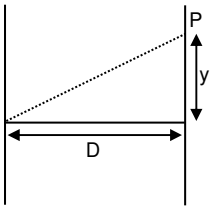
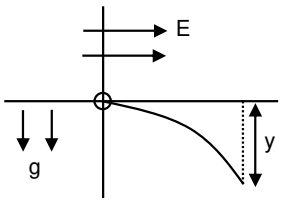
PART - A (PHYSICS)

1. Which logic gate has only one input and one are put.

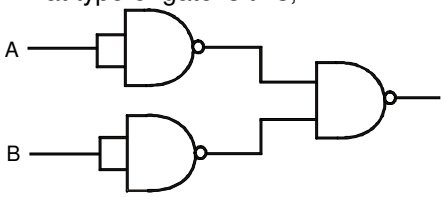
2. In YDSE there is a point P on the screen. What is path difference at point P. Given d = 1 mm, y = 2 mm D = 1 m :-



3. $\frac{Q}{m} =$ was given E is given what is horizontal displacement of charge particle when it decend a distance of y meter. Given $\frac{Q}{m} = 9.6 \times 10^7 c/kg$, E = 5 × 10^5 V/m , y = 84 cm, g = 10 m/s^2

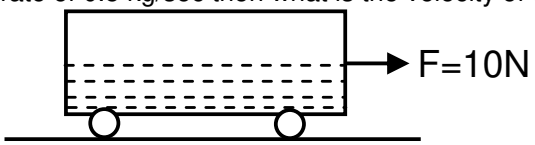


4. What type of gate is this,

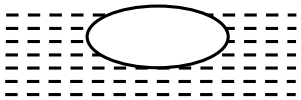


5. Electric field inside the capacitor is E and dielectric constant of material is k. Find charge density σ on the plates. Given $E = 6 \times 10^5$ V/m, k = 6

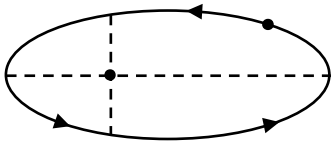
6. A cart has mass 2 metric tone and send of 1 metric tone is inside the cart. Now sand start to leak with rate of 0.5 kg/sec then what is the velocity of cart when total sand has come out from the cart.



7. A ring of radius R is kept on water surface. Surface tension of water is T and mass is m. What force required to lift the ring from water surface?



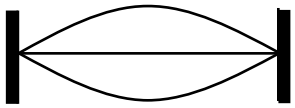
8. The minimum and maximum distance of planet from sun is r_{min} and r_{max}. If velocity at r_{max} is V_0 find velocity at r_{min}.



9. If a gas changes its temperature from T_1 to T_2 its pressure is P. If C_P is given of the gas what is change in entropy.

10. If coefficient of performance of A refrigerator is β and heat given to surrounding is Q_2 then what is heat absorbed.

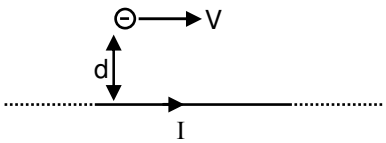
11. Frequency of the wave is 50 Hz. Length is 1 meter and mass of string is 10 gm. What is tension in the string.



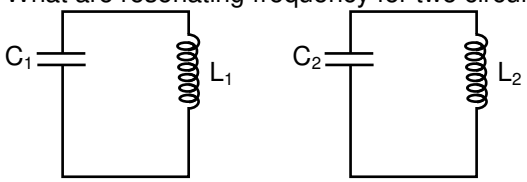
12. What is lowest wavelength of paschen series.

13. In a solenoid A rod of relative permeability μ_r is kept. Total number of turn are N, Area of solenoid is A, length of solenoid is ℓ. What is self inductance of solenoid.

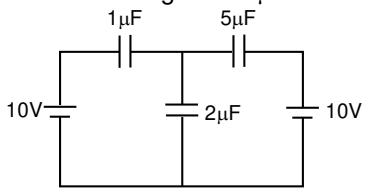
14. Electron is moving parallel to wire. What is force on electron.



15. What are resonating frequency for two circuits.



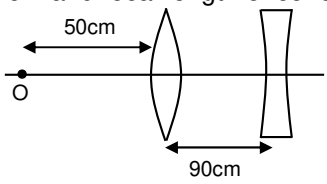
16. Find the charge on 2 μF.



