☐ D Red blood cell

7. Bacteria reproduce asexually by:

- ☐ A Mitosis
- ☐ B Meioses
- ☐ C Conjugation
- ☐ D Fission

8. A study of communities in relation to environment is called:

- ☐ A Social ecology
- ☐ B Synecology
- ☐ C Autoecology
- ☐ D Heteroecology

9. The possible reason(s) for cyanosis, one of congenital heart disease is:

- ☐ A Formation of carboxy-hemoglobin
- ☐ B The high concentration of oxyhemoglobin
- ☐ C Low level of carbon monoxide (CO)
- ☐ D Low level of hemoglobin

10. Oxyntic cells in stomach produce :

- ☐ A Pepsin
- ☐ B Pepsinogen
- ☐ C Gastrin
- ☐ D HCl

11. The joints that allow movements in several directions are:

- ☐ A Hinge Joints
- ☐ B Fibrous Joints
- ☐ C Ball and Socket Joints
- ☐ D Cartilaginous Joints

12. Base substitution, deletion and insertion are examples of:

- ☐ A Chromosomal aberration
- ☐ B Aneuploidy
- ☐ C Point mutation
- ☐ D Euploidy

13. Specific sequences of four or six nucleotides arranged symmetrically in reverse order where restriction enzymes work are known as

- ☐ A Okazaki fragment
- ☐ B Palindromic sequences
- ☐ C Promoter sequences
- ☐ D Primer

14. Homeostasis of blood osmotic pressure is maintained by which organ(s)?

- ☐ A Lungs
- ☐ B Kidneys
- ☐ C Heart
- ☐ D Liver

15. Which of the following is the opposite of condensation reaction?

- ☐ A Decarboxylation
- ☐ B Hydration
- ☐ C Dehydration
- ☐ D Hydrolysis

16. Gigantism in human beings is caused due to over secretion of:

- ☐ A Thyrotropin
- ☐ B Corticotropin
- ☐ C Somatotropin
- ☐ D Prolactin

17. Which of the following is the lowest level of biological organization with respect to others?

- ☐ A Multicellular organisms
- ☐ B Biosphere
- ☐ C Species
- ☐ D Population

18. An ATP molecule is hydrolyzed into ADP and P and almost _ energy is produced.

- ☐ A 6 kcal
- ☐ B 9 kcal
- ☐ C 8 kcal
- ☐ D 7 kcal

19. In which phase of the cell division is the metabolic activity of the nucleus is high?

- ☐ A Mitosis
- ☐ B Interphase
- ☐ C Meiosis
- ☐ D Cell Cycle

20. Amount of O₂ carried by red blood cells is:

- ☐ A 77%
- ☐ B 90%
- ☐ C 87%
- ☐ D 97%

21. Most favorite host of HIV virus is?

- ☐ A Lymphocytes
- ☐ B RBC
- ☐ C T_Cell
- ☐ D B_ cells

22. The optimum temperature for enzymes of human body is:

- ☐ A 32 F
- ☐ B 313 K
- ☐ C 46 C
- ☐ D 37 C

23. _ induces vaginal pain.

- ☐ A Oxytocin
- ☐ B FSH
- ☐ C Estrogen
- ☐ D Progesterone

24. The theory of uniformitarianism was proposed by:

- ☐ A Hutton and Lyell
- ☐ B Lamarck
- ☐ C Georges Cuvier
- ☐ D Darwin

25. Chlorophyll II is protected from intense light by

- ☐ A plant hormones
- ☐ B carotenoids
- ☐ C plant enzymes
- ☐ D water present in mysophyll tissue

26. Which one of the following is the additional function of the embryonic membranes?

- ☐ A Respiration and reproduction
- ☐ B Reproduction and nourishment
- ☐ C Strong of wase products
- ☐ D Respiration and storage of waste products

