SAMPLE PAPER

MENTORS TALENT SEARCH EXAMINATION

FOR STUDENTS IN CLASS X AND GOING TO CLASS XI

Time : 3 hours **Maximum Marks: 460**

INSTRUCTIONS

(A) General :

1. This Question paper contains **FOUR** Parts (Physics, Chemistry, Biology & Analytical Ability) containing 115 questions in all.
2. This Question Paper contains 15 pages, other than the OMR.
3. The Question Paper has blank spaces at the bottom of each page for rough work.No additional sheets will be provided for rough work.
4. Blank papers, clip boards, log tables, slide rule, calculators, cellular phones, pagers and electronic gadgets, in any form, are **NOT** allowed.
5. This booklet also contains the **OMR** answer sheet (i.e., A machine gradable Response Sheet).

(B) Answering on the OMR:

6. Each question will have **4 choices** in both the Sections, out of which **only one choice is correct**.
7. Darken the bubble with **Ball Pen (Blue or Black) ONLY.**

(C) Filling – in Name and Registration No.

8. On the **OMR sheet**, write your Name and Registration No. in ink. Also, put your signature in the appropriate box in ink.

(D) Marking Scheme:

9. (a) For each question, you will be awarded **4 marks** if you have darkened only one bubble corresponding to the right answer.
   (b) In case you have not darkened any bubble, you will be awarded 0 mark for that question.
   (c) In all other cases, you will be awarded **–1 mark**.

DO NOT BREAK THE SEALS ON THIS BOOKLET, AWAIT INSTRUCTIONS FROM THE INVIGILATOR.

SEAL

Name :.....

Registration No.: | | | | | | | | | | | | | | |

PART-I : PHYSICS

SECTION-A

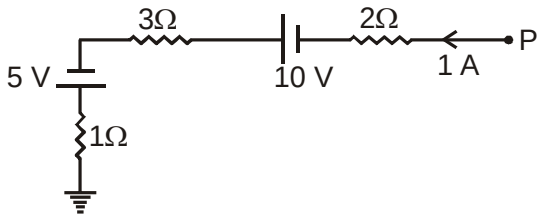
(Single Correct Answer Type)

This section contains **24 multiple** choice questions. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

1. A flow of 10^{10} electrons in 1.6 sec in a conducting wire constitutes a current of

(A) 10^{-29} A (B) 1.6×10^{-29} A (C) 1.6×10^{-9} A (D) 10^{-9} A

2. Potential at point P will be



(A) –9 V (B) + 9 V (C) 10 V (D) 0

3. A concave mirror of focal length *f* produces an image *n* times the size of the object. If the image is real then the distance of the object from the mirror is

(A) $(n-1)f$ (B) $\frac{(n-1)}{n}f$ (C) $\frac{(n+1)}{n}f$ (D) $(n+1)f$

4. The phenomenon of electromagnetic induction is

(A) the process of charging a sphere

(B) the process of discharging a sphere

(C) the process of producing induced current in a coil whenever there is a relative motion between the coil and the magnet.

(D) the process of producing cooling effect.

5. An object of size 2.0 cm is placed perpendicular to the principal axis of a concave mirror. The distance of the object from the mirror equals the radius of curvature. The size of the image will be

(A) 0.5 cm (B) 1.0 cm (C) 1.5cm (D) 2.0cm

6. To get an image larger than a real object, one can use

(A) a convex mirror but not a concave mirror

(B) a concave mirror but not a convex mirror

(C) either a convex mirror or a concave mirror

(D) a plane mirror

7. The purpose of the glass cover on top of a box-type solar cooker is to

(A) allow one to see the food being cooked

(B) allow more sunlight into the box

(C) prevent dust from entering the box

(D) reduce heat loss by radiation

8. The magnetic field lines due to a straight wire carrying a current are

(A) straight (B) circular (C) parabolic (D) elliptical

9. Stars twinkle due to:

(A) refraction (B) reflection (C) scattering (D) polarization of light

10. Which of the following does not change when light goes from one medium to another?

(A) Frequency (B) Wavelength (C) Speed (D) Intensity

11. The refractive index of water is 1.33. What will be the speed of light in water ?

(A) 3×10^8 m/s (B) 2.25×10^8 m/s (C) 4×10^8 m/s (D) 1.33×10^8 m/s

12. A real, inverted and equal in size image is formed by :

(A) a concave mirror (B) a convex mirror

(C) plane mirror (D) none of these

13. The resistivity of a wire depends on its :

(A) length (B) area of cross-section

(C) shape (D) material

14. The resistor R_1 dissipates power P when connected to a generator. If a resistor R_2 is inserted in series with R_1, the power dissipated by R_1:

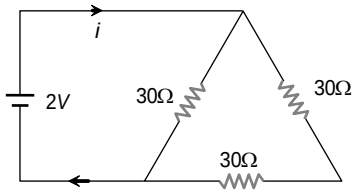
(A) increase

(B) decrease

(C) remains the same

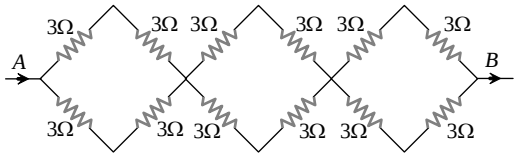
(D) may decrease or increase depending on the values of R_1 and R_2

15. The current in the adjoining circuit will be



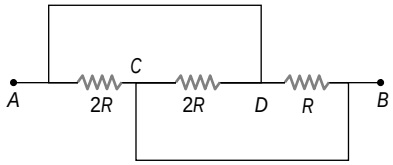
(A) $\frac{1}{45}$ ampere (B) $\frac{1}{15}$ ampere (C) $\frac{1}{10}$ ampere (D) $\frac{1}{5}$ ampere

16. In the network of resistors shown in the adjoining figure, the equivalent resistance between *A* and *B* is



(A) 54 ohm (B) 18 ohm (C) 36 ohm (D) 9 ohm

17. What is the equivalent resistance between *A* and *B*

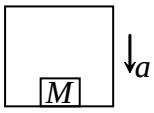


(A) $\frac{2}{3}R$ (B) $\frac{3}{2}R$ (C) $\frac{R}{2}$ (D) $2R$

18. The resistance of a wire is *R*. If the length of the wire is doubled by stretching, then the new resistance will be

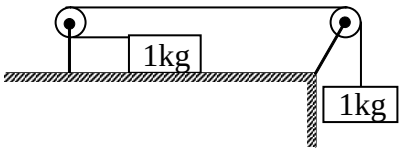
(A) $2R$ (B) $4R$ (C) R (D) $\frac{R}{4}$

19. With what acceleration '*a*' should the box of figure descend so that the block of mass *M* exerts a force *Mg*/4 on the floor of the box?



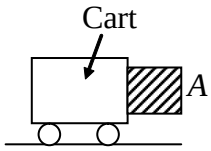
(A) *g*/4 (B) *g*/2 (C) 3*g*/4 (D) 4*g*

20. A block of mass 1 kg is placed on a rough horizontal surface connected by a light string passing over two smooth pulleys as shown. Another block of 1 kg is connected to the other end of the string. The acceleration of the system is (coefficient of friction $\mu = 0.2$)



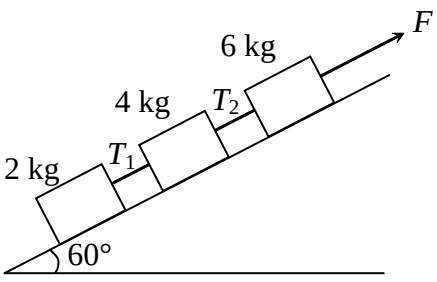
(A) 0.8 *g* (B) 0.4 *g* (C) 0.5 *g* (D) zero

21. What acceleration must the cart in figure have in order that the block *A* will not fall? (μ is coefficient of friction between cart and block)



(A) μg (B) $\frac{g}{\mu}$ (C) $\frac{\mu}{g}$ (D) $\mu + g$

22. Three blocks of masses 2kg, 4kg and 6kg are connected by string and resting on a frictionless incline of 60° as shown. A force of 120N is applied upward along the incline to the 6 kg block. If the strings are ideal, the ratio T_1/T_2 will be (g = 10 ms^{-2})



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

23. Pick up the correct statements:

(A) area under a – t graph gives velocity

(B) area under a – t graph gives change in velocity

(C) path of projectile as seen by another projectile is parabola

(D) none of these

24. A car accelerates from rest at a constant rate α for some time, after which it decelerates at a constant rate β to come to rest. If the total time elapsed is t, the maximum velocity acquired by car is

(A) $V = \frac{\alpha\beta}{(\alpha+\beta)}t$ (B) $V = \frac{\alpha\beta}{(\alpha-\beta)}t$ (C) $V = \frac{2\alpha\beta}{(\alpha+\beta)}t$ (D) $V = \frac{2\alpha\beta}{(\alpha-\beta)}t$.