17. In LCR circuit inductance is L, resistance is R and quality factor is Q then find capacitance

18. In forced vibration m = 10 gm, f = 100 Hz and driver force F = 100 cos (20 πt) then what is amplitude of particle

19. Focal length of convex lens = 100 cm and focal length of concave lens = – 8 cm. Find the magnification.



20. The radius of two bohr radius of a hydrogen like atom are r_1 and r_2. Find the wave length of photon when electron jumps from r_2 to r_1.

21. **Assertion :** In adiabatic process change in internal energy is equal to work done on gas.
Reason : In adiabatic process no heat exchange with surrounding.

(1) If both assertion and reason are true and reason is the correct explanation of assertion.
(2) If both assertion and reason are true but reason is not the correct explanation of assertion.
(3) If assertion is true but reason is false.
(4) If both assertion and reason are false.

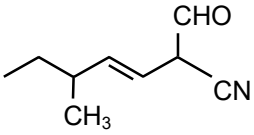
22. **Assertion :** Gallium arsenide phosphide is used in red L.E.D.
Reason : Its work function lies b/w 1.65 ev.

(1) If both assertion and reason are true and reason is the correct explanation of assertion.
(2) If both assertion and reason are true but reason is not the correct explanation of assertion.
(3) If assertion is true but reason is false.
(4) If both assertion and reason are false.

23. **Assertion :** Viscous force is measurement of resistance of liquid.
Reason : It converts kinetic energy into heat energy of liquid.

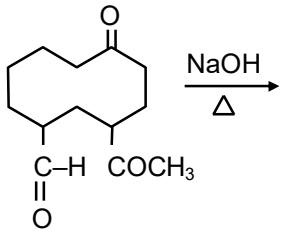
(1) If both assertion and reason are true and reason is the correct explanation of assertion.
(2) If both assertion and reason are true but reason is not the correct explanation of assertion.
(3) If assertion is true but reason is false.
(4) If both assertion and reason are false.

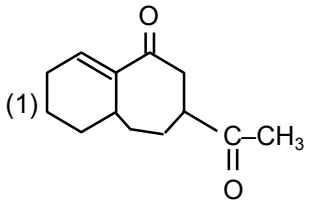
PART - B (CHEMISTRY)

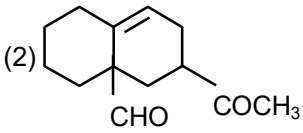
24. Give IUPAC name of : 

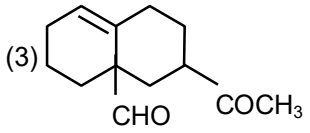
(1) 2–cyano–5–methyl hept–3–enal
(2) 2–formyl–5–methyl hept–3–enenitrile
(3) 2–oxo–5–methyl hept–3–ene–1–nitrile
(4) 1–cyano–1–formyl–4–methyl hex–2–ene

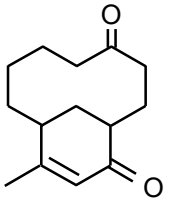
25. Final product of given Reaction :



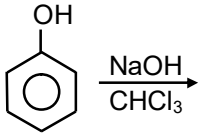
(1) 

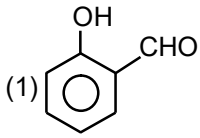
(2) 

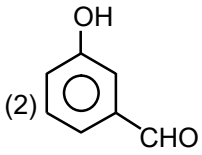
(3) 

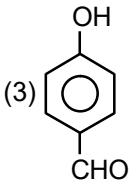
(4) 

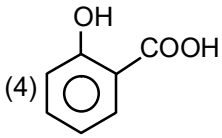
26. Final Product of given reaction :



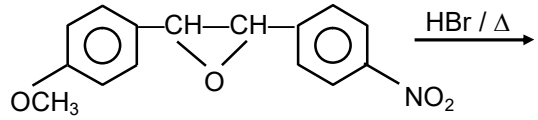
(1) 

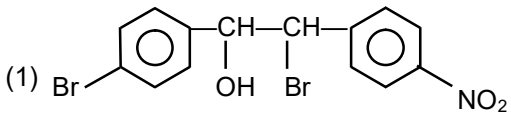
(2) 

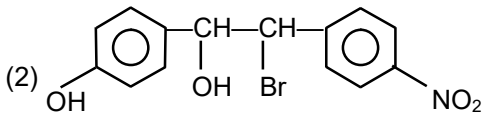
(3) 

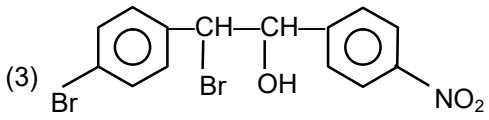
(4) 