27. The most common form of WBCs in the body are:

- ☐ A Eosinophils
- ☐ B Basophils
- ☐ C Neusrophils
- ☐ D Lymphocytes

28. Cell wall may be absent in which of the following?

- ☐ A Plant & Algae
- ☐ B Algae & Fungi
- ☐ C Fungi & Archaea
- ☐ D Bacteria & Archaea

29. Group of interbreeding individuals of particular species, sharing common geographical area is called:

- ☐ A Population
- ☐ B Community ecology
- ☐ C Community
- ☐ D Autecology

30. Which one of the following statements best describes the function of sinoatrial node?

- ☐ A It sends out electrical impulses to atrial muscles causing both atria to contract
- ☐ B It consists of small number of diffusely oriented cardiac fibres
- ☐ C It sends out electrical impulses to ventricular muscles causing both ventricles to contract
- ☐ D It is present at upper end of left atrium

31. Which enzyme works in alkaline pH?

- ☐ A Pepsin
- ☐ B Sucrose
- ☐ C Enterokinase
- ☐ D Pancreatic lipase

32. Which of the following are present in the internal organs, like the stomach, intestine, etc.?

- ☐ A Option A
- ☐ B Option B
- ☐ C Option C
- ☐ D Both A and B
- ☐ E Both A and C

33. Haemophilia affects males than females because of:

- ☐ A X linked recessive
- ☐ B X linked dominant
- ☐ C Dominant autosomes
- ☐ D Y linked inheritance

34. DNA made by joining pieces from two or more different sources is called:

- ☐ A Probes
- ☐ B Restriction endonuclease
- ☐ C Mutated DNA
- ☐ D Recombinant DNA

35. The excretory product that requires minimum water for its elimination compare to others:

- ☐ A Creatinine
- ☐ B Ammonia
- ☐ C Urea
- ☐ D Uric acid

36. The genome of the most animals and higher plants is:

- ☐ A DNA
- ☐ B RNA
- ☐ C Both DNA and RNA
- ☐ D Either DNA or RNA

37. Which of the following is non-steroidal hormone?

- ☐ A Cortisol
- ☐ B Testosterone
- ☐ C Insulin
- ☐ D Aldosterone

38. _ is the branch of Biology used for the identification and interpretation of fossils.

- ☐ A Evolution
- ☐ B Paleontology
- ☐ C Zoogeography
- ☐ D Biodiversity

39. Which one of the following in glycolysis is a hydrogen carrier?

- ☐ A ADP
- ☐ B PGAL
- ☐ C DPGA
- ☐ D NAD

40. Sickle cell Anaemia is an example of which type of chromosomal defect?

- ☐ A Chromosomal rearrangement
- ☐ B Transposition of gene
- ☐ C Chromosomal aberration
- ☐ D Point mutation

41. Percentage of CO₂ carried by plasma proteins is:

- ☐ A 5%
- ☐ B 6%
- ☐ C 7%
- ☐ D 8%

42. Virus recognize host through:

- ☐ A Envelope
- ☐ B DNA
- ☐ C Capsid
- ☐ D Protein Coat

43. Enzymes belong to which class of biomolecules?

- ☐ A Carbohydrates
- ☐ B Lipids
- ☐ C Proteins
- ☐ D Nucleic acids

44. Gonorrhea is a sex disease caused by:

- ☐ A Bacteria
- ☐ B Virus
- ☐ C Parasite
- ☐ D None of the above

45. Who formulated the principle that "ontogeny recapitulates phylogeny"?

- ☐ A Von bear
- ☐ B Hackel
- ☐ C Herbert Spencer
- ☐ D Darwin

46. Bulliform cells are present in:

- ☐ A Grasses
- ☐ B Under ground stems
- ☐ C Fruit-nuts
- ☐ D Cabbage leaves

47. The mesodermal cell which give rise to urinary system in frog are called:

- ☐ A Pincer cells
- ☐ B Blastomers
- ☐ C Nephrotome
- ☐ D Parietal

48. RBC's are destroyed in liver while WBC's are destroyed in:

- ☐ A Plasma
- ☐ B Liver
- ☐ C Inside various cells of body
- ☐ D Outside the blood stream

49. Most disease symptoms appear during.

- ☐ A Lag phase
- ☐ B Log phase
- ☐ C Die
- ☐ D Generation time

50. "The open water zone away from shore to the depth of affective light penetration and occupied by phylopplankion Iike green algae euglena etc." which of the following regions of fresh water has all these properties?

