

DO NOT OPEN THE SEAL UNTIL INSTRUCTED TO DO SO.

Q. Booklet

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NT (E)

NT - FEBRUARY 2021

Code

SCHOLASTIC APTITUDE TEST

Medium : English

Paper-II

Candidate's Roll Number

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Sl. No.:

00368

Time allowed : 120 Minutes

Total Questions : 100

Maximum Marks : 100

Instructions to Candidates

Read the following instructions carefully before you answer the questions. Answers are to be SHADED on a SEPARATE OMR Answer Sheet given, with a Blue or Black Ballpoint Pen only. Read the Instructions printed on the OMR Sheet carefully before answering the questions.

1. Paper-II (Scholastic Aptitude Test) consists of 100 Questions (Q. Nos. 1 to 100).
2. All questions carry one mark each.
3. Since all questions are compulsory, do not try to read through the whole question paper before beginning to answer it.
4. Begin with the first question and keep trying one question after another till you finish all the questions.
5. If you do not know the answer to any question, do not spend much time on it and pass on to the next one. If time permits, you can come back to the questions which you have left in the first instance and try them again.
6. Since the time allotted to the question paper is very limited, you should make the best use of it by not spending too much time on any question.
7. A blank page is provided for rough work at the end of question paper.
8. REMEMBER, YOU HAVE TO SHADE ANSWERS ON A SEPARATE OMR ANSWER SHEET PROVIDED.
9. Answer to each question is to be indicated by SHADING the circle having the number of the correct alternative in the OMR Answer Sheet from among the ones given for the corresponding question in the booklet.
10. Now turn to the next page and start answering the questions.
11. The candidate need not return this Question Paper Booklet and can take it after the completion of the examination. No candidate should leave the examination hall before the end of the examination.

PHYSICS

1. The distance between the near point and the eye of a person suffering with hypermetropia is 50 cm. Then what is the power of the lens to be used by the person?
 - (1) + 1D
 - (2) + 2D
 - (3) + 3D
 - (4) + 4D
2. If 10 gm of ice at 0°C is mixed with 10 gm of water at 10°C , then the resultant temperature is
 - (1) 0°C
 - (2) 2.5°C
 - (3) 5°C
 - (4) 7.5°C
3. Assertion (A) : Cooking food is difficult on hills.
Reason (R) : The boiling point decreases with increase of pressure
 - (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 and 'R' is false.
 - (4) Both 'A' and 'R' are false.
4. A plane mirror is approaching you at a speed of 5 cm/sec. The image will approach you with a speed
 - (1) 0 cm/sec
 - (2) 5 cm/sec
 - (3) 10 cm/sec
 - (4) 20 cm/sec
5. A small bottle weighs 20 gm when empty and 22 gm when filled with water. When it is filled with oil it weighs 21.76 gm. Then the density of the oil is
 - (1) 0.88 gm/cm^3
 - (2) 8.8 gm/cm^3
 - (3) 6.8 gm/cm^3
 - (4) 88.8 gm/cm^3
6. A body of mass 50 kg has momentum of 3000 kg-m/sec. Then its Kinetic energy is
 - (1) 900 J
 - (2) 90,000 J
 - (3) 90 J
 - (4) 9,00,000 J
7. The power of a lens in the spectacles of a person is -2D . The person suffers from
 - (1) Hypermetropia
 - (2) Myopia
 - (3) Colour blindness
 - (4) Presbyopia

8. Two blocks of masses 8 kg and 12 kg connected at two ends of a inextensible string. The string passes over a frictionless pulley. Then the acceleration of the system is

- (1) $\frac{g}{4}$ (2) $\frac{g}{5}$
 (3) $\frac{g}{8}$ (4) $\frac{g}{6}$

9. A vehicle starting from rest attains a speed of 72 km/h after covering a distance of 100 m. If the mass of the vehicle is 500 kg, the force exerted by the vehicle is

- (1) 100 N
 (2) 500 N
 (3) 2000 N
 (4) 1000 N

10. When the velocity of a body is doubled

- (1) Its KE is doubled
 (2) Its PE is doubled
 (3) Its momentum is doubled
 (4) Both PE and KE are doubled

11. A man of mass 75 kg stands in a lift. The force exerted on him by the floor when the lift starts moving upward, with an acceleration of 2 m/sec^2 is