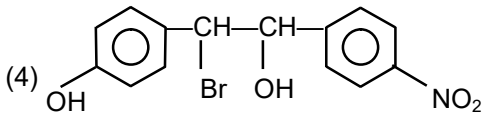
27. Find product of given reaction :



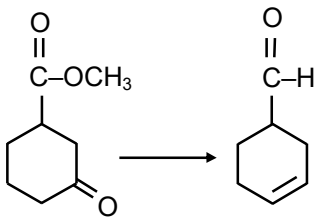
(1) 

(2) 

(3) 

(4) 

28. Give correct sequences of reaction for following conversion :



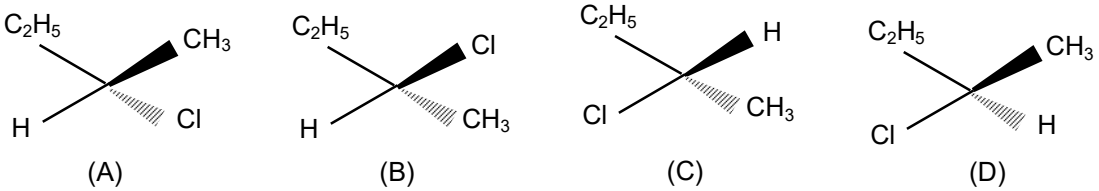
(1) DIBAL –H, $NaBH_4$, $H_3O^{\oplus}/\Delta$

(2) $H_3O^{\oplus}/\Delta$, $NaBH_4$, DIBAL–H

(3) $NaBH_4$, DIBAL–H, $H_3O^{\oplus}/\Delta$

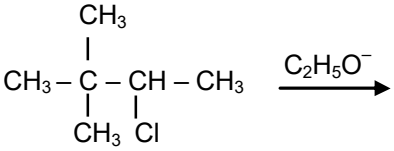
(4) DIBAL–H, $H_3O^{\oplus}/\Delta$, $NaBH_4$

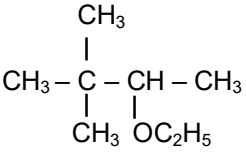
29. Which of the following are not enantiomer pair.

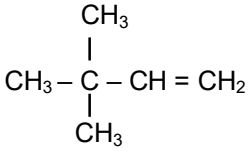


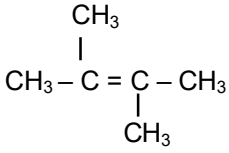
(1) A & B (2) A & D (3) B & D (4) C & D

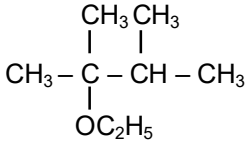
30. Major product of following reaction:



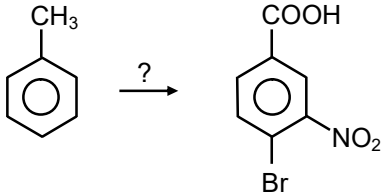
(1) 

(2) 

(3) 

(4) 

31. What are the suitable reagent for following conversion



(1) $Br_2/FeBr_3$, $KMnO_4$, HNO_3 / H_2SO_4 (2) $KMnO_4$, $Br_2/FeBr_3$, HNO_3
(3) HNO_3, $Br_2/FeBr_3$, $KMnO_4$ (4) HNO_3, $KMnO_4$, Br_2 / $FeBr_3$

32. Monomers of Natural Rubber and Neoprene are Respectively :

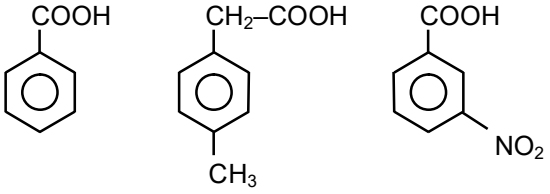
(1) $CH_3 - \underset{\displaystyle CH_3}{\underset{|}{C}} = CH - CH_3$, $CH_3 - \underset{\displaystyle Cl}{\underset{|}{C}} = CH - CH_3$

(2) $CH_2 = \underset{\displaystyle CH_3}{\underset{|}{C}} - CH = CH_2$ $CH_2 = \underset{\displaystyle Cl}{\underset{|}{C}} - CH = CH_2$

(3) $CH_2 = CH - CH = CH_2$, $CH_2 = CH - Cl$

(4) $CH_2 = \underset{\displaystyle Cl}{\underset{|}{C}} - CH = CH_2$ $CH_2 = \underset{\displaystyle CH_3}{\underset{|}{C}} - CH = CH_2$

