MENIIT

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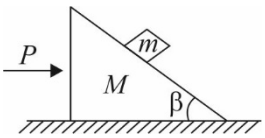
ADMISSION TEST (NEET)

SAMPLE PAPER Set-1

COURSE : XII (One Year Medical)

PHYSICS

1. Two wooden blocks are moving on a smooth horizontal surface such that the mass m remains stationary with respect to the block of mass M as shown in figure. The magnitude of force P is:



(A) $(M + m)\, g \tan \beta$ (B) $g \tan \beta$ (C) $mg \cos \beta$ (D) $(M + m)\, g \operatorname{cosec} \beta$

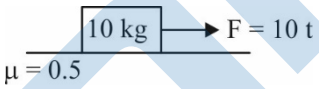
2. A toy car of mass 20 kg is moving at 10 m/s^2 and another toy truck of mass 10 kg is moving at 40 m/s^2 along a straight line. The acceleration of centre of mass of the two is

(A) 10 m/s^2 (B) 20 m/s^2 (C) 40 m/s^2 (D) zero

3. If the value of 'g' acceleration due to gravity, at earth surface is 10 m/s^2, its value in m/s^2 at the centre of the earth, which is assumed to be a sphere of radius 'R' metre and uniform mass density is:

(A) 5 (B) 10/R (C) 10/2R (D) Zero

4. A block is initially at rest. The friction force acting on the block at time t = 4 sec will be:



(A) 50 N (B) 30 N (C) 25 N (D) 40 N

5. Assuming earth to be a sphere of a uniform density, what is the value of gravitational acceleration in a mine 100 km below the earth's surface? (Given R = 6400 km)

(A) 9.65 m/s^2 (B) 7.64 m/s^2 (C) 5.06 m/s^2 (D) 3.10 m/s^2

6. A spring of spring constant k is broken in the length of ratio 1 : 3. The spring constant of larger part will be:

(A) $\frac{4k}{3}$ (B) $\frac{2k}{3}$ (C) $\frac{k}{3}$ (D) $\frac{5k}{3}$

7. A rocket of initial mass M_0 starts from rest eject gases with exhaust velocity v_0. The mass of rocket when velocity of rocket is $2v_0$ is

(A) $M_0\, e^{-2}$ (B) $M_0\, e$ (C) $M_0\, e^2$ (D) $2M_0$

8. A wire has a mass (0.3 ± 0.003) g, radius (0.5 ± 0.005) mm and length (6 ± 0.06) cm. The maximum percentage error in the measurement of density is:

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

9. A body is released from the top of a tower of height H metre. After 2 seconds it is stopped and then instantaneously released. What will be its height after next 2 seconds?

(A) (H – 5) metre (B) (H – 10) metre (C) (H – 20) metre (D) (H – 40) metre

10. A metal ball falls from a height of 32 metre on a steel plate. If the coefficient of restitution is 0.5, to what height will the ball rise after second bounce?

(A) 2m (B) 4m (C) 8m (D) 16m

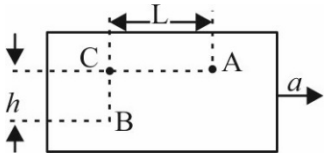
11. A ball of mass m_1 makes a head on elastic collision with a ball of mass m_2 which is initially at rest. The transfer of kinetic energy to the second ball is maximum when:

(A) $m_1 >> m_2$ (B) $m_1 = m_2$ (C) $m_1 << m_2$ (D) $m_1 \leq m_2$

12. If θ be the angle between two vectors $\vec{P}$ and $\vec{Q}$, then $\vec{P}\cdot(\vec{Q}\times\vec{P})$ is equal to

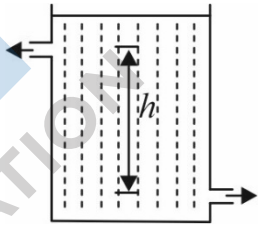
(A) zero (B) $P^2Q\cos\theta$ (C) $PQ^2\sin\theta$ (D) PQ^2

13. A sealed tank containing a liquid of density ρ moves with a horizontal acceleration a, as shown in the figure. The difference in pressure between the points A and B is:



(A) $h\rho g$ (B) $L\rho a$ (C) $h\rho g - L\rho a$ (D) $h\rho g + L\rho a$

14. There are two identical small holes on the opposite sides of a tank containing a liquid. The tank is open at the top. The difference in height between the two holes is h. As the liquid comes out of the two holes, the tank will experience a net horizontal force proportional to:



(A) $\sqrt{h}$ (B) h

(C) $h^{3/2}$ (D) h^2

15. A particle of mass m with velocity v collides head on with another identical mass at rest elastically. The velocity of the first particle just after collision is

(A) 2v (B) v (C) v/2 (D) Zero

16. A reference frame attached to the earth:

(A) is an inertial frame by definition

(B) cannot be an inertial frame because the earth is revolving round the sun

(C) is an inertial frame because Newton's law are applicable in this frame

(D) is an inertial frame because the earth is rotating about its own axis

17. A man pushes a wall and fails to displace it. Work done by him is:

(A) zero (B) negative

(C) maximum (D) positive, but not maximum

18. Centre of mass is a point:

(A) which is geometric centre of a body

(B) from which distance of particles are same

(C) where the whole mass of the body is supposed to concentrated

(D) which is the origin of reference frame

19. The angular momentum of a moving body remains constant if:

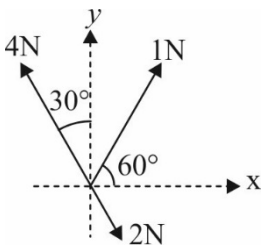
(A) net external force is applied (B) net pressure is applied

(C) net external torque is applied (D) net external torque is not applied

20. A gas flows with a velocity v along a pipe of cross-sectional area S and bent an angle of 90° at a point A. What force does the gas exert on the pipe at A if its density is ρ ?

(A) $\dfrac{\sqrt{2}\,Sv}{\rho}$ (B) $\sqrt{2}Sv^2\rho$ (C) $\dfrac{\sqrt{3}Sv^2\rho}{2}$ (D) $\sqrt{3}Sv^2\rho$

21. Three forces acting on a body are shown in figure. To have the resultant force only along the y-direction, the magnitude of the minimum additional force needed is:



(A) $\frac{\sqrt{3}}{4}$ N (B) $\sqrt{3}$ N

(C) 0.5 N (D) 1.5 N

22. A uniform metal disc of radius R is taken and out of it a disc of radius R/2 is cut-off from the end. The centre of mass of the remaining part will be:

(A) R/4 from the centre (B) R/3 from the centre

(C) R/5 from the centre (D) R/6 from the centre

23. A tank is filled with water of density 1 g/ cm^3 and oil of density 0.9 g/ cm^3. The height of water layer is 100 cm and of the oil layer is 400 cm. If g = 980 cm/s^2, then the velocity of efflux from an opening in the bottom of the tank is:

(A) $\sqrt{900\times980}$ cm/s (B) $\sqrt{100\times980}$ cm/s

(C) $\sqrt{920\times980}$ cm/s (D) $\sqrt{950\times980}$ cm/s

24. A cylinder of height h is placed on an inclined plane, the angle of inclination of which is slowly increased. It begins to topple when the angle of inclination is 45°. What is the radius of the cylinder?

(A) h (B) $\frac{3}{4}h$ (C) $\frac{1}{2}h$ (D) $\frac{1}{4}h$

25. The radius and mass of earth are increased by 0.5%. Which of the following statements is not true at the surface of the earth?

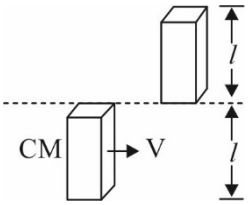
(A) g will increase (B) g will decrease

(C) Escape velocity will remain unchanged (D) Potential energy will remain unchanged.

26. A particle of mass 4 m at rest explodes into three fragments. Two of the fragments each of mass m each move with speed v at right angles to each other. The kinetic energy released in the process is:

(A) $2\,mv^2$ (B) $\frac{3}{2}mv^2$ (C) $\frac{1}{2}mv^2$ (D) $3\,mv^2$

27. A bar of mass m & length l is in pure translatory motion with its centre of mass velocity v. It collides with and sticks to another identical bar at rest as shown in figure. Assuming that after collision it becomes one composite bar of length $2l$, the angular velocity of the composite bar will be:



(A) $\frac{3v}{4l}$, clockwise (B) $\frac{4v}{3l}$, ant-clockwise

(C) $\frac{3v}{4l}$, ant clockwise (D) $\frac{4v}{3l}$, clockwise

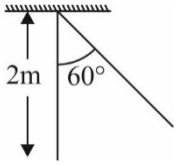
28. An object of mass 3 kg is at rest. Now a force of $\vec{F}=6t^2\hat{i}+4t\hat{j}$ is applied on the object then velocity of object at t = 3 sec. is:

(A) $18\hat{i}+3\hat{j}$ (B) $18\hat{i}+6\hat{j}$ (C) $3\hat{i}+18\hat{j}$ (D) $18\hat{i}+4\hat{j}$

29. A heavy uniform chain lies on a horizontal table top. If the coefficient of friction between the chain and the table surface is 0.25, then the maximum percentage of the length of the chain that can hang off the edge of the table is:

(A) 20% (B) 25% (C) 35% (D) 45%

30. A rod of length '2m' and mass 0.5 kg is pivoted at one end as shown in figure. The increase in potential energy when $\theta = 60^\circ$ is ($g = 10\ m/s^2$)



(A) 1.25 J (B) 2.5 J (C) 5 J (D) 10 J

CHEMISTRY

31. Total number of protons in 10 g $CaCO_3$ are

(A) 4.011×10^{24} (B) 1.0478×10^{24} (C) 3.0115×10^{24} (D) 7×10^{24}

32. The total number of spectral lines emitted during the transition of an electron from 5^{th} shell to 2^{nd} shell are

(A) 11 (B) 12 (C) 8 (D) 6

33. Maximum covalency of N and B respectively are

(A) 5, 3 (B) 3, 1 (C) 3, 3 (D) 4, 4

34. If a system absorbs 1 kJ heat at constant pressure of 1atm, the system volume changes from 3 litres to 10 litres. The change in internal energy will be

(A) 993 kJ (B) 4 kJ (C) – 6 kJ (D) 0.29 kJ

35. The pH of a buffer containing 2M acetic acid and 1 M sodium acetate will be:
(K_a for $CH_3COOH = 1.8 \times 10^{-5}$)

(A) 3.74 (B) 5.04 (C) 4.74 (D) 5.26

36. The total number of angular nodes in the 3p orbitals are

(A) 0 (B) 1 (C) 2 (D) 3

37. The outer most electronic configuration of an element is $[Ar]3d^74s^2$. The atomic number of an element lying just below this element in its group will be

(A) 40 (B) 45 (C) 49 (D) 54

38. The hybridization of Xe in XeO_2F_2 is:

(A) sp^3 (B) sp^3d (C) sp^3d^3 (D) sp^3d^2

39. Which of the following is diamagnetic?

(A) O_2 (B) O_2^+ (C) O_2^- (D) O_2^{2-}

40. Which of the following are isoelectric species?

(A) BH_4^-, CH_4 and NH_4^+ (B) CO_3^{2-}, NO_3^- and BO_3^-

(C) CO_2, N_3^- and NO_2^+ (D) All of these

41. The correct order of increasing covalent character is

(A) $AlF_3 < AlCl_3 < AlBr_3 < AlI_3$ (B) $AlF_3 > AlBr_3 < AlCl_3 < AlI_3$

(C) $AlF_3 < AlBr_3 < AlI_3 < AlCl_3$ (D) $AlI_3 < AlBr_3 < AlCl_3 < AlF_3$

42. A sudden large jump between the values of second and third ionization energies of an element would be associated with which of the following electronic configuration?

(A) $1s^2 2s^2 2p^6 3s^1$ (B) $1s^2 2s^2 2p^6 3s^2 3p^1$

(C) $1s^2 2s^2 2p^6 3s^2 3p^6$ (D) $1s^2 2s^2 2p^6 3s^2$

43. When enthalpy and entropy change for a chemical reaction are -2.5×10^5 cal and 7.4 cal deg^{-1} respectively, the reaction at 298 K would be