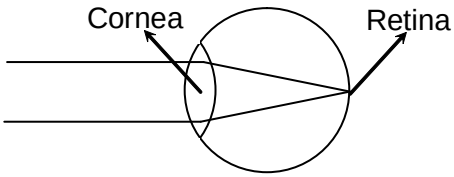
SECTION - B

(Comprehension Type)

This section contains **2 paragraphs**. Based upon the paragraph 3 multiple choice questions have to be answered. Each of these questions has four choices (A), (B), (C) and (D) out of which **ONLY ONE** is correct.

Paragraph-1

Figures shows a simplified model of the eye that is based on the assumption that all of the refraction of entering light occurs at the cornea. The cornea is a converging lens located at the outer surface of the eye with fixed focal length approximately equal to 2 cm. Parallel light rays coming from a very long distance object are refracted by the cornea to produce a focused image on the retina. The retina then transmits electrical impulse along the optic nerve to the brain.



Two common defects of vision are myopia and hyperopia. Myopia, sometimes referred to as nearsightedness, occurs when the cornea focuses the image of a distant object in front of the retina. Hyperopia, sometimes referred to as farsightedness, occurs when the cornea focuses the image of a nearby object behind the retina. Both of these problems can be corrected by introducing another lens in front of the eye so that the two lens system produces a focused image on the retina. If an object is so far away from the lens system that its distance may be taken as infinite, then the following relationship holds. $\frac{1}{f_c} + \frac{1}{f_1 - x} = \frac{1}{v}$, where f_c is the focal length of the cornea, f_1 is the focal length of the correcting lens. X is the distance from the correcting lens to the cornea, and v is the image distance measured from the cornea (Note: The index of refraction is 1.0 for air and 1.5 for glass)

25. How far away should the retina be from the cornea for normal vision?

(A) 0.5 cm (B) 1.0 cm (C) 2.0 cm (D) 4.0 cm

26. For a distant object, the image produced by the cornea is

(A) real and inverted (B) real and upright

(C) virtual and inverted (D) virtual and upright

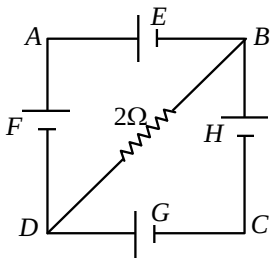
27. What kind of lens would be suitable to correct myopia and hyperopia respectively? (Note: assume that the correcting lens is at the focal point of the cornea so that $x = f_c$)

(A) converging, converging (B) converging, diverging

(C) diverging, diverging (D) diverging, converging

Paragraph-2

In the circuit shown in the figure *E*, *F*, *G*, *H* are cells of emf 2,1,3 and 1 volt respectively, and their internal resistances are 2,1,3 and 1Ω respectively



28. The potential difference between *D* and *B* is

(A) $\frac{10}{13}V$ (B) $\frac{12}{13}V$ (C) $\frac{13}{13}V$ (D) $\frac{14}{13}V$

29. The potential difference across the terminals of cell *E* is

(A) $\frac{17}{13}V$ (B) $\frac{20}{13}V$ (C) $\frac{23}{13}V$ (D) $\frac{24}{13}V$

30. The potential difference across the terminals of cell *H* is

(A) $\frac{17}{13}V$ (B) $\frac{20}{13}V$ (C) $\frac{23}{13}V$ (D) $\frac{24}{13}V$

PART-II : CHEMISTRY

SECTION - A

(Single Correct Answer Type)

This section contains **24 multiple** choice questions. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

31. Consider the following chemical species :

(i) NH_3 (ii) $B(OH)_3$ (iii) $FeCl_3$ (iv) BH_3

(v) H_2O (vi) Cl^- (vii) Cr^{+3} (viii) CH_4

(ix) HCOOH (x) $HClO_4$

The number of species among the above which can act as acid :