- ☐ A Littoral
- ☐ B Limnetic
- ☐ C Profundal
- ☐ D Both "a" and "b"

51. The heart chamber from where aorta originates:

- ☐ A Left atrium
- ☐ B Left ventricle
- ☐ C Right ventricle
- ☐ D Right atrium

52. Enzymatic portion of the gastric juices secreted by which mucosal calls?

- ☐ A Oxyntic cells
- ☐ B Chief cells
- ☐ C Mucus cells
- ☐ D Endocrine cells

53. The living cells of cartilage are called:

- ☐ A Chrondrocytes
- ☐ B Osteoblasts
- ☐ C Osteocytes
- ☐ D Osteoclasts

54. A woman can be bald only when she is

- ☐ A Homozygous dominant
- ☐ B Heterozygous
- ☐ C Homozygous recessive
- ☐ D None of these

55. The physical method used to control Bacteria is

- ☐ A Antiseptics
- ☐ B Disinfectants
- ☐ C Pasteurization
- ☐ D Antibiotics



Chemistry

40 MCQs

56. A buffer solution containing H_2CO_3 and NaHCO_3 is to be prepared to maintain a pH of 7.00. What must be the ratio NaHCO_3 in order to realize such a pH if K_a of carbonic HCO_3 acid is 4.3×10^{-7} ?

- (A) 43
- (B) 48
- (C) 0.43
- (D) 4.3

57. Which of the following carboxylic acid is the strongest?

- (A) Dichloroacetic acid
- (B) Chloroacetic acid
- (C) Formic acid
- (D) Acetic acid

58. The atomic masses of elements depend upon:

- (A) Atomic number
- (B) Number of electrons
- (C) Number of isotopes & their abundance
- (D) None of the above

59. Which one of the following is a coinage metal

- (A) Pd
- (B) Cu
- (C) Cd
- (D) Hg

60. How should the condition be changed to prevent the volume of a given gas from expanding when its mass is increased?

- (A) Temperature is lowered & pressure is increased
- (B) Temperature is increased & pressure is lowered
- (C) Temperature & pressure both are lowered
- (D) Temperature & pressure both are increased

61. Height of peak in mass spectrum shows:

- (A) Number of isotopes
- (B) Mass number
- (C) Relative abundance of isotopes
- (D) Number of protons

62. Which of the following is strongest Lewis base?

- (A) Ethylene
- (B) Acetylene
- (C) Benzene
- (D) All have equal strength

63. Collagen and albumin are:

- (A) Simple proteins
- (B) Derived proteins
- (C) Polyamides
- (D) Polysaccharides

64. An Azeotropic mixture of two miscible liquids boils at a lower temperature than its components when:

- (A) The system shows a negative deviation from Raoult's law.
- (B) The system shows a positive deviation from Raoult's law.
- (C) The system perfectly obeys Raoult's law
- (D) Both (A) and (B)

65. The ionization energy of a hydrogen atom is 13.6 eV. The ionization potential required will be:

- (A) 4.9 volt
- (B) 8.5×10^{-10} volt
- (C) 3.4 volt
- (D) 13.6 volt

66. In a reaction of ethane and hydrochloric acid, the hydrogen ion acts as:

- (A) Nucleophiles
- (B) Electrophiles
- (C) Carbon ions
- (D) Carbonium ions

67. Catenation is a process in which carbon shows the properties of making:

- (A) Multiple bonds
- (B) Hybridization
- (C) Long chain or rings of carbon atoms
- (D) Showing isomerism