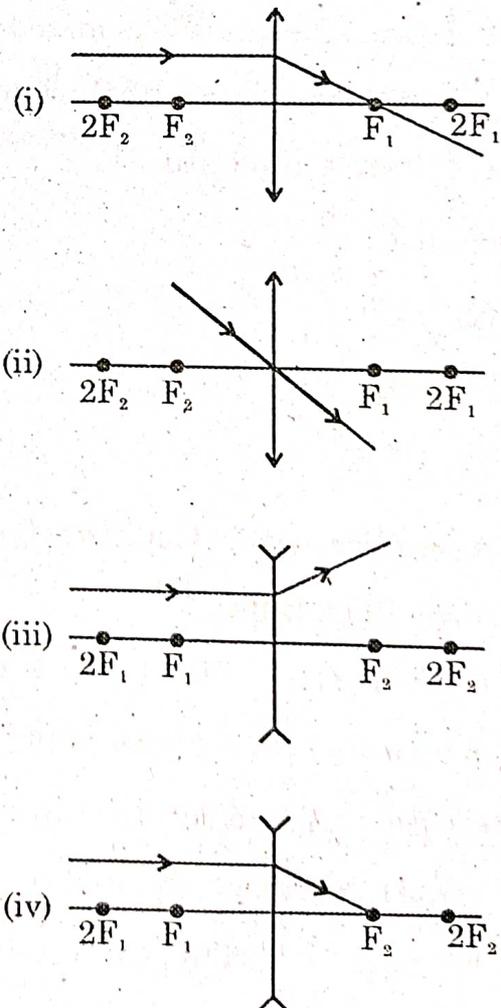
- (1) 450 N
 (2) 1000 N
 (3) 900 N
 (4) 600 N

12. Assertion (A) : The refractive index of kerosene is more than that of water.

Reason (R) : The density of water is more than that of kerosene.

- (1) Both 'A' and 'R' are correct and 'R' is the correct explanation of 'A'.
 (2) Both 'A' and 'R' are correct and 'R' is not correct explanation of 'A'.
 (3) 'A' is correct and 'R' is incorrect.
 (4) Both 'A' and 'R' are incorrect.

13.



Which of the above ray diagrams are CORRECT?

- (1) (i), (iii), (iv)
 (2) (i), (iii), (ii)
 (3) (i), (ii), (iii)
 (4) (i), (iv), (ii)

CHEMISTRY

14. Indicators are :

- (i) Weak acids or weak bases
- (ii) Strong acids or strong bases
- (iii) They help to find acidic and basic nature of liquids
- (iv) Most of them are organic compounds

- (1) (i), (ii), (iv)
- (2) (i), (iii), (iv)
- (3) (ii), (iii), (iv)
- (4) (i), (ii), (iii)

15. Copper present in 50 gm of $CuSO_4$ is

- (1) 19.90 gm
- (2) 39.81 gm
- (3) 29.5 gm
- (4) 31.71 gm

16. Which of the following are CORRECT in respect of silver metal?

- (i) Malleable
- (ii) Melts at $690^{\circ}C$
- (iii) Ductile
- (iv) Electric conductor

- (1) (i), (ii), (iii)
- (2) (i), (iii), (iv)
- (3) (i), (ii), (iv)
- (4) (i), (ii), (iii), (iv)

17. Match the following :

Colloid	Dispersed phase-medium
i. Gemstone	() A. Liquid-Gas
ii. Shaving cream	() B. Liquid-Solid
iii. Cheese	() C. Solid-Solid
iv. Cloud	() D. Gas-Liquid

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

18. The mass of 3.011×10^{23} number of Nitrogen atoms is

- (1) 14 gm
- (2) 3.5 gm
- (3) 7 gm
- (4) 28 gm

19. The four quantum numbers of 19th electron of potassium is

- (1) $n = 4, l = 3, m_l = 0, m_s = +\frac{1}{2}$
- (2) $n = 4, l = 0, m_l = 0, m_s = +\frac{1}{2}$
- (3) $n = 4, l = 0, m_l = 1, m_s = 0$
- (4) $n = 4, l = 1, m_l = 0, m_s = +\frac{1}{2}$

20. In the reaction



- (i) Carbon is reduced
- (ii) PbO is reduced
- (iii) PbO is oxidised
- (iv) Carbon is oxidised

- (1) (i), (iii)
- (2) (i), (ii)
- (3) (ii), (iii)
- (4) (ii), (iv)

21. Assertion (A) : Elements and compounds are the examples of pure substances.

Reason (R) : The properties of a compound are different from those of its constituent elements.

- (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 and 'R' is false.
- (4) Both 'A' and 'R' are false.