(A) 3 (B) 5 (C) 6 (D) 7

32. When aqueous HOCl solution is kept on litmus papers :

(A) It turns blue litmus paper red

(B) It turns red litmus paper blue

(C) It turns blue litmus paper red which becomes colourless after sometime

(D) It turns red litmus paper blue which becomes colourless after sometime

33. When a copper rod is kept in concentrated HNO_3 a gas is evolved, this gas is dissolved in a pure water sample. Now the sampe will

(A) Turn blue litmus red

(B) Turn red litmus blue

(C) No change in colour of any litmus

(D) There is no reaction of copper with the nitric acid

34. In the extraction of copper the smelt formed in the reverberatory furnace contains

(A) Cu_2S + little FeS (B) Cu_2S + little FeO

(C) Cu_2O + little FeS (D) Cu_2O + little FeO

35. Find the incorrectly matched pair

		Ores		**Metals**
(A)	Sylvine	-		Potassium
(B)	Malachite	-		Magnesium
(C)	Cinnabar	-		Mercury
(D)	Fluorite	-		Calcium

36. Which of the following is a redox reaction

(A) $CH_3COOH + C_2H_5OH \rightarrow CH_3COOC_2H_5 + H_2O$

(B) $2NaOH + H_2SO_4 \rightarrow Na_2SO_4 + 2H_2O$

(C) $Zn + CuSO_4 \rightarrow ZnSO_4 + Cu$

(D) $NaCl + AgNO_3 \rightarrow AgCl + NaNO_3$

37. In cold water Bleaching powder ionises to form

(A) Ca^{2+}, Cl^- and ClO^- (B) CaO, Cl^-

(C) Ca^{2+}, Cl^- and ClO_3^- (D) Ca^{2+}, Cl^- and ClO_2^-

38. On balancing following equation

$$N_2H_4 + b\,AgNO_3 + KOH \longrightarrow N_2 + Ag + KNO_3 + H_2O$$

What is value of b

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

39. 12 g of Mg will react completely with an acid to give

(A) 1 mole of O_2 (B) $\frac{1}{2}$ mole of H_2

(C) 1 mole of H_2 (D) 2 moles of H_2

40. Which of the following statements about graphite and diamond is true ?

(A) They have the same crystal structure

(B) They have the same degree of hardness

(C) They have the same electrical conductivity

(D) They can undergo the same chemical reactions

41. The soap molecule has a

(A) hydrophilic head and a hydrophobic tail (B) hydrophobic head and a hydrophilic tail

(C) hydrophobic head and a hydrophobic tail (D) hydrophilic head and a hydrophilic tail

42. Which of the following is correct order of atomic size ?

(A) $Li < Na < K < Rb < Cs$ (B) $Li > Na > K > Rb > Cs$

(C) $Na < K < Li < Rb < Cs$ (D) $K < Na < Li < Rb < Cs$

43. Which of the following has most non-metallic character ?

(A) N (B) O (C) C (D) F

44. Which of the following is correct order of size ?

(A) $I^+ > I > I^-$ (B) $I^- > I > I^+$ (C) $I > I^+ > I^-$ (D) $I > I^- > I^+$

45. If temperature of a body increased by 1^o celsius, what will be increase in temprature at kelvin scale.

(A) 1 K (B) 273 K (C) 274 K (D) 374 K

46. Which of the following is largest in size ?

(A) Na^+ (B) Cl^- (C) Mg^{++} (D) O^{2-}

47. Which of the following have least non-metallic character

(A) Fluorine (B) Chlorine (C) Bromine (D) Iodine

48. Which of the following have highest melting point

(A) Fluorine (B) Chlorine (C) Bromine (D) Iodine

49. A solid is crystalline, has high melting point and is water soluble. The solid is

(A) ionic (B) covalant

(C) Co-ordinate (D) Both A and B

50. Among the following which is ionic in nature?

(A) Oxygen (B) Calcium Oxide (C) Water (D) methane

51. An organic acid is :

(A) Formic acid (B) Sulphuric acid

(C) Nitric acid (D) Hydrochloric acid

52. Which of the following is incorrectlly matched with its colour

(A) Chromium Salt - Green (B) Amonium Salt - White

(C) Aluminum Salt - Black (D) Copper Salt - Blue

53. What volume of oxygen at STP is required to affect the combustion of 11 litres of ethylene $[C_2H_4]$ at 273^oC and at 380 mm of Hg pressure.