68. The reduction of aldehydes and ketones in the presence of zinc amalgam and HCl is termed as:

- (A) Grignard reduction
- (B) Clemmenson reduction
- (C) Wolf-kishner reduction
- (D) Friedel-craft reduction

69. The net heat change in a chemical reaction is same whether it takes place in one step or several steps. This law is known as:

- (A) First law of thermodynamics
- (B) Henry's law
- (C) Hess's law
- (D) Joule's law

70. Silicones are resistant to chemical attack and are used as

- (A) Paints
- (B) Vessels
- (C) Water proofing fabrics
- (D) All of the above

71. Which one shows anisotropic behavior?

- (A) Wood
- (B) Gemstone
- (C) Coke
- (D) Graphite

72. The process of filtration is used to separate particles _ from liquids.

- (A) Radial.
- (B) Angular.
- (C) Insoluble.
- (D) Soluble

73. Unit of rate and rate constant are same for:

- (A) First order reaction
- (B) Second order reaction
- (C) Third order reaction
- (D) Zero order reaction

74. If water samples are taken from a sea, river, cloud, lake, or snow, they will be found to contain hydrogen and oxygen in the ratio of 1:8 by weight. This indicates the law of:

- (A) Definite proportion
- (B) Multiple proportion
- (C) Reciprocal proportion
- (D) None of above

75. Which of the following element same oxidation number in all compounds?

- (A) Oxygen
- (B) Fluorine
- (C) chlorine
- (D) Both (A) & (C)

76. Which of the following is not an air pollutant?

- (A) N_2
- (B) N_2O
- (C) NO
- (D) CO

77. Seawater has 5.65×10^{-3} g of dissolved oxygen in one kilogram of water. Concentration of O_2 in parts per million is

- (A) 5.65
- (B) 7.69
- (C) 5.20
- (D) 4.11

78. When n-butyl magnesium iodide is treated with water, the product is:

- (A) n-butane
- (B) Propane
- (C) Iso-butane
- (D) Alcohol

79. _ has dipole moment.

- (A) CO
- (B) CO_2
- (C) Benzene
- (D) All of these

80. Which of the following alcohols cannot be synthesized when Grignard reagent reacts with aldehydes and ketones?

- (A) Ethanol
- (B) Isobutyl alcohol
- (C) Propanol
- (D) Methanol

81. Nitrogen gas reacts under _ conditions.

- (A) Standard
- (B) Normal
- (C) Cool
- (D) Harsh

82. Which one of the following is strongest acid?

- (A) FCH_2COOH
- (B) CH_3COOH
- (C) $ClCH_2COOH$
- (D) $C_6H_5CH_2COOH$

83. Hydrogen loses an electron to form:

- (A) H^+ (B) H_2-2
(C) H (D) H^-

84. The correct electronic configuration of Nickel (28) is:

- (A) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^8 4s^2$ (B) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^7 4s^2 4p^1$
(C) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^6 4s^2 4p^2$ (D) $1s^2 2s^2 2p^6 3s^2 3p^6 3d^6 4s^1 4p^3$

85. Gas is enclosed in a container of 20 cm^3 with a moving piston. According to the kinetic theory of gases, what will be the effect on freely moving molecules of the gas if the temperature is increased from 20°C to 100°C ?

- (A) Pressure will become one half
(B) The volume will be increased
(C) Temperature has no effect on freely moving molecules
(D) Colliding capability of molecule will become lower

86. Which of the following electronic transitions requires highest amount of energy when a compound is interacted with ultraviolet radiations?

- (A) $n \rightarrow \pi$ (B) $\pi \rightarrow \pi$
(C) $8 \rightarrow 8$ (D) $n \rightarrow 8$

87. Which of the following ions can act as a Bronsted acid and base in water?

- (A) HCO^- (B) CN^-
(C) NO_3^- (D) PO_4^-

88. Which enzyme is involved in the fermentation of glucose:

- (A) Zymase (B) Invertase
(C) Urease (D) Diastase

89. Study the following graphs for the boiling points of some substances: Which of the above graph shows that some members of the graph have hydrogen bonding?