22. Identify the correct symbols of the following elements.

- (i) Curium
- (ii) Fermium
- (iii) Nobelium
- (iv) Mendeleevium

- (1) i-Cm, ii-Fm, iii-No, iv-Me
- (2) i-Cm, ii-Fm, iii-No, iv-Md
- (3) i-Ci, ii-Fu, iii-Nb, iv-Me
- (4) i-Ci, ii-Fu, iii-Nm, iv-Mv

23. Assertion (A) : In the experiment of α -particle scattering extremely thin gold foil is preferred.

Reason (R) : Gold is ductile material.

- (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 and 'R' is false.
- (4) Both 'A' and 'R' are false.

24. The ratio of rate of diffusion of two gases X and Y is 16 : 1. When these two gases are combined, it gives a liquid, which is very much essential for the survival of living beings on the Earth. The two gases are respectively

- (1) H_2, Cl_2
- (2) H_2, O_2
- (3) He, O_2
- (4) N_2, Cl_2

25. When 4 gm of carbon is completely burnt in air, the volume occupied by the liberated gas at S.T.P.?

- (1) 11.2 lit
- (2) 6.46 lit
- (3) 7.46 lit
- (4) 22.4 lit

26. The number of valency electrons present in the outermost shells of atoms of Sodium, Copper and Germanium respectively

- (1) 1, 9, 4
- (2) 1, 2, 6
- (3) 1, 2, 4
- (4) 1, 4, 9

BIOLOGY

27. Which one of the following Indian trees/plants is not found in the Red Data Book (Red List Book) published by International Union for Wild Life Conservation?

- (1) Cycas
- (2) Rauwolfia
- (3) Nepenthes
- (4) Hibiscus

28. Identify the mismatched one :

- (1) Tridax – Pyrethroids
- (2) Datura – Cocaine
- (3) Azadirachta – Nimbin
- (4) Papaver – Morphine

29. Assertion (A) : In some adolescent boys it is seen Adam's apple at the neck.

Reason (R) : An Adam's apple is formed mainly by some vitamins.

- (1) 'A' is correct and 'R' is wrong.
- (2) 'A' is wrong and 'R' is correct.
- (3) 'A' and 'R' both are correct.
- (4) 'A' and 'R' both are wrong.

30. Plasma membrane of a cell is made up of

- (1) Proteins and Carbohydrates
- (2) Proteins and Lipids
- (3) Carbohydrates and Lipids
- (4) Lipids and Nucleic acids

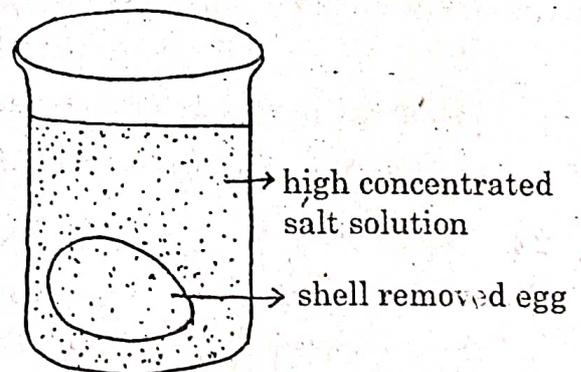
31. $\boxed{\text{Stomach}} \rightarrow \boxed{\text{Gastric glands}} \rightarrow$
 $\boxed{\text{Gastric Juice}} \rightarrow \boxed{?} \rightarrow \boxed{\text{Proteins}}$
 $\rightarrow \boxed{\text{Peptones}}$

- (1) Ptyalin
- (2) Trypsin
- (3) Pepsin
- (4) Lipase

32. When the blood flows out through a wound, the platelets release an enzyme called to stop the blood flow.

- (1) Prothrombin
- (2) Fibrinogen
- (3) Thrombokinase
- (4) Thrombin

33.



In the above given experiment, the level of solution in the beaker

- (1) increases
- (2) decreases
- (3) does not change
- (4) increases first, then decreases

34. Assertion (A) : The water present in the soil solution passes into the cell of the root hair by osmosis.

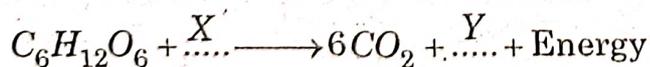
Reason (R) : The concentration of soil solution is less than that of the cell sap in the root hair.