33. Correct order of Acidic strength :



$CH_3–CH_2–COOH$

(i) (ii) (iii) (iv)

(1) iii > ii > i > iv (2) I > iii > ii > iv (3) iv > i > ii > iii (4) iii > iv > i > iii

34. Blue colour disappears in which solution by passing SO_2

(1) CrO_4^{2-} , + H_2SO_4 (2) I_2 + Starch (3) $CuSO_4$ (4) I_2

35. In HCP of A, $\frac{1}{3}$ of tetrahedral are occupied by B. What is the formula for compound:

(1) A_2B_3 (2) A_3B_2 (3) AB_3 (4) A_2B

36. Time taken to completely (in hr) decompose 36 g water by passing 3A current is :

(1) 35.8 hrs (2) 40 hr (3) 51.8 hr (4) 22.5 hr

37. In which of the following shape is same but hybridization is different:

(1) ICl_2^-, XeF_2 (2) SO_2, NO_2^+ (3) SO_2, NH_2^- (4) CO_2, SO_2

38. $CaCO_3(s) \longrightarrow CaO(s) + CO_2(g)$ at const Temp, the pressure will increase if :

(1) Vol. of container increase (2) Temperature increases

(3) Concentration of CaO increases. (4) Concentration of $CaCO_3$ increases.

39. At constant temperature Gases A & B, density of (A) is twice that of B and molar mass of A is half of B. Ratio of their pressures is $\frac{P_A}{P_B}$ is :

(1) ¼ (2) 1 (3) 4 (4) 2

40. Correct order of bond angle is :

(1) $SO_2 < H_2S$ (2) $SO_2 < H_2O$ (3) $NH_3 < H_2O$ (4) $NH_3 < SO_2$

41. Time taken for 12.8 g of a radioactive substance to decay to 0.4 g, is (half life is 138s)

(1) 720 s (2) 690 s (3) 345 s (4) 69 s

42. % s-character of N–H bond is maximum in :

(1) N_2H_2 (2) N_2H_4 (3) NH_3 (4) NH_4^+

43. $MnO_2 + NaCl \xrightarrow[H_2SO_4]{H^+}$ choose incorrect statement for above reaction.

(1) Mn goes from +4 to +2 (2) Cl^- is oxidized

(3) Cl_2 yellow gas is released. (4) SO_4^{2-} reduces to SO_2

44. Ethylene glycol is used as antifreeze to reduce freezing point of water to –2.4ºC.

What mass of antifreeze is required for 2L water? (K_f water = 1.86 $\frac{K\ kg}{mole}$)

(1) 16 kg (2) 160 g (3) 1.60 kg (4) 16 g

45. What is entropy change in 2 mol N_2, when its temperature is taken from 400 K to 800 K, adiabatically.

(1) $30\frac{J}{K}$ (2) $60\frac{J}{K}$ (3) $40\frac{J}{K}$ (4) $20\frac{J}{K}$

46. Calculate ionisation constant for pyridinium chloride,
Given that H^+ ion concent ration is 3.6×10^{-4} M and its concentration is 0.02 M.
(1) 6.48×10^{-2} (2) 6×10^{-6} (3) 6×10^{-8} (4) 12×10^{-8}

47. **Assertion :** Benzylamine is less basic then Ethylamine
Reason : Benzene Show +I Effect
(1) If both assertion and reason are true and reason is the correct explanation of assertion.
(2) If both assertion and reason are true but reason is not the correct explanation of assertion.
(3) If assertion is true but reason is false.
(4) If both assertion and reason are false.

48. **Assertion :** C_6H_5–MgBr Reacts with CO_2 and forms benzoic acid.
Reason : CO_2 is electrophile.
(1) If both assertion and reason are true and reason is the correct explanation of assertion.
(2) If both assertion and reason are true but reason is not the correct explanation of assertion.
(3) If assertion is true but reason is false.
(4) If both assertion and reason are false.

49. **Assertion :** Boiling point of α–D-glucose is less then β–D-glucose.
Reason : β–D–glucose is more stable then α–D-glucose
(1) If both assertion and reason are true and reason is the correct explanation of assertion.
(2) If both assertion and reason are true but reason is not the correct explanation of assertion.
(3) If assertion is true but reason is false.
(4) If both assertion and reason are false.