$$C_2H_4 + 3O_2 \longrightarrow 2CO_2 + 2H_2O$$

(A) 33 litre (B) 16.5 litre

(C) 8.25 litre (D) None of these

54. What is the number of sodium ion in 14.2 gm sodium sulphate

(A) 6.02×10^{22} (B) 6.02×10^{23} (C) 1.2×10^{22} (D) 1.2×10^{23}

SECTION - B

(Comprehension Type)

This section contains **2 paragraphs**. Based upon the first paragraph **3** multiple choice questions and based upon the second paragraph **3** multiple choice questions have to be answered. Each of these questions has four choices (A), (B), (C) and (D) out of which **ONLY ONE** is correct.

Paragraph-1

Metal nitrate (A) on heating decomposes, leaving a residue (B) which goes into solution with dilute HCl. The solution of (B) gives a white precipitate (C) with ammonium carbonate solution. The precipitate (C) is dissolved in dilute HCl and the solution is treated with potassium chromate to get yellow precipitate (D), the solution (B) with dilute H_2SO_4 also gives a white precipitate (E) insoluble in dilute HCl and nitric acid. The precipitate (E) is a part of a white pigment lithopone.

55. The compound (E) is :

(A) $BaSO_4$ (B) $MgSO_4$ (C) $CaSO_4$ (D) Na_2SO_4

56. The yellow precipitate (D) is :

(A) $PbCrO_4$ (B) $BaCrO_4$ (C) $CaCrO_4$ (D) none of these

57. The metal nitrate (A) is

(A) $Ca(NO_3)_2$ (B) $Pb(NO_3)_2$ (C) $Ba(NO_3)_2$ (D) KNO_3

Paragraph-2

"A" is a white crystalline solid. Its aqueous solution is alkaline in nature. It is used in water softening. One heating it swells up to form a puffy mass, B. strong heating of B gives C.

58. The number of moles of water of crystallization present per a mole of the compound. A is

(A) 10 (B) 5 (C) 7 (D) 8

59. The aqueous solution of A is alkaline due to

(A) The presence of $Ca^{+2}ions$ (B) The presence of H_3BO_3

(C) Hydrolysis of $B_4O_7^{-2}$ (D) Hydrolysis of CO_3^{-2}

60. Composition of the substance, B is

(A) $Na_2B_4O_7$ (B) B_2O_3 (C) H_3BO_3 (D) HBO_2

PART-III : BIOLOGY

SECTION - A
(Single Correct Answer Type)

This section contains **30 multiple** choice questions. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

61. During photosynthesis the oxygen in glucose comes from

(A) Water (B) CO_2

(C) Both from water and CO_2 (D) Oxygen in air

62. Dark reaction is traced by

(A) X-rays (B) O^{18} (C) $^{14}CO_2$ (D) P^{32}

63. Which of the following enzyme acts efficiency at pH two ?

(A) Trypsin (B) Pepsin (C) Ptyalin (D) All of the above

64. Glisson's capsule are found in

(A) Kidney of frog (B) Heart of frog (C) Liver of mammals (D) Cerebellum of rabbit