- (1) 'A' is correct, 'R' is wrong
- (2) 'A' is wrong, 'R' is correct
- (3) 'A' and 'R' both are wrong
- (4) 'A' and 'R' both are correct

35. The nervous system is formed by the chain of ganglia on either sides of the vertebral column and associated nerves.

- (1) central
- (2) peripheral
- (3) sympathetic
- (4) parasympathetic

36. Fill in the blanks with right options to represent an equation for aerobic respiration :



- (1) $X - 6O_2; Y - 2H_2O$
- (2) $X - 2O_2; Y - 6H_2O$
- (3) $X - 6H_2O; Y - 6O_2$
- (4) $X - 6O_2; Y - 6H_2O$

37. Match the following :

Group A	Group B
i. Ovary	A. development of male sex organs
ii. Pituitary gland	B. increases heart beat rate
iii. Testis	C. menstrual cycle
iv. Adrenal gland	D. growth of bones

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

38. Identify the right statement about Abscisic Acid :

- (1) It helps in ripening of fruits
- (2) It promotes cell division
- (3) It promotes seed dormancy
- (4) It causes stem elongation in plants

39. Cell organelles which have connection with protein synthesis :

- (1) Ribosomes and Smooth Endoplasmic Reticulum
- (2) Ribosomes and Lysosomes
- (3) Ribosomes and Chloroplasts
- (4) Ribosomes and Rough Endoplasmic Reticulum

40. Assertion (A) : Blood in veins and lymph in lymphatic vessels do not flow reverse.

Reason (R) : It is because, the pressure is very high in veins and lymphatic vessels.

- (1) 'A' and 'R' both are correct.
- (2) 'A' is correct and 'R' is wrong.
- (3) 'A' is wrong and 'R' is correct.
- (4) 'A' and 'R' both are wrong.

MATHEMATICS

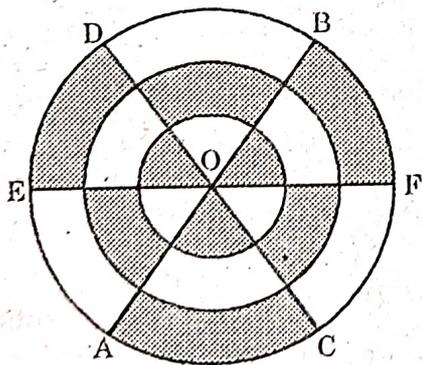
41. In $\triangle ABC$, $AD \perp BC$, $\angle A = 90^\circ$.
 D is the interior point on \overline{BC} .
 $AC = 15$ cm and $DB = 16$ cm, then
 area of $\triangle ABC$ is (in sq.cm)

- (1) 120 (2) 150
 (3) 180 (4) 100

42. If $S = \left(1\frac{2}{3}\right)^2 + \left(2\frac{1}{3}\right)^2 + \left(2\frac{2}{3}\right)^2$
 $+ \left(3\frac{1}{3}\right)^2 + \left(3\frac{2}{3}\right)^2 + \left(4\frac{1}{3}\right)^2$ then $3S = ?$

- (1) 178 (2) 172
 (3) 176 (4) 174

43. Three concentric circles having
 center ' O ' whose radii are a, b, c
 ($a < b < c$). $\overline{AB}, \overline{CD}, \overline{EF}$ are three
 diameters divides 6 equal angles at
 center ' O '. Then the area of shaded
 region is



- (1) $(a^2 + b^2 + c^2) \cdot \frac{\pi}{2}$
 (2) $\frac{\pi \cdot c^2}{2}$
 (3) $\frac{\pi}{2}(c^2 - a^2)$
 (4) πc^2

44. The maximum number of points of
 intersection of three circles and two
 lines in the same plane is

- (1) 18
 (2) 21
 (3) 19
 (4) 20

45. The product of $\sqrt[3]{4}$ and $\sqrt[4]{8} = ?$

- (1) $\sqrt[7]{32}$
 (2) $12\sqrt[3]{32}$
 (3) $2 \cdot 12\sqrt[3]{32}$
 (4) $2\sqrt[7]{12}$

46. In a parallelogram $ABCD$, the
 midpoints of adjacent sides $\overline{AB}, \overline{BC}$
 are P and Q respectively, then the
 area of parallelogram $ABCD$: Area
 of $\triangle DPQ$

- (1) 8 : 3
 (2) 3 : 8
 (3) 5 : 7
 (4) 7 : 5

47. If $x + \frac{3}{x} = 5$, then the value of

$$\frac{x^2(5-x)}{x^2+x+3} + \frac{x^2+x+3}{x^2(5-x)} = ?$$

- (1) 2 (2) 6
 (3) $\frac{5}{2}$ (4) $\frac{9}{2}$

48. The average age of students of a class is 15.8 years. The average age of boys in the class is 16.4 years and that of the girls is 15.4 years. The ratio of the number of boys to the number of girls in the class is