50. **Assertion :** Cimetidine is an antacid.
Reason : Antacid increases secretion of HCl from gastric cells.
(1) If both assertion and reason are true and reason is the correct explanation of assertion.
(2) If both assertion and reason are true but reason is not the correct explanation of assertion.
(3) If assertion is true but reason is false.
(4) If both assertion and reason are false.

51. **Assertion :** In Free expansion, $\Delta U = 0$
Reason : No work is done in free expansion.
(1) If both assertion and reason are true and reason is the correct explanation of assertion.
(2) If both assertion and reason are true but reason is not the correct explanation of assertion.
(3) If assertion is true but reason is false.
(4) If both assertion and reason are false.

52. **Assertion :** $NaCl_{(aq)}$ electrolysis produces Na metal.
Reason : Na^+ is obtained at cathode.
(1) If both assertion and reason are true and reason is the correct explanation of assertion.
(2) If both assertion and reason are true but reason is not the correct explanation of assertion.
(3) If assertion is true but reason is false.
(4) If both assertion and reason are false.

53. **Assertion :** O_2F_2 converts Pu to PuF_6.
Reason : O_2F_2 is used to remove unreacted Pu from nuclear reaction.
(1) If both assertion and reason are true and reason is the correct explanation of assertion.
(2) If both assertion and reason are true but reason is not the correct explanation of assertion.
(3) If assertion is true but reason is false.
(4) If both assertion and reason are false.

54. **Assertion :** Solubility of gases increases with increase in pressure.
Reason : Dissolution of gas in liquid is exothermic.
(1) If both assertion and reason are true and reason is the correct explanation of assertion.
(2) If both assertion and reason are true but reason is not the correct explanation of assertion.
(3) If assertion is true but reason is false.
(4) If both assertion and reason are false.

55. **Assertion :** SO_2 is more covalent than SeO_2
Reason : Covalent radius of Se is more than S
(1) If both assertion and reason are true and reason is the correct explanation of assertion.
(2) If both assertion and reason are true but reason is not the correct explanation of assertion.
(3) If assertion is true but reason is false.
(4) If both assertion and reason are false.

56. **Assertion :** In O/W emulsion, soap is mixed
Reason : Soap reduces surface tension
(1) If both assertion and reason are true and reason is the correct explanation of assertion.
(2) If both assertion and reason are true but reason is not the correct explanation of assertion.
(3) If assertion is true but reason is false.
(4) If both assertion and reason are false.

57. **Assertion :** $[Co(NH_3)_6]^{3+} \rightarrow [Co(NH_3)_5\ H_2O]^{3+}$ colour continuously changes.
Reason : Larger wavelength will be absorbed
(1) If both assertion and reason are true and reason is the correct explanation of assertion.
(2) If both assertion and reason are true but reason is not the correct explanation of assertion.
(3) If assertion is true but reason is false.
(4) If both assertion and reason are false.

PART - C (BIOLOGY)

58. Which is incorrect about E.coli

(1) It is diploid

(2) It is found in human intestine

(3) Transformation, Transduction, Conjugation can show

(4) Can be used in Recombinant DNA technology

59. Codons of alanine

(1) CUC, CUA, CUG

(2) GGG, GGU, GGA

(3) GUG, GUC, GUA

(4) GCU, GCC, GCG

60. Which of the following can synthesize all types of RNA

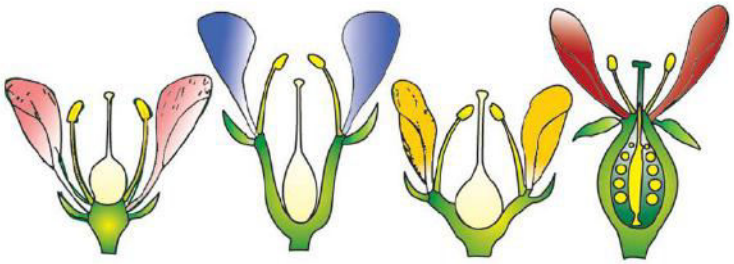
(1) r-RNA

(2) t-RNA

(3) m-RNA

(4) DNA

61. Diagram of hypogynous, perigynous, Epigynous are given respectively



Find out the correct option for the above diagrams a,b,c,d that has correct examples

