NTSE (STAGE-II) TEST SERIES

SCHOLASTIC APTITUDE TEST (SAT)

TEST #1

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY

1. Duration of Test is **120 Minutes** and Questions Paper Contains **100 Questions**. Total Marks are **100**.

2. Answers are to be given on a separate OMR sheet.

3. There are 100 questions in this test. All are compulsory. The question numbers 1 to 40 belong to Science, 41 to 60 pertain to Mathematics and 61 to 100 are on Social Science subjects. 120 minutes are alloted for Science, Mathematics and Social Science.

4. Please follow the instructions given on the OMR sheet for marking the answers.

5. Mark your answers for questions 1–100 on the OMR sheet by darkening the circles.

6. Every correct answer will be awarded one mark. **THERE IS NO NEGATIVE MARKING.**

7. If you do not know the answer to any question, do not waste time on it and pass on to the next one. Time permitting, you can come back to the questions, which you have left in the first instance and attempt them.

8. Since the time allotted for this question paper is very limited you should make the best use of it by not spending too much time on any one question.

9. Rough work can be done anywhere in the booklet but not on the OMR sheet/loose paper.

10. Please return the OMR sheet to the invigilator after the test.

Your Hard Work Leads to Strong Foundation

HAVE CONTROL ⟶ HAVE PATIENCE ⟶ HAVE CONFIDENCE ⟹ 100% SUCCESS

1. Consider the circuit below:
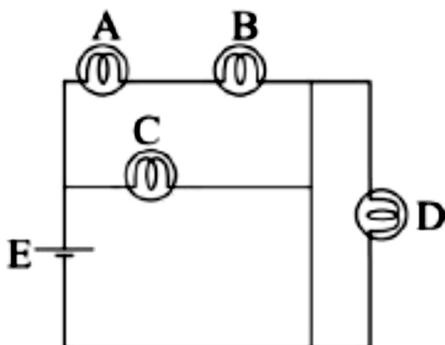
   (1) If the bulb A burns out. then bulb C stays lighted, bulb B burns brightly
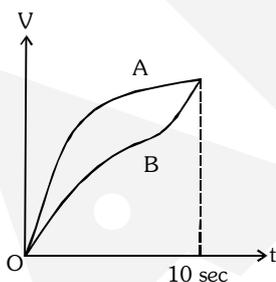
   (2) If the bulb B burns out, then bulb C goes off and D stays lighted

   (3) If the bulb C burns out, bulbs A and B go off

   (4) If the bulb D burns out, the event is unnoticeable, and bulbs A, B, C stays lighted.

2. A graph given, shows the variation of velocity and time of two bodies A and B along a straight line. Choose an alternative for their average velocities

   (1) Average velocities of both are same since they have same initial and final velocities

   (2) Average velocities of both are same since both cover equal distance in equal interval of time

   (3) Average velocity of A is greater than that of B since it covers more distance than B in 10 sec.

   (4) Nothing can be said since their accelerations are not given.

3. A ball whose density is 0.4×10^3 kg/m³ falls into water from a height of 9 cm. To what depth does the ball sink? (Hint: Only consider buoyancy) [Take g = 9.8m/s²]

   (1) 9cm   (2) 6cm   (3) 4.5 cm   (4) 2.25 cm

4. A ball is dropped from a height of 20m above the surface of water in a lake. The refractive index of water is 4/3. A fish inside the lake, in the line of fall of the ball, is looking at the ball. At an instant, when the ball is 12.8 m above the water surface, the fish sees the speed of ball as [Take g = 10 m/s²]

   (1) 9 m/s   (2) 12m/s   (3) 16m/s   (4) 21.33ms

5. A parachutist after balling out falls 50m without friction. When parachute opens, it decelerates at 2 m/s². He reaches the ground with a speed of 3m/s. At what height (approx), did he bail out? [Take g = 9.8m/s²]

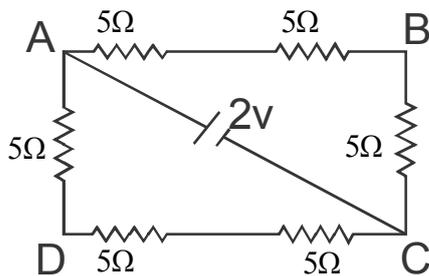   (1) 91m   (2) 182m   (3) 293m   (4) 111m

6. From a tower of height H, a particle is thrown vertically upwards with a speed u. The time taken by the particle to hit the ground, is n times that taken by it to reach the highest point of its path. The relation between H, u and n is

   (1) $2gH = n^2u^2$ (2) $gH = (n–2)^2u^2$

   (3) $2gH = nu^2(n–2)$ (4) $gH = (n–2)u^2$

7. A pendulum has a frequency of 5 vibrations per second. An observer starts the pendulum and fires a gun simultaneously. He hears the echo from the cliff after 8 vibrations of the pendulum. If the velocity of sound in air is 340 ms⁻¹, what is the distance between the cliff and the observer?

   (1) 472m   (2) 372m

   (3) 272m   (4) 572m

8. For a convex lens, if real image is formed the graph between (u + v) and u or v is as follows

(1)

(2)

(3)

(4)

9. Balls are thrown vertically upward in such a way that the next ball is thrown when the previous one is at the maximum height. If the maximum height is 5m, the number of balls thrown per minute will be

(1) 40 (2) 50

(3) 60 (4) 120

10. A point source of light B, placed at a distance L in front of the centre of plane mirror of width d, hangs vertically on a wall. A man walks in front of the mirror along a line parallel to the mirror at a distance 2L from it as shown. The greatest distance over which he can see the image of the light source in the mirror is :

(1) d/2 (2) d

(3) 2d (4) 3d

11. Express which of the following setups can be used to verify Ohm's law

(1)

(2)

(3)

(4)

12. An electric current passes through a circuit containing two wires of the same material connected in parallel. If the lengths of the wires are in the ratio of 4/3 and radii of the wires are in the ratio of 2/3, then the ratio of the currents passing through