- (1) 1 : 2 (2) 2 : 3
 (3) 3 : 4 (4) 3 : 5

49. If $\frac{x}{2x+y+z} = \frac{y}{x+2y+z} = \frac{z}{x+y+2z} = a$, then the value of $a = \dots\dots\dots$ (Given $x + y + z \neq 0$)

- (1) $\frac{1}{3}$ (2) $\frac{1}{4}$
 (3) $\frac{1}{8}$ (4) $\frac{1}{2}$

50. Assertion (A) : If the points $A(8, 1)$, $B(k, -4)$ and $C(2, -5)$ are collinear, then $k = 4$.

Reason (R) : Three points $A(x_1, y_1)$, $B(x_2, y_2)$ and $C(x_3, y_3)$ are collinear when $AB + BC = AC$ or $AC + CB = AB$ or $BA + CA = BC$.

- (1) 'A' is true but 'R' is false.
 (2) 'A' is false but 'R' is true.
 (3) Both 'A' and 'R' are true but 'R' is not a correct explanation of 'A'.
 (4) Both 'A' and 'R' are true and 'R' is a correct explanation of 'A'.

51. "Cards marked with numbers 13, 14, 15,, 60 are placed in a box and mixed thoroughly. One card is drawn at random from the box."

Read the information carefully and match the following.

i. The probability of the number that is on the card drawn is divisible by 5.	p. $\frac{1}{4}$
ii. The probability of the number that is on the card drawn is a prime.	q. $\frac{36}{48}$
iii. The probability of the number that is on the card drawn is a multiple of 19.	r. $\frac{5}{24}$
iv. The probability of the number that is on the card drawn is a composite number.	s. $\frac{1}{16}$

- (1) $p \rightarrow iv, q \rightarrow iii, r \rightarrow ii, s \rightarrow i$
 (2) $p \rightarrow iii, q \rightarrow ii, r \rightarrow iv, s \rightarrow i$
 (3) $p \rightarrow i, q \rightarrow ii, r \rightarrow iii, s \rightarrow iv$
 (4) $p \rightarrow ii, q \rightarrow iv, r \rightarrow i, s \rightarrow iii$

52. P, R and S are three persons with ages 26 years, 27 years and 28 years respectively. In what ratio must they invest money at 10% per annum compounded yearly so that each gets same sum at the age of their retirement?

- (1) 100 : 121 : 132
 (2) 100 : 110 : 121
 (3) 80 : 100 : 99
 (4) 89 : 95 : 100

53. Which one of the following statements is/are TRUE?

- (1) In a $\triangle ABC$, $\angle A = x^\circ$, $\angle B = 3x^\circ$ and $\angle C = 2x^\circ$, then it is an equilateral triangle.
 (2) If the product of two whole numbers is 21 and their difference is 4, then the ratio of the numbers is 2 : 3.
 (3) The distance between the points $O(0, 0)$ and $A(2, 3)$ is 5 units.
 (4) If $\frac{\cos^2 \theta}{1 - \sin \theta} - \frac{3}{2} = 0$, then $\theta = 30^\circ$.
 $(0^\circ < \theta < 90^\circ)$

54. The value of $\sin^2 5^\circ + \sin^2 10^\circ + \sin^2 15^\circ + \dots + \sin^2 90^\circ = \dots\dots\dots$

- (1) $\frac{23}{2}$
 (2) $\frac{21}{2}$
 (3) $\frac{19}{2}$
 (4) $\frac{17}{2}$

55. The curved surface area of a regular cylinder is given by $4\pi a^2 + 4\pi a - 3\pi$. Then the possible expressions for the base radius and height of the cylinder are

- (1) Radius = $2a - 1$, height = $2a + 3$
 (2) Radius = $\frac{1}{2}$, height = $4a^2 + 4a - 3$
 (3) Both options (1) and (2)
 (4) Only option (2)

56. If the mean of 28, 34, 41, 23, 45, 18, 21 is 'x', then the value of $2 - \log_x^2 - \log_x^3 - \log_x^5$ is

- (1) 1
 (2) -1
 (3) 0
 (4) $\frac{1}{2}$

57. In the construction of circumscribing circle of a given regular hexagon $ABCDEF$ of side 3 cm done by a student, the steps involved in his construction are given here in a jumbled order. Arrange them in proper order.