(1) a-Mustard, b- Rose, c- Plum, d- Guava

(2) a-Cucumber, b- Plum, c- Rose, d- Brinjal

(3) a-China rose, b- Guava, c- Rose, d-Mustard

(4) a-Mustard, b- Rose, c- Plum, d- Brinjal

62. Which of the following are synthetic phytohormone

(1) IBA, IAA, BAP

(2) 2,4-D, NAA, BAP

(3) Zeatin, IBA, IAA

(4) NAA, IAA, 2,4-D

63. Which of the following is correct

(1) Cyanobacteria makes mycorrhiza Which absorbs phosphate from soil

(2) Azotobacter is symbiotic nitorgen fixing bacteria

(3) In paddy field, cyanobacteria is used to decrease soil microbes

(4) Methanobacterium feed cellulose in anaerobic condition

64. The genetic material of ϕ×174 is

(1) SSDNA (2) SSRNA (3) DSDNA (4) DSRNA

65. Heterozygous tall is crossed with recessive parent .What will the percentage of homozygous recessive

(1) 75 % (2) 25 % (3) 100 % (4) 50 %

66. In *Mirablilis jalapa,* red flowered plant is crossed with white flowered plant. What will the phenotypic ratio in F_2 generation.

(1) 1 : 1 : 1 (2) 1 : 2 : 1 (3) 3 : 1 (4) 1 : 1

67. Which of the following is correct about somaclone plants

(1) Somatic hybrid (2) Same genetic constitution

(3) Different genetic constitution (4) None

68. Fishes in eutrophic lake is died due to

(1) Oxygen (2) Nutrient enrichment

(3) CO_2 (4) None

69. Which is required in glycolysis

(1) ATP, ADP, NAD^+, Glucose, cytoplasmic enzymes

(2) FAD^+, ADP, ATP, Glucose, cytoplasmic enzymes

(3) $NADP^+$, ATP, GTP, Glucose, cytoplasmic enzymes

(4) NAD^+, $NADP^+$, ATP, Glucose, cytoplasmic enzymes

70. Which is correct link reaction

(1) Pyruvic acid + NAD^+ + Co-A $\xrightarrow[Mg^{++}]{\text{Pyruvate dehydrogenase}}$ Acetyl Co-A + $NADH.H^+$ + CO_2

(2) Pyruvic acid + FAD^+ + Co-A $\xrightarrow[Mg^{++}]{\text{Pyruvate dehydrogenase}}$ Acetyl Co-A + $FADH.H^+$ + CO_2

(3) Pyruvic acid + $NADP^+$ + Co-A $\xrightarrow[Mg^{++}]{\text{Pyruvate dehydrogenase}}$ Acetyl Co-A + $NADPH.H^+$ + CO_2

(4) Pyruvic acid + NAD^+ + Co-A $\xrightarrow[Mg^{++}]{\text{Pyruvate dehydrogenase}}$ Acetyl Co-A + $NADH.H^+$

71. Match the Column-I & Column-II

(i) Auxin	(A) Ripening of fruit
(ii) ABA	(B) Bolting
(iii) Gibberellin	(C) Sensitivity against adverse conditions
(iv) Ethephon	(D) parthenocarpy in tomato

(1) i–C, ii–D, iii–B, iv–A (2) i–D, ii–C, iii–A, iv–B

(3) i–D, ii–C, iii–B, iv–A (4) i–A, ii–C, iii–B, iv–D

72. Select the incorrect statement

(1) Microelements involve N, P, Mn, Cu,Mo.

(2) The concentration of microelements is 10 m mole/kg.

(3) If the concentration is more than 10 m mole/kg, they become toxic

(4) The deficiency of microelements causes symptoms of disease

73. All the digestive enzymes like carbohydrase, protease, lipase, DNase, RNase are found in :

(1) Lysosome (2) peroxisome (3) Glyoxysome (4) Vacuole

74. RNA is found in :

(1) Chloroplast, mitochondria (2) Golgibody, Chloroplast

(3) Lysosome, Mitochondria (4) Centrioles, Mitochondria

75. The value of 2,4-D is 25 ppm. How many amount of 2,4-D should require for making its 5 litres, 15 litres and 25 litres solutions respectively

(1) 25 gm, 50 gm, 75 gm (2) 50 gm, 175 gm, 525 gm

(3) 250 gm, 750 gm, 1250 gm (4) 125 gm, 375 gm, 625 gm

76. **Assertion :** C_3 cycle is found in all plant

Reason : Kranz anatomy is found in C_3 plant

(1) Both A and R are true and R is the correct explanation of A.

(2) Both A and R are true but R is not correct explanation of A.

(3) A is true but R is false.

(4) A and R are false.