65. Vermiform appendix is make up of

(A) Respiratory tissue (B) Excretory tissue

(C) Lymphatic tissue (D) Digestive tissue

66. Which of the following can respire in total absence of air

(A) Amoeba (B) Bed-Bug (C) Hydra (D) Tapeworm

67. A normal man respires in a minute

(A) 10-15 times (B) 14-18 times (C) 20-25 times (D) 25-30 times

68. Which one of the following is called pacemaker of the heart

(A) SA node (B) AV node (C) AV septum (D) Chordae-tendinae

69. Rh factor may be responsible for

(A) Turner's syndrome (B) AIDS

(C) Sickle cell anaemia (D) Erythroblastosis foesalis

70. Which of the following is the part of kidney

(A) Pelvis (B) Ileum (C) Ilium (D) Cystic duct

71. ADH is put into the blood by the

(A) Hypothalamus (B) Pituitary gland (C) Liver (D) Small intestine

72. Which of the following is primarily concerned with cell division

(A) GA_3 (B) IAA (C) NAA (D) Cytokinnin

73. Silver nitrate solution is used to study

(A) Endoplasmic reticulum (B) Golgi apparatus

(C) Nucleus (D) Mitochondria

74. Hearing is controlled by

(A) Temporal lobe (B) Cerebrum (C) Hypothalamus (D) Parietal lobe

75. FSH is to estrogen as LH is to

(A) Vasopressin (B) Testosterone (C) Progestrone (D) LTH

76. A method in which roots are induced on the stem while it is still attached to the parent plant is called

(A) Layering (B) Cutting (C) Grafting (D) Vivipary

77. Cellular totipotency was for the first time demonstrated by

(A) F. C. Steward (B) p. Maheswari (C) W. H. Muir (D) Y. P. S. Basas

78. Sperms are produced in the

(A) Seminiferous tubule (B) Interstital cell

(C) Vas deferens (D) Prostate gland

79. In 28 day human ovarian cycle, ovulation occurs on

(A) Day 1 (B) Day 10 (C) Day 14 (D) Day 28

80. What would happen if vas efferentia of Man were cut ?

(A) Sperms become non-nucleate (B) Semen is without sperms

(C) Sperms are non-motile (D) Spermatogenesis does not occur

81. Sneezing, coughing, vomiting are controlled by

(A) Pons (B) Cerebrum (C) Medulla oblangata (D) Cerebellum

82. Which of the following has no muscular wall ?

(A) Artery (B) Arterioles (C) Capillary (D) vein

83. Nutrition in *Euglena* is

(A) Saprotrophic (B) Autotrophic

(C) Both saprotrophic and Holozoic (D) Both autotrophic and saprotrophic

84. ATP and or $NADPH_2$ are produced

(A) During dark reaction

(B) During dark reaction and are used in light reaction

(C) During light reaction and are used in Dark reaction

(D) During light reaction

85. Which of these plant homone is a growth inhibitor

(A) Ethylene (B) Auxin (C) Abscissic acid (D) Cytokinnin

86. Water and electrolyte balance is regulated by

(A) Vasopressin (B) Calcitonnin (C) Oxytocin (D) Adrenaline

87. The chromosome number is haploid is

(A) Zygote (B) Gamete (C) Embryo (D) Seed

88. First successful animal clone was

(A) Dolly goat (B) Molly goat (C) Dolly sheep (D) Moky sheep

89. What is the function of copper

(A) Prevents mutation (B) Prevents fertilization

(C) Prevents zygote formation (D) (B) and (C)

90. Total number of nuclei involved in double fertilization is

(A) Two (B) Three (C) Four (D) Five

SECTION - B

(Assertion-Reason Type)

This section contains **10 Assertion-Reason type questions** numbered 91 to 100. Each question contains Statement-1 and Statement-2. Each question has four choices (A), (B), (C) and (D): out of which ONLY ONE is correct.

(A) Statement-1 is true, Statement-2 is true, Statement-2 is a correct explanation for Statement-1.

(B) Statement-1 is true, Statement-2 is true, Statement-2 is not a correct explanation for Statement-1

(C) Statement-1 is true, Statement-2 is false.

(D) Statement-1 is false, Statement-2 is true..

91. **Statement-1 :** Liver doesn't contain any enzymes
Statement-2 : Liver helps in digestion by emulsifying fats.

92. **Statement-1 :** Herbivorous animals has a larger small intestine.
Statement-2 : Cellulose present in grass takes some time to digest.

93. **Statement-1 :** The wall of left ventricle is thicker right ventricle
Statement-2 : Right ventricle has to pump the blood to the farthest end of the body.

94. **Statement-1 :** Meninges are the covering of lungs.
Statement-2 : The name of meninges in case of man is Piamater, Arachnoid and Duramater

95. **Statement-1 :** The rate of respiration in man in 17/minute.
Statement-2 : Emphysema is a neural disorder.

96. **Statement-1 :** Light reaction takes place in Grana of Chloroplast
Statement-2 : A specific function of light energy in the process of photosynthesis is to synthesize glucose.

97. **Statement - 1 :** Seeded plants are highly evolved
Statement - 2 : Seeds are found is Gymnosperm & Angiosperm.

98. **Statement - 1 :** A method of birth control is rescentry.
Statement - 2 : Failure of testes to descent into the scrotum causes sterility in man.

99. **Statement - 1 :** The blooming of dandelion flower as the sun rises and its closing on sunset is a phototropic movement.
Statement - 2 : Phototropism is the directional movement of plant parts in respons to light.