- With 'O' as center and OA as radius draw a circle.
- Construct a regular hexagon of each side 3 cm.
- Draw perpendicular bisectors of two adjacent sides.
- Find the measure of the interior angle of the regular hexagon

By observing these steps, now find the correct order.

- (1) c), b), d), a)
- (2) d), b), c), a)
- (3) c), a), b), d)
- (4) b), d), a), c)

58. Assertion (A) : If the mean of x, y, z is y , then $x + z = 2y$.

Reason (R) : Arithmetic mean of 'n' observations $x_1, x_2, x_3, \dots, x_n$ is

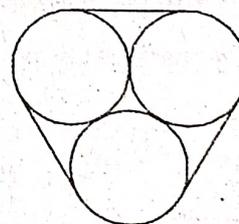
$$\frac{\sum_{i=1}^n x_i}{n}$$

- (1) 'A' is true but 'R' is false.
- (2) 'A' is false but 'R' is true.
- (3) Both 'A' and 'R' are true and 'R' is the correct explanation of 'A'.
- (4) Both 'A' and 'R' are true but 'R' is not a correct explanation of 'A'.

59. If $\left(a + \frac{1}{a}\right)^2 = 3$, then $a^{39} + a^{21} - a^{27} - a^9 + 1 = \dots\dots (a > 0)$

- (1) 0
- (2) 1
- (3) -1
- (4) -2

60. Three identical wheels of diameter 7 cm inserted in a rubber belt as shown in the figure. Then the length of the belt (in cm) is



- (1) 65
- (2) 57
- (3) $\frac{159}{7}$
- (4) 43

HISTORY

61. Who among the following proposed a social contract between people and their representatives?

- (1) Rousseau
- (2) John Locke
- (3) Thomas Jefferson
- (4) Montesquieu

62. Bastille prison was destroyed in France on :

- (1) June 20th 1778
- (2) May 5th 1786
- (3) July 14th 1789
- (4) July 4th 1798

63. Consider the following statements.

- (i) Laying 'Pakka' roads was devised by McAdam.
- (ii) The steam locomotive made by Stephenson was named 'Rocket'.

Which of the above statements is/ are CORRECT?

- (1) (i) only
- (2) (ii) only
- (3) Both (i) and (ii)
- (4) Neither (i), nor (ii)

64. Consider the following statements.

- (i) Woodrow Wilson, the American President played a very active role in the formation of the League of Nations.

(ii) America became an important member of the League of Nations after its formation.

Which of the above statements is/ are CORRECT?

- (1) (i) only
- (2) (ii) only
- (3) Both (i) and (ii)
- (4) Neither (i), nor (ii)

65. Match List I with List II with respect to Sun-Yat-Sen's programme and select the correct answer using the codes given below.

List-I	List-II
A) San	i) Overthrowing the Manchu
B) Min	ii) Land reforms and regulating industries
C) Chui	iii) Establishing democratic government

Codes :

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

66. The western capitalist countries like Britain initially encouraged Hitler and the Nazis because :

- (1) They thought that the policies of Hitler were democratic.
- (2) They thought that Hitler would strengthen the whole Europe.
- (3) They thought that Hitler would act as a buffer against Soviet Socialism.
- (4) They thought that Hitler would save them from Great Depression.

67. Consider the following statements.

- (i) Hitler attacked communism terming it as Jewish conspiracy.
- (ii) Hitler attacked capitalism terming it as Jewish conspiracy.

Which of the above statements is/ are CORRECT?

- (1) (i) only
- (2) (ii) only
- (3) Both (i) and (ii)
- (4) Neither (i), nor (ii)

68. This national leader fasted on the First Independence Day of the Nation. He said, "If I am to die by the bullet of a mad man, I must do so smiling." Who was he?

- (1) Jawaharlal Nehru
- (2) Gandhiji
- (3) Subhash Chandra Bose
- (4) Sardar Vallabhbhai Patel

69. Consider the following statements and select the CORRECT answer using the codes given below.

- (A) The first printing press was made by Johannes Gutenberg.
- (B) Paper and printing with blocks were first developed by the Chinese.
- (C) The first printed book in press was 'The Bible'.

Codes :

- (1) (A), (B) and (C) are correct.
- (2) (A) and (B) are correct.
- (3) (B) and (C) are correct.
- (4) (A) and (C) are correct.