77. What was the reason of mass extinction during Mesozoic era?

(1) Due to meteorite falling on earth
(2) Due to continental drift
(3) Glaciation
(4) Volcanic eruption

78. Which hormone helps in detection of pregnancy?

(1) hCG
(2) hPL
(3) Prolactin
(4) Progesterone

79. Match the following and select the correct option –

A.	LSD	i.	CNS depressant
B.	Morphine	ii.	Hallucinogen
C.	Cocaine	iii.	Effects cardiovascular system
D.	Nicotine	iv.	Interferes with dopamine

Options:

(1) A-ii, B-i, C-iv, D-iii
(2) A-iii, B-1, C-iv, D-ii
(3) A-i, B-iv, C-ii, D-iii
(4) A-iv, B-i, C-iii, D-ii

80. Which among the following alcoholic beverage will be formed by distillation?

(1) Brandy
(2) Wine
(3) Beer
(4) All

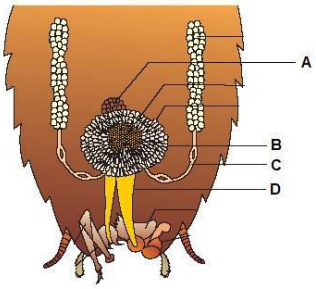
81. Optimum pH for activation of pepsinogen is–

(1) 1.5 - 2
(2) 6
(3) 8
(4) 10

82. Which of the following is correct?

Column-I		**Column-II**	
(1)	Blood & lymph	(a)	Connective tissue
(2)	Bones and muscles	(b)	Skeletal tissue
(3)	Skin epidermis	(c)	Nervous tissue
(4)	Cartilage and muscles	(d)	Connective tissue

83. Select the option having correct matching for different parts of male reproductive system of cockroach –



(1) A - Phallic gland, B- Seminal vesicle, C- Vas deferens, D - Ejaculatory duct

(2) A - Phallic gland, B- Seminal vesicle, C- Ejaculatory duct, D - Vas deferens

(3) A - Seminal vesicle, B- Phallic gland, C- Vas deferens, D - Ejaculatory duct

(4) A - Phallic gland, B- Vas deferens, C- Seminal vesicle, D - Ejaculatory duct

84. Select the option with correct matching of animal group and its examples –

(1) Mammalian - *Platypus, Rattus, Camelus, Pavo*

(2) Aves - *Neophron, Struthio, Sphenodon, Passer*

(3) Reptilia - *Calotes, Heloderma, Uromastix, Draco*

(4) Amphibia - *Bufo, Hyla, Rhacophorus, Ophiosaurus*

85. Select the correct matching–

(1) Cuboidal epithelium - Alveolar wall

(2) Columnar epithelium - Stomach

(3) Ciliated epithelium - Intestine

(4) Squamous epithelium - Germinal epithelium

86. Cross bridges between actin and myosin is broken up by –

(1) Hydrolysis of ATP

(2) Binding of ATP to the myosin head

(3) Binding of calcium to the subunit of troponin

(4) Exposure of tropmyosin

87. Only erythropoiesis occurs in –

(1) Erythroblast (2) Proerythroblast

(3) Myeloid tissue (4) Haemocytoblast

88. Which among the following hormone initiate development of secondary sexual characters in female?

(1) GnRH (2) Estradiol

(3) Estriol (4) Progesterone

89. Which of the following are about 90% absorbed in the nephron?
(1) Glucose and amino acids – Active process
(2) Glucose and amino acids – Passive process
(3) Cl^-, NH_3, K^+ – Passive process
(4) Cl^-, NH_3, K^+ – Active process

90. Infective stages of malarial parasite is found in -
(1) Salivary glands of mosquito
(2) Intestine of mosquito
(3) Haemolymph of mosquito
(4) Stomach wall of mosquito

91. Full form of GEAC is –
(1) Genetic engineering approval committee
(2) Genetic engineering advisory council
(3) Genetic export approval committee
(4) Global environmental advisory committee

92. **Assertion :** Eli Lily prepared two DNA sequences corresponding to A and B chain of human insulin and introduced them in the plasmid of *E.coli* to produce polypeptide chains of insulin.
Reason : Chains A and B were produced separately, extracted and combined by creating disulphide bonds to form human insulin.
(1) Both A and R are true and R is the correct explanation of A.
(2) Both A and R are true but R is not correct explanation of A.
(3) A is true but R is false.
(4) A and R are false.