(A) Spontaneous (B) Reversible

(C) Irreversible (D) Non-spontaneous

44. The pH of a solution of HCl is 4. The molarity of the solution is

(A) 4.0 (B) 0.4 (C) 0.0001 (D) 0.04

45. In $C + H_2O \longrightarrow CO + H_2$, H_2O acts as

(A) Oxidizing agent (B) Reducing agent

(C) Both (D) None of these

46. Which hydrogen like species will have same radius as that of first Bohr's orbit of hydrogen atom?

(A) n = 2, H (B) $n = 2, He^+$ (C) $n = 2, Li^{++}$ (D) $n = 2, Be^{3+}$

47. Which has maximum number of atoms?

(A) 4 gm of H_2 (B) 32 gm of O_2 (C) 44 gm of CO_2 (D) 64 gm of SO_2

48. For the reversible reactions:

$$NH_4^+ + 2H_2O \rightleftharpoons NH_4OH + H_3O^+ \quad K_1$$
$$NH_4^+ + OH^- \rightleftharpoons NH_4OH \quad K_2$$

then K_3 of the reaction: $H_2O + H_2O \rightleftharpoons H_3O^+ + OH^-$ is:

(A) $K_3 = K_1.K_2$ (B) $K_3 = \frac{K_2}{K_1}$ (C) $K_3 = \frac{K_1}{K_2}$ (D) $K_3 = \frac{1}{K_1 K_2}$

49. Central atom of the following compound has one lone pair of electrons and three bond pairs of electrons

(A) H_2S (B) $AlCl_3$ (C) NH_3 (D) BF_3

50. The hydrogen ion concentration of 0.1 N solution of CH_3COOH, which is 30% dissociated is

(A) 0.03 (B) 3.0 (C) 0.3 (D) 30.0

51. When a liquid boils, there is

(A) an increase in entropy (B) a decrease in entropy

(C) an increase in heat of vaporization (D) an increase in free energy

52. K_C for the reaction $A(g) + B(g) \rightleftharpoons C(g)$ is 3.0 at 400 K. In an experiment x mol of A is mixed with same number of moles of B in a 1 litre vessel. At equilibrium 3 mol of C is formed. The value of x will be

(A) 2.5 (B) 3.5 (C) 4.0 (D) 4.5

53. The solubility of Ag_2CO_3 is S. The K_{sp} for the salt is given by

(A) 2S (B) S^2 (C) $4S^3$ (D) $2S^2$

54. Which combination of the compounds and their geometry is not correct?

(A) $HgCl_2$ -linear (B) ClF_3 -V-shaped

(C) BrF_3-T-shaped (D) ICl_4^--square planar

55. Which is not an intensive property?

(A) boiling point (B) refractive index

(C) molarity (D) volume

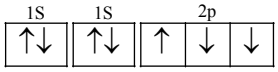
56. Which is not amphoteric?

(A) HSO_4^- (B) $H_2PO_2^-$ (C) H_2O (D) NH_3

57. The first ionization potential of Mg, Al, P and S follows the order

(A) Mg < Al < P < S (B) Al < Mg < P < S

(C) Al < Mg < S < P (D) Mg < Al < S < P

58. 

is not the ground state electronic configuration of nitrogen because it violates

(A) Aufbau principle (B) Hund's rule

(C) Pauli's principle (D) Uncertainty principle

59. In which of the following energy is absorbed?

(A) $F - F^-$ (B) $Cl \rightarrow Cl^-$ (C) $O^- \rightarrow O^{2-}$ (D) $H \rightarrow H^-$

60. The pH of 0.1 M solution of the following salts increases in the order

(A) $NaCl < NH_4Cl < NaCN < HCl$ (B) $HCl < NH_4Cl < NaCl < NaCN$

(C) $NaCN < NH_4Cl < NaCl < HCl$ (D) $HCl < NaCN < NH_4Cl < NaCl$

BIOLOGY

61. Find out the correct sequence of taxonomic categories in ascending order:

(A) Species → Family → Genus (B) Kingdom →Class → Division

(C) Order → Class → Division (D) Genus →Class → Order

62. Animals are classified into hierarchical group. In which one of the following, the largest number of species are found?

(A) Genus (B) Order (C) Family (D) Class

63. Ergot disease of rye is caused by a species of:

(A) *Rhizopus* (B) *Ustilago* (C) *Claviceps* (D) *Phytopthora*

64. Which one of the following is a slime mould?

(A) *Physarum* (B) *Thiobacillus* (C) *Anabaena* (D) *Rhizopus*

65. Which one of the following statements about mycoplasma is wrong?

(A) They are pleomorphic (B) They are sensitive to penicillin

(C) They cause diseases in plants (D) They are also called PPLO

66. Which of the following is not a group of green algae?

(A) *Chlamydomonas, Volvox* (B) *Ulothrix, Spirogyra*

(C) *Gelidium*, *Chara* (D) *Chlamydomonas* and *Chara*

67. In *Pteris*, the roots are:

(A) Tap roots (B) Coralloid roots

(C) Adventitious roots (D) Rhizoids

68. Walking ferns belongs to the genus:

(A) *Adiantum* (B) *Dryopteris* (C) *Pteris* (D) *Marsilea*

69. The roots in gymnosperms are generally ____ and in *Cycas* small specialised roots called ___ are associated with N_2 fixing cyanobacteria.