70. Which one of the following pairs is NOT correctly matched?

- (1) Michelangelo – Statue of David
- (2) Leonardo da Vinci – Mona Lisa
- (3) Filippo Brunelleschi – The Last Supper
- (4) Albrecht Dürer – Praying Hands

71. Match List I with List II and select the correct answer using the codes given below.

List I (Author)	List II (Book)
A. Machiavelli	i. Praise of Folly
B. Montesquieu	ii. Utopia
C. Thomas More	iii. The spirit of Laws
D. Erasmus	iv. The Prince

Codes :

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

72. Consider the following statements.

- (i) The parliament which continued from 1660 to 1680 in England was called the long Parliament.
- (ii) 'No taxation without representation' is the slogan of Glorious Revolution.

Which of the above statements is/ are CORRECT?

- (1) (i) only
- (2) (ii) only
- (3) Both (i) and (ii)
- (4) Neither (i), nor (ii)

GEOGRAPHY

73. Baltic sea has very low salinity. Which of the following factors is mainly responsible for this?

- (1) Evaporation
- (2) Precipitation
- (3) Ocean currents
- (4) Fresh water flow from rivers

74. Consider the following statements and find out which of them is/are TRUE?

(i) The minerals in organic fertilizers are slowly available to plants.

(ii) Chemical fertilizers reduce the fertility of the soil in course of time.

- (1) Only (i) is true
- (2) Only (ii) is true
- (3) Both (i) and (ii) are true.
- (4) Both (i) and (ii) are false.

75. When it is 12 noon in Greenwich (0°), what is the local time at Chicago ($87^{\circ}30'W$) and at Chirala ($81^{\circ}E$) respectively?

- (1) 5.46 am and 5.32 pm
- (2) 5.40 am and 4.50 pm
- (3) 6.10 am and 5.24 pm
- (4) 5.30 am and 5.30 pm

76. Match List I with List II and select the correct answer using the codes given below.

List I (Coast)	List II (State)
A. Coromandel	i. Karnataka
B. Circar	ii. Kerala
C. Malabar	iii. Andhra Pradesh
D. Canara	iv. Tamil Nadu

Codes :

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

77. Consider the following statements about lesser Himalayas.

(i) The Pirpanjal and Mahabharata ranges form the important ranges of this region.

(ii) This region is covered by evergreen forests.

Which of the above statements is/are CORRECT?

- (1) (i) only
- (2) (ii) only
- (3) Both (i) and (ii)
- (4) Neither (i), nor (ii)

78. Consider the following features of Peninsular rivers.

- (i) Fixed course
- (ii) Presence of meanders
- (iii) Largely non-perennial flow of water

Which of the above features is/are CORRECT?

- (1) (i), (ii), (iii)
- (2) (ii) only
- (3) (i) and (ii) only
- (4) (i) and (iii) only

79. Which of the following are South flowing tributaries of River Ganga?

- (1) Yamuna, Betwa
- (2) Gomti, Gandak
- (3) Kosi, Tamsa
- (4) Chambal, Ghaghara

80. Assertion (A) : Coromandel coast remains mostly dry during South-West monsoon season.

Reason (R) : It is in the rain shadow area of the Arabian sea branch and is parallel to the Bay of Bengal branch.

- (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 the correct explanation of 'A'.
- (3) 'A' is true but 'R' is false.
- (4) 'A' is false but 'R' is true.

81. Find out the correct statement among the following regarding the rainfall across the globe :

- (1) Rainfall is more on the western coasts between 10°N – 30°N and 10°S – 30°S .

- (2) Rainfall is more on the eastern coasts between 40°N – 60°N and 40°S – 60°S .

- (3) Rainfall is low in low pressure areas.

- (4) Rainfall is more over the oceans than on the continents.

82. Oceans in descending order in terms of their size :

- (1) Pacific, Atlantic, Indian, Antarctic, Arctic

- (2) Pacific, Atlantic, Indian, Arctic, Antarctic

- (3) Pacific, Indian, Atlantic, Arctic, Antarctic

- (4) Pacific, Arctic, Atlantic, Indian, Antarctic

83. Thick barks and wax coated leaves is an important feature of :

- (1) Tropical evergreen forests

- (2) Temperate evergreen forests

- (3) Temperate deciduous forests

- (4) Mediterranean vegetation

84. Consider the following statements and select the correct answer using the codes given below.

- (i) India is the second largest producer of paddy in the World after China.

- (ii) India is the largest producer as well as the consumer of the pulses in the World.

- (iii) India is the largest producer of sugarcane in the World.