- (A) I + IV (B) II + IV
(C) III + IV + V (D) I + II + III

90. The mass of electron is:

- (A) 1838 times more than mass of proton
(B) 1836 times less than mass of proton
(C) 1836 times more than mass of neutron
(D) 1836 times more than mass of hydrogen atom

91. Select the reaction when the supply of air is very limited;

- (A) $\text{CH}_4 + 2\text{O}_2 \rightarrow \text{CO}_2 + 2\text{H}_2\text{O} + \text{heat}$
- (B) $2\text{CH}_4 + 3\text{O}_2 \rightarrow 2\text{CO}_2 + 4\text{H}_2\text{O} + \text{heat}$
- (C) $\text{CH}_3 - \text{CH}_3 + 7\text{O}_2 \rightarrow \text{CO}_2 + 6\text{H}_2\text{O} + \text{heat}$
- (D) $2\text{CH}_4 + 2\text{O}_2 \rightarrow 2\text{CO} + 4\text{H}_2\text{O} + \text{heat}$

92. The catalyst used for the preparation of acrylonitrile is:

- (A) Cu_2Cl_2 and NH_4Cl
- (B) Al_2O_3 and NH_4Cl
- (C) Cu_2Cl_2 and NH_4OH
- (D) Cu_2Cl_2 and Al_2O_3

93. Which of the following aldehydes will be most reactive towards nucleophiles?

- (A) Benzaldehyde
- (B) Acetaldehyde
- (C) Formaldehyde
- (D) Propanaldehyde

94. Change in entropy doesn't depend on:

- (A) Amount of heat added to the system
- (B) Amount of heat rejected from the system
- (C) Temperature of the substance
- (D) Amount of the substance

95. What is the trade name of tetrafluoroethylene polymer?

- (A) Polystyrene
- (B) Bakelite
- (C) Nylon
- (D) Teflon



Physics

40 MCQs

96. The relation between the decay constant ' λ ' and the half-life $T_{1/2}$ of a radioactive substance is:

- (A) $\lambda = 1/T_{1/2}$
- (B) $\lambda = 0.693 T_{1/2}$
- (C) $\lambda = T_{1/2}$
- (D) $\lambda = 0.693/T_{1/2}$

97. An electric charge in uniform motion produces:

- (A) An electric field.
- (B) A magnetic field.
- (C) Both magnetic and electric fields.
- (D) Neither magnetic nor electric fields.

98. Angle that a body traverses at the centre of a circle in two turns is:

- (A) 180 degrees
- (B) 360 degrees
- (C) 540 degrees
- (D) 720 degrees

99. In a pipe of varying cross-section, as fluid enters the narrower region it exhibits:

- (A) High velocity, high pressure
- (B) High velocity, low pressure
- (C) Low velocity, high pressure
- (D) Low velocity, low pressure

100. The duration of meta stable state is approximately:

- (A) 10-8s
- (B) 10-3s
- (C) 10-10s
- (D) 10-6s

101. If a force of 12 N acts on a car and changes its momentum from 36 kgm/sec to 60 kgm/sec, the time during which this change occurs will be

- (A) 24 sec
- (B) 2 sec
- (C) 12 sec
- (D) 8 sec

102. If a force of magnitude 8 N acts on a body in direction making an angle 30, its x and y components will be:

- (A) $F_x = 4\sqrt{3}$ and $F_y = 8$
- (B) $F_x = 8$ and $F_y = 4\sqrt{3}$
- (C) $F_x = 4\sqrt{3}$ and $F_y = 4$
- (D) $F_x = 8\sqrt{3}$ and $F_y = 4$