100. **Statement - 1 :** Liver is the mixed gland of human body
Statement - 2 : Liver doesn't contain any eneyme yet it helps in digestion.

PART-IV : ANALYTICAL ABILITY

SECTION – A

(Single Correct Answer Type)

This section contains **9 multiple** choice questions. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

101. Complete the series : 0, 4, 18, 48, ?, 180

(A) 56 (B) 100 (C) 120 (D) 135

102. Complete the series : 2, 3, 10, 39, 172, ?

(A) 880 (B) 735 (C) 885 (D) 632

103. Sarita is at 27^{th} position from the top in a class of 43 students. What is her rank from the other side?

(A) 16^{th} (B) 17^{th} (C) 15^{th} (D) 21^{st}

In each question below, two pairs of numbers are given but one number in the second pair is missing. Identify the relationship between the two numbers in the first pair and find the missing number in the second pair such that the numbers in the second pair also follow the same relationship.

104. 8 : 28 : : ? : 65

(A) 9 (B) 12 (C) 15 (D) 18

Select the correct alternative from the given choices.

105. When the clock shows time 20 minutes past 7, the angle between hands of the watch is ?

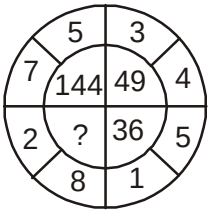
(A) 100º (B) 90º (C) 80º (D) 95º

106. In a certain code language, if the word "PROTEIN" is coded as RTINHOP, then how will you code the word "PRODUCT" in that language ?

(A) RDCUTOP (B) RDCTOUP (C) RDTCUOP (D) RDCTUOP

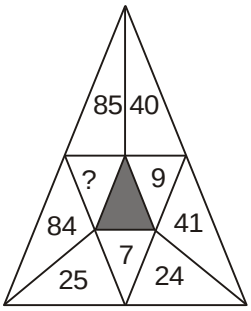
In each of these questions select the correct alternative from the given choices which should come in place of the question mark (?)

107.



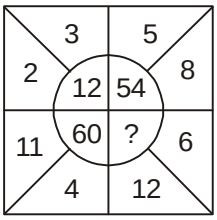
(A) 81 (B) 64 (C) 100 (D) 112

108.



(A) 11 (B) 13 (C) 15 (D) 17

109.



(A) 91 (B) 9 (C) 25 (D) 20

SECTION - B

(Comprehension Type)

This section contains **2 paragraphs**. Based upon the paragraph 3 multiple choice questions have to be answered. Each of these questions has four choices (A), (B), (C) and (D) out of which **ONLY ONE** is correct.

Paragraph-1

Doppler's butterfly is only found in Asian countries, including India, Thailand, Japan, Malaysia and Cambodia, and in areas of non-forested South American countries, including Brazil, Argentina, Chile and Peru. It is very rare in Brazil, where it has black, elongated wings, whilst in Asia the wings are much shorter and coloured orange. In Chile they have only red wings, though these retain the characteristic South American shape.

110. In which country is the butterfly unlikely to have elongated wings?

(A) Mexico (B) Chile (C) Argentina

(D) India

111. Where is a forest-dwelling Doppler butterfly with orange wings most likely to be found?

(A) Chile (B) Germany (C) Thailand

(D) cannot say

112. Where is a purple Doppler butterfly most likely to be found?

(A) France (B) India (C) Japan

(D) cannot say

Paragraph-2

Mr Marx's and Mr Bagshaw's cars are black. The others have red ones. Mr Bagshaw and Mrs Chance have a white stripe on the sides of their cars. Miss Jenkins has a blue stripe on the side of her car. Mr Fleming and Mr Marx have silver stripes on the sides of their cars. Miss Jenkins' and Mr Fleming's have blue upholstery, the others have white.

113. Who has a car with blue upholstery and a silver stripe?

(A) Mr Bagshaw (B) Miss Jenkins (C) Mrs Chance (D) Mr Fleming

114. Who has a car with a silver stripe and white upholstery?

(A) Mr Bagshaw (B) Miss Jenkins (C) Mrs Chance

(D) Mr Marx

115. Who has got the red car with a blue stripe and matching upholstery?

(A) Mr Bagshaw (B) Miss Jenkins (C) Mrs Chance (D) Mr Fleming