(A) Adventitious, coralloid roots (B) Tap, coralloid roots

(C) Adventitious, mycorrhizal roots (D) Tap, haustorial roots

70. Biennials are the plants which:

(A) Complete their life cycle in one growing season only

(B) Remain vegetative in first growing season and produce flowers in the next season

(C) Produce flowers twice during that life cycle

(D) Produce flowers many times during their life time

71. When the placenta is axial and the ovules are attached to it in a multilocular ovary, the placentaion is said to be axile, as in:

(A) China rose (B) Tomato (C) Lemon (D) All of these

72. Whorled phyllotaxy of leaves is characteristics of:

(A) *Hibiscus* (B) *Brassica* (C) *Alstonia* (D) *Calotropis*

73. Ground tissue of leaf is:

(A) Collenchymatous (B) Parenchymatous

(C) Called cortex (D) Always differentiated

74. On studying the T.S. of an organ a student found xylem and phloem are arranged in an alternate manner on different radii. This organ will be:

(A) Dicot root (B) Dicot leaf (C) Monocot stem (D) Dicot stem

75. Why Calvin cycle is called C3-cycle?

(A) Primary CO_2 acceptor is C3 compound

(B) Many intermediate compounds are C3 compound

(C) 1st stable product is 3 PGA which is a C3 compound

(D) None of the above

76. In stroma,

(A) enzymatic reactions incorporate CO_2 into the plant leading to ATP and $NADH_2$ formation

(B) enzymatic reactions incorporate CO_2 into plant leading to the synthesis of sugar, which in turn, forms starch

(C) light energy is captured to form glucose

(D) ATP and $NADPH_2$ are splitted and H O_2 and O_2 comes out

77. Bundle sheath cells of C4 -plants are rich in which enzyme?

(A) PEP carboxylase (B) Malate dehydrogenase

(B) Phosphofructokinase (D) RuBisCO

78. Specialised cells called heterocysts are present in

(A) dinoflagellates (B) chrysophytes

(C) archaebacterial (D) cyanobacteria

79. Methanogens belong to

(A) eubacteria (B) archaebacteria

(C) dinoflagellates (D) slime moulds

80. In fungi, the various types of spores are produced in distinct structures known as
(A) fruiting body (B) spore sac
(C) peristome (D) pollen sac

81. For naming different families in taxonomy.
(A) Animal families ends with suffix – idea
(B) Plant families ends with suffix – aceae
(C) Both vegetative and reproductive features are taken as the basis of plant classification
(D) All of the above

82. Species is considered as
(A) The largest taxon of taxonomy/classification
(B) The smallest taxon of taxonomy/classification
(C) Both smallest and the largest unit of taxonomy/classification
(D) None of the above

83. PS-I is located on the
(A) non-appressed part of grana thylakoids
(B) stroma thylakoids
(C) appressed part of grana thylakoids
(D) Both (A) and (B)

84. Emerson's enhancement effect and red drop have been instrumental in the discovery of
(A) two photosystems operating simultaneously
(B) photophosphorylation and cyclic electron transport
(C) photophosphorylation
(D) photophosphorylation and non-cyclic electron transport

85. The most obvious and technically complicated feature of all living organisms is:
(A) Reproduction (B) Growth
(C) Ability to sense their environment (D) Photosynthesis

86. In bacteria pili and fimbriae are surface structures and they:
(A) play a role in motility.
(B) play a role in sexuality.
(C) help attach the bacteria to rocks in streams
(D) all of these

87. In Z-scheme of light reaction, the participating pigment systems is/are
(A) PS-I and PS-II
(B) PS-III
(C) Carotenoid and xanthophyll
(D) PS-II

88. Which of these may not be an economic importance of bryophytes?
(A) Food for animals like birds
(B) Peat formation used as fuel
(C) In older times, *Sphagnum* was used in place of absorbant cotton
(D) Mosses along with lichens are the first organisms to colonise rocks