103. The SI unit of magnetic flux is Weber, which is equal to:

- (A) NmA^{-1}
- (B) $\text{Nm}^2 \text{A}^{-1}$
- (C) NA m^{-1}
- (D) NmA^{-2}

104. When a spring is stretched by 10cm, the potential energy is stored is E. When the spring is stretched by 10cm more, the potential energy stored in the spring becomes

- (A) 2E
- (B) 4E
- (C) 6E
- (D) 10E

105. A device that converts AC into DC is called

- (A) Rectifier
- (B) Transistor
- (C) Capacitor
- (D) Inductor

106. Resonance occurs when the driving frequency is:

- (A) Greater than natural frequency
- (B) Unequal the natural frequency
- (C) Less than natural frequency
- (D) Equal to the natural frequency

107. For the production of electromagnetic waves, the charges used are:

- (A) Stationary charges
- (B) Charges moving with uniform speed
- (C) Accelerating charges
- (D) All of the above

108. In an ideal transformer:

- (A) Power input is equal to Power output.
- (B) Power input is less than half of the power output.
- (C) Power input is greater than Power output
- (D) Power input is more than half of the power output.

109. The thermodynamic process during which the pressure is kept constant is called

- (A) Isochoric process
- (B) Adiabatic process
- (C) Isobaric process
- (D) Isothermal process

110. A fuse can be a saviour against:

- (A) High voltage
- (B) High current
- (C) High power
- (D) Heating of wires

111. In pair production, the type of photon used:

- (A) α -particle
- (B) β -particle
- (C) X-rays
- (D) γ -radiations

112. The activity of the radioactive material can be expressed in the unit of:

- (A) curie
- (B) Becquerel
- (C) Tesla
- (D) both a and b

113. In the time constant of RC circuit, how much charge is stored, out of maximum charge q ?

- (A) $0.63q_0$
- (B) $0.51q_0$
- (C) $0.37q_0$
- (D) $0.9q_0$

114. The angular acceleration of second hand of watch is

- (A) $\pi \text{ rad/sec}^2$
- (B) $2\pi \text{ rad/sec}^2$
- (C) $\pi/2 \text{ rad/sec}^2$
- (D) None of the above

115. In Bernoulli's equation, the term $1/2 v^2$ is called:

- (A) K.E. per unit volume
- (B) K.E.
- (C) K.E. per unit area
- (D) K.E. per unit length

116. The transition from $n = 4, 5, 6, \dots$ To $n+3$ in hydrogen spectrum gives

- (A) Balmer series
- (B) Lyman series
- (C) Paschen series
- (D) Pfund series

117. A science museum designs an experiment to show the fall of a feather in a vertical glass vacuum tube. The time of fall from test is too close to 0.5 s. What length of tube is required?

- (A) 1.3 m
- (B) 2.5 m
- (C) 5.0 m
- (D) 10.0 m

118. If the dot product of two nonzero vectors A and B is zero then the magnitude of their cross product is _.

- (A) 0
- (B) 1
- (C) AB
- (D) -AB

119. A charge of two microcoulombs ($2\ \mu\text{C}$) moves with velocity of two meter per second ($2\ \text{m/sec}$) in the direction of two Tesla magnetic field. The force that will act on it will be:

- (A) 2 N
- (B) Zero
- (C) 8 N
- (D) 4 N

120. An electric motor is used to lift the weight of 2.0N through a vertical distance of 100 cm in 4 sec. What is the power output of the motor?

- (A) 25 W
- (B) 0.5 W
- (C) 0.75 W
- (D) 1 W

121. A logic gate has four inputs. Its possible input combinations will be:

- (A) 4
- (B) 16
- (C) 32
- (D) 64

122. In Young's double slit experiment both the separation between the slits and the distance between the slits and the screen are halved; then the fringe width is:

- (A) Halved
- (B) Unchanged
- (C) Doubled
- (D) Zero

123. The electrical analog of mass in electricity is _.

- (A) Capacitance
- (B) Inductance
- (C) Charge
- (D) Resistance

124. A setup transformer is that which :

- (A) Increase of power
- (B) Increase of current
- (C) Increase of voltage
- (D) Increase of energy

125. Which of the following is the expression of root mean square speed of a gas having n number of molecules contained in the container?