93. **Assertion :** We can develop nematode resistant plants by RNA interference technology.
Reason : Secondary metabolites can be produced by genetic engineering in plants.
(1) Both A and R are true and R is the correct explanation of A.
(2) Both A and R are true but R is not correct explanation of A.
(3) A is true but R is false.
(4) A and R are false.

94. **Assertion :** GM plants are more useful than normal plants.
Reason : Golden rice is rich in β-carotene
(1) Both A and R are true and R is the correct explanation of A.
(2) Both A and R are true but R is not correct explanation of A.
(3) A is true but R is false.
(4) A and R are false.

95. **Assertion :** Secondary metabolites of plants can be useful for human.
Reason : Abrin and ricin are toxins.
(1) Both A and R are true and R is the correct explanation of A.
(2) Both A and R are true but R is not correct explanation of A.
(3) A is true but R is false.
(4) A and R are false.

96. **Assertion :** The endosperm in gymnosperm is formed after fertilization.
Reason : The endosperm of gymnosperm is formed by triple fusion.
(1) Both A and R are true and R is the correct explanation of A.
(2) Both A and R are true but R is not correct explanation of A.
(3) A is true but R is false.
(4) A and R are false.

97. **Assertion :** A & B are antigens present on RBCs
Reason : The blood group is AB blood group only.
(1) Both A and R are true and R is the correct explanation of A.
(2) Both A and R are true but R is not correct explanation of A.
(3) A is true but R is false.
(4) A and R are false.

98. **Assertion :** BOD (Biological oxygen demand) is a device that is used to measure quality of water
Reason : High BOD is observed in highly polluted water
(1) Both A and R are true and R is the correct explanation of A.
(2) Both A and R are true but R is not correct explanation of A.
(3) A is true but R is false.
(4) A and R are false.

99. **Assertion :** Deforestation sequesters CO_2 from atmosphere.
Reason : Global warming is beneficial for plants and human health.
(1) Both A and R are true and R is the correct explanation of A.
(2) Both A and R are true but R is not correct explanation of A.
(3) A is true but R is false.
(4) A and R are false.

PART - D (G.K & MENTAL ABILITY)

100. What is colour of Milestones used at state highways?

(1) Yellow (2) Blue (3) Green (4) Red

101. Who is the chairman of Rajyasabha

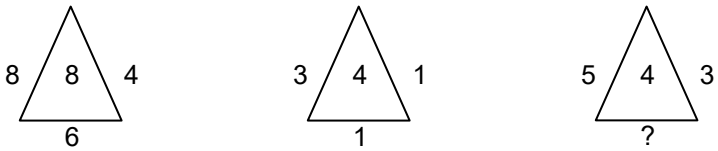
102. What is the full form of GSM

103. Find the odd one out

(1)  (2)  (3)  (4) 

104. Who is the natural host of Nipah virus?

105. Find the missing term.



(1) 2 (2) 3 (3) 4 (4) 5

106. What is the required run rate if 50 runs is needed to win a T-20 match?

Statement-I : 3/5 of the total allotted overs have been completed.

Statement-2 : Each bowler has bowled 3 overs.

(1) Statement-1 is required (2) Statement-2 is required

(3) Both 1 & 2 are required (4) Neither 1 nor 2 is required

107. Social media is a popular medium of spreading information?

Statement-I : Normally people believe in the information of social media.

Statement-2 : Social media information is authentic.

(1) Statement-1 is required (2) Statement-2 is required

(3) Both 1 & 2 are required (4) Neither 1 nor 2 is required

108. Establish the relation

Google

?

109. 2, 3, 5, 8, 7 by using these five digits how many 3 digits numbers can be formed which are divisible by 2

(1) 24 (2) 30 (3) 6 (4) 50

110. He decided to wear his best suit for the presentation.

Statement-I : It is mandatory to wear suit for the presentation.

Statement-2 : he does not possess any other good clothes to wear.

(1) Statement-1 is required (2) Statement-2 is required

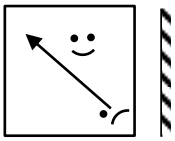
(3) Both 1 & 2 are required (4) Neither 1 nor 2 is required

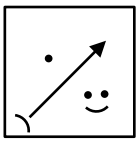
111. A man purchased computer at Rs. 10,000. He further got it repaired in Rs. 1000. He sold it with 10% profit. What is the selling price?

112. Three friends in college election got 300, 800 and 900 votes respectively. What % of the total votes the winner candidate got?

(1) 40% (2) 45% (3) 50% (4) 55%

113. Find the mirror image.



(1) 

(2) 

(3) 

(4)