89. In maize, the fibrous roots develop from:
(A) Lower nodes (B) Upper nodes (C) Upper internodes (D) None of the above

90. Light compensation point is the point where
(A) gaseous exchange occurs in photosynthesis
(B) gaseous exchange does not occur in photosynthesis
(C) gaseous exchange reduces in photosynthesis
(D) light intensity become appropriate for photosynthesis

91. (A) Genetic material is basically naked, **not** surrounded by nuclear membrane
(B) Mesosome is present
Above features are **true** for
(A) Plants (B) Animals
(C) Fungi (D) Bacteria

92. Nucleolus is the site for _____
(A) tRNA synthesis (B) rRNA synthesis
(C) Aerobic respiration (D) Carbohydrate synthesis

93. Enzymes which catalyse joining of C-S bond falls
(A) Transferases (B) Lyases
(C) Hydrolases (D) Ligases

94. What is the innermost portion of mature plant cell walls called?
(A) Primary cell wall (B) Secondary cell wall
(C) Middle lamella (D) Tonoplast

95. The chemical substance most abundantly present in the middle lamella is:
(A) Calcium pectate (B) Suberin
(C) Lignin (D) Calcium phosphate

96. Mitosis differs from meiosis in:
(A) Forming four haploid cells (B) Pairing of homologous chromosomes
(C) Doubling of each chromosome and each pair showing four chromatids
(D) Duplication of chromosomes and subsequent separation of chromatids

97. Which of these is a non-reducing sugar?
(A) Sucrose (B) Glucose (C) Fructose (D) Maltose

98. Why are amino acids also called α-amino acids?
(A) They have α-carbon with amino & acid group.
(B) They are rotated clockwise.
(C) They are rotated anti-clockwise.
(D) They rotate the plane of polarized light to the right.

99. Metamerism is absent in:
(A) Platyhelminthes (B) Annelida (C) Arthropoda (D) Chordata

100. Which of the following combination of phylum and its characteristic is incorrect?
(A) Young Echinodermata – Bilateria (B) Porifera – Gastrovascular cavity
(C) Platyhelminthes – Flatworms (D) Nematoda – Roundworms, pseudocoelomate

101. Which of the following relationship was studied by Chargaff within any double stranded DNA molecule?
(A) T = C, A = G (B) A = C, C = T
(C) A + T = C + G (D) A + G = T + C

102. Centromere splits and chromatids separate in
(A) Metaphase I (B) Anaphase I
(C) Metaphase II (D) Anaphase II

103. Which are the three main layers that form the diffusion membrane?
(A) Thin squamous epithelium of alveoli, basement membrane of bronchioles and basement substance
(B) Thin squamous epithelium of alveoli, endothelium of alveolar capillaries and the basement substance
(C) Basement substance, cuboidal epithelium of alveoli and stratified epithelium of bronchiole
(D) Ciliated epithelium of trachea, endothelium of capillaries and basement substance

104. Pneumotaxic centre can moderate the functions of respiratory rhythm centre by:
(A) Reducing the duration of inspiration
(B) Increasing the duration of inspiration only
(C) First increasing and then reducing the duration of expiration
(D) Increasing the duration of expiration only

105. An Rh negative mother is pregnant for the first time with an Rh positive fetus. Just prior to birth some fetal blood cells cross the placenta into the mother. Which of the following will occur?
(A) The fetus will die before birth
(B) The mother will become Rh positive
(C) The mother will produce Rh antibodies
(D) The fetal red blood cells will become Rh negative

106. Which of the following best describes a artery?
(A) Thin-walled, elastic, and equipped with valves
(B) Thick-walled, elastic, and high pressure flow
(C) Thin-walled, muscular, and supplied with nerves
(D) Thick-walled, muscular, and low pressure flow

107. How many molecules of oxygen are carried by one molecule of haemoglobin.
(A) 6 (B) 8
(C) 2 (D) 4

108. About 97% of O_2 is transported by RBC. The remaining 3% is
(A) dissolved in plasma and transported
(B) remains in lungs
(C) attached to cell membranes
(D) inside the mitochondria

109. Select the taxon mentioned that represents both marine and fresh water species:
(A) Echinoderms (B) Ctenophora
(C) Cephalochordata (D) Cnidaria