- (A) Option A
- (B) Option B
- (C) Option C
- (D) Option D

126. When the hot and cold junctions of a thermocouple are interchanged, the thermo- emf:

- (A) becomes zero
- (B) doubles
- (C) remain the same
- (D) changes the sign

127. IF a material particle starts motion with speed equal to the speed of light, then mass of the moving particle will:

- ☐ A Remain constant
- ☐ B Become zero
- ☐ C Become equal to rest mass of particle
- ☐ D Become infinite

128. Laser is a potential energy source for inducing which type of reaction?

- ☐ A Radioactive
- ☐ B Fission
- ☐ C Ionization
- ☐ D Fusion

129. If a soap bubble is charged:

- ☐ A Its size decreases
- ☐ B Its size increases
- ☐ C No change
- ☐ D None of the above

130. A disc, a hoop and a sphere are rolling down from an inclined plane simultaneously. Which object will reach at the bottom first?

- ☐ A Hoop
- ☐ B Disc
- ☐ C Sphere
- ☐ D All at the same time

131. Why do the rain drops fall with constant speed during the later stages of their journey?

- ☐ A The air resistance just balances the force of gravity
- ☐ B The force of gravity is constant for all drops
- ☐ C All drops fall from the same height
- ☐ D The drops are small so force of gravity is negligible for them

132. The net magnetic field created by the electrons within an atom is due to the field created by their _ motion.

- ☐ A Orbital
- ☐ B Spin
- ☐ C Orbital & spin
- ☐ D Orbital X spin

133. When a car moves with constant acceleration, the velocity-time graph is a:

- ☐ A Straight line
- ☐ B Parabola
- ☐ C Horizontal line
- ☐ D Exponential curve

134. Minimum number of equal forces that keep the body in equilibrium are:

- ☐ A Two
- ☐ B Three
- ☐ C Four
- ☐ D Five

135. A 2m wire carrying current 5A is at right angle to uniform magnetic field of 0.2 Web/m^2 . The force on wire will be:

- ☐ A 5N
- ☐ B 4N
- ☐ C 2N
- ☐ D 1.5N

**English**

15 MCQs

136. She _ about with the excitement of hearing the news of her sister's wedding.

- ☐ A Ran
- ☐ B Jigged
- ☐ C Talked
- ☐ D Wept

137. The _ stench of dead animals and plants made Mumtaz ill.

- ☐ A Putrid
- ☐ B Purified
- ☐ C Perturbed
- ☐ D Purchase

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

- ☐ A They felt bad while leaving their friends.
- ☐ B They felt very badly about leaving their friends.
- ☐ C They felt badly about leaving their friends.
- ☐ D They felt badly while teaving their friends.

139. Fill in the blank with appropriate preposition. Do you usually take a bus _ the market?

- ☐ A By
- ☐ B For
- ☐ C Of
- ☐ D To

140. Choose the correct option. We must _ the tickets for the movie in advance.

- ☐ A Remove
- ☐ B Take
- ☐ C Draw
- ☐ D Buy

141. A man of letters is:

- ☐ A A postman
- ☐ B A person who is fond of writing letters
- ☐ C A man well versed in literature
- ☐ D A man who writes letters for others

142. In the following question four alternative sentences are given. Choose the CORRECT option:

- (A) The parent who I have offended often come around after a term of years and tell me that his son was right.
- (B) The parent who I have offended often comes around after a term of years and tell me that his son was right.
- (C) The parents whom I have offended often comes around after a term of years and tells that his son was right.
- (D) The parent whom I have offended often comes around after a term of years and tells me that his son was right.

143. Select the best word to complete the sentence. The ant marched quickly back to _ home.

- (A) Its
- (B) It's
- (C) Their
- (D) its'

144. Identify the MISTAKE in the following question: It has been calculated that unless the growth is checked, there will only be enough room on Earth for people to stand by.