Codes :

- (1) (i), (ii), (iii) all are correct

- (2) (i), (ii) are correct

- (3) (ii), (iii) are correct

- (4) (i), (iii) are correct

POLITICAL SCIENCE

85. The Chief Election Commissioner of India holds office for a period of :

- (1) Six years
- (2) Five years
- (3) Six years or upto 65 years of age (whichever is earlier)
- (4) Five years or upto 60 years of age (whichever is earlier)

86. Minimum educational qualification required for a candidate to contest in Parliamentary elections is :

- (1) SSC or equivalent
- (2) Intermediate or equivalent
- (3) Graduation
- (4) No educational qualification is required

87. The Supreme Court judgement popularly known as 'Keshavanandabharati case' says that :

- (1) Certain basic provisions in the Constitution cannot be changed under any circumstances.
- (2) The word 'secular' is to be added to the Preamble of the Constitution.
- (3) 'Right to Property' should be removed from fundamental rights.
- (4) Laws should not be amended.

88. Constitution Day is celebrated in India every year on which day? Why?

- (1) 26th November – Constituent Assembly met for the first time on that day.
- (2) 26th January – Constitution came into force on that day.
- (3) 26th November – Constitution was finally adopted on that day.
- (4) 26th January – Constitution was ammended for the first time on that day.

89. The sequence in which the given terms are mentioned in the Constitutional preamble is :

- (1) Sovereign, Socialist, Secular, Democratic, Republic
- (2) Sovereign, Socialist, Secular, Republic, Democratic
- (3) Sovereign, Socialist, Democratic, Secular, Republic
- (4) Sovereign, Socialist, Republic, Secular, Democratic

90. Respect for the National Flag and the National Anthem is :

- (1) A fundamental right of every citizen.
- (2) A fundamental duty of every citizen.
- (3) A directive principle of state policy.
- (4) An ordinary duty of every citizen.

91. Which one among the following was not an aim of the 42nd Constitutional amendment?

- (1) Excluding the courts from election disputes.
- (2) Strengthening the Central Government.
- (3) Abolition of bonded labour.
- (4) Making the judiciary subservient to Parliament.

92. In a Parliamentary form of Government, Ministers are appointed by :

- (1) The President at his discretion.
- (2) The Prime Minister at his discretion.
- (3) The President on the recommendations of the Prime Minister.
- (4) The Prime Minister on the recommendations of the President.

ECONOMICS

93. Find the odd one out with reference to type of capital.
- (1) Tools
 - (2) Raw materials
 - (3) Machines
 - (4) Buildings
94. Consider the following statements.
- (i) India is the largest producer of raw jute and jute goods in the World.
 - (ii) The first cement plant in India was setup in Jamshedpur in 1904.
- Which of the above statements is/are CORRECT?
- (1) (i) only
 - (2) (ii) only
 - (3) Both (i) and (ii)
 - (4) Neither (i) nor (ii)
95. Consider the following statements.
- (i) Infant mortality rate is the number of children who die within one year, out of 100 live children born.
 - (ii) Literacy rate is the percentage of literate population in the 6 and above age group
- Which of the above statements is/are CORRECT?
- (1) (i) only
 - (2) (ii) only
 - (3) Both (i) and (ii)
 - (4) Neither (i) nor (ii)
96. With reference to agriculture in India, which among the following statements is NOT CORRECT?
- (1) Disguised unemployment is predominantly seen.
 - (2) Still today, it is the largest employer in India.
 - (3) Goods are not directly produced.
 - (4) Nature plays a dominant role in production.
97. In our country as per Indian National Co-operative Union guidelines all the states conduct co-operative week celebrations :
- (1) From November 14th to 20th
 - (2) From January 10th to 16th
 - (3) From April 10th to 16th
 - (4) From July 1st to 7th
98. Consider the following taxes :
- A) Corporate tax
 - B) Property tax
 - C) Income tax
 - D) Service tax
- Which of the above is/are NOT included in direct tax?
- (1) A) only
 - (2) C) only
 - (3) A), B) and C) only
 - (4) D) only
99. Which among the following is ODD one out in the general criteria for selecting a site for operations of MNCs?
- (1) Proximity to the markets
 - (2) Availability of labour at low cost
 - (3) Strong and good labour unions
 - (4) Favourable Government policies
100. Which of the following is/are related to Tertiary sector of Indian Economy? Select the answer using the codes given below :
- A) Trade and Transportation
 - B) Public Administration
 - C) Mining
 - D) Information Technology
- Codes :
- (1) A, B and C only
 - (2) A, B and D only
 - (3) A and D only
 - (4) A, B, C and D