110. The essential chemical components of many coenzymes are:
(A) Nucleic acids (B) Carbohydrates
(C) Vitamins (D) Proteins

111. Transition state structure of the substrate formed during an enzymatic reaction is:
(A) Permanent but unstable (B) Transient and unstable
(C) Permanent and stable (D) Transient but stable

112. Spindle fibres attach on to:
(A) Kinetosome of the chromosome (B) Telomere of the chromosome
(C) Kinetochore of the chromosome (D) Centromere of the chromosome

113. Which of the following is common to both ER and Golgi complex?
(A) Both are double membrane bound (B) Both have cisternae
(C) Both contain their own DNA (D) Both are semi-autonomous organelle

114. Which of the following statement is **incorrect** w.r.t. lysosomes?
(A) Lysosomes are simple tiny spherical sac-like structures
(B) They are distributed in the cytoplasm of the cell
(C) The enzymes of lysosomes work in basic condition
(D) The enzymes of lysosomes are synthesised by RER

115. In man and other mammals, air passes from outside into the lungs through.

(A) Nasal cavity, larynx, pharynx, trachea, bronchi, alveoli

(B) Nasal cavity, larynx, pharynx, trachea, bronchioles, alveoli

(C) Nasal cavity, pharynx, larynx, trachea, bronchioles, bronchi, alveoli

(D) Nasal cavity, pharynx, larynx, trachea, bronchi, bronchioles, alveoli

116. The carbon dioxide is transported via blood to lungs.

(A) In combination with haemoglobin only

(B) Dissolved in blood plasma only

(C) In the form of carbonic acid only

(D) As carbamino – haemoglobin and as bicarbonates

117. In animal cells, cytokinesis takes place by

(A) Furrow formation (B) Phragmoplast formation

(C) Cell plate formation (D) Both (A) and (B)

118. The body cavity of cockroach is called :

(A) Pseudocoel

(B) Coelom

(C) Hydrocoel

(D) Haemocoel

119. How do parasympathetic neural signals affect the working of the heart?

(A) Reduce both heart rate and cardiac output

(B) Heart rate is increased without affecting the cardiac output

(C) Both heart rate and cardiac output increase

(D) Heart rate decreases but cardiac output increases

120. Arteries are best defined as the vessels which:

(A) Carry blood from one visceral organ to another visceral organ

(B) Supply oxygenated blood to the different organs

(C) Carry blood away from the heart to different organs

(D) Break up into venoules which reunite to form a vein

★★★★★

Answer Key [Sample Paper : NEET-XII] SET-1

1	(A)	21	(C)	41	(A)	61	(C)	81	(D)	101	(C)
2	(B)	22	(D)	42	(D)	62	(D)	82	(B)	102	(D)
3	(D)	23	(C)	43	(A)	63	(C)	83	(D)	103	(B)
4	(D)	24	(C)	44	(C)	64	(A)	84	(A)	104	(A)
5	(A)	25	(A)	45	(A)	65	(B)	85	(C)	105	(C)
6	(A)	26	(B)	46	(D)	66	(C)	86	(C)	106	(B)
7	(A)	27	(C)	47	(A)	67	(C)	87	(A)	107	(D)
8	(D)	28	(B)	48	(C)	68	(A)	88	(D)	108	(A)
9	(A)	29	(A)	49	(C)	69	(B)	89	(A)	109	(D)
10	(A)	30	(B)	50	(A)	70	(B)	90	(B)	110	(C)
11	(B)	31	(C)	51	(A)	71	(D)	91	(D)	111	(B)
12	(A)	32	(D)	52	(C)	72	(C)	92	(B)	112	(C)
13	(D)	33	(C)	53	(C)	73	(B)	93	(D)	113	(B)
14	(B)	34	(D)	54	(B)	74	(A)	94	(B)	114	(C)
15	(D)	35	(C)	55	(D)	75	(C)	95	(A)	115	(D)
16	(B)	36	(B)	56	(B)	76	(B)	96	(D)	116	(D)
17	(A)	37	(B)	57	(B)	77	(D)	97	(A)	117	(A)
18	(C)	38	(B)	58	(B)	78	(D)	98	(A)	118	(D)
19	(D)	39	(D)	59	(C)	79	(B)	99	(A)	119	(A)
20	(B)	40	(D)	60	(B)	80	(A)	100	(B)	120	(C)