- (A) Has been calculated
- (B) Is checked
- (C) There will only be
- (D) Stand by

145. The manager accepted the cashier's _____ for coming late.

- (A) expalanation
- (B) explanation
- (C) explnasion
- (D) explanation

146. Identify the mistake that needs to be corrected. Stevens was very delighted to see that he was declared more popular than any talk show just in the USA.

- (A) Very
- (B) To see that
- (C) Than any
- (D) The USA

147. Identify the error and choose the correct option: The first space traveller was dennis tito from united states

- (A) The first space traveller was Dennis Tito from the United States.
- (B) The First Space Traveller was Dennis Tito, from, the United states.
- (C) The first space traveller was Dennis Tito-from the United states.
- (D) The first space traveller was Dennis Tito, from the United States.

148. Unless you work hard, you will not get good results. This sentence is:

- (A) Compound
- (B) Complex
- (C) Compound- complex
- (D) Simple

149. "Despite the complicated situation, she remained _, calmly assessing her options before deciding." Fill in the blank with the appropriate choice:

- | | |
|------------------------------------|---------------------------------|
| ☐ A Composed | ☐ B Frantic |
| ☐ C Hysterical | ☐ D Erratic |

150. My friend has a fine _ of old stamps.

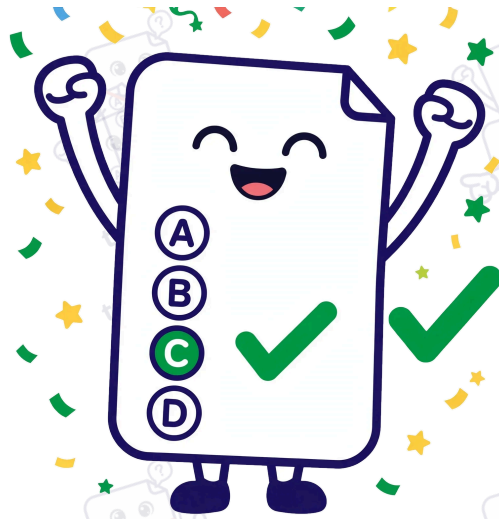
- | | |
|-------------------------------|------------------------------------|
| ☐ A Group | ☐ B Bridge |
| ☐ C Band | ☐ D Collection |

Answer key

Tap any answer to open its full explanation on TestUstad.

Model Paper 1

1	C	2	D	3	B	4	C	5	C	6	B	7	D	8	B	9	A	10	D
11	C	12	C	13	B	14	B	15	D	16	C	17	A	18	D	19	B	20	D
21	C	22	D	23	A	24	A	25	B	26	D	27	C	28	D	29	A	30	A
31	D	32	A	33	A	34	D	35	D	36	A	37	C	38	B	39	D	40	D
41	C	42	D	43	C	44	A	45	B	46	A	47	C	48	C	49	B	50	B
51	B	52	B	53	A	54	C	55	C	56	D	57	A	58	C	59	B	60	A
61	C	62	B	63	A	64	B	65	D	66	B	67	C	68	B	69	C	70	A
71	D	72	C	73	D	74	A	75	B	76	A	77	A	78	A	79	A	80	D
81	D	82	A	83	A	84	A	85	B	86	D	87	A	88	A	89	C	90	B
91	D	92	A	93	C	94	D	95	D	96	D	97	C	98	D	99	B	100	B
101	B	102	C	103	A	104	B	105	A	106	D	107	C	108	A	109	C	110	B
111	D	112	D	113	A	114	D	115	A	116	C	117	A	118	C	119	B	120	B
121	B	122	B	123	B	124	C	125	A	126	D	127	D	128	D	129	B	130	C
131	A	132	B	133	A	134	A	135	C	136	B	137	A	138	A	139	D	140	D
141	C	142	D	143	A	144	D	145	D	146	C	147	A	148	C	149	A	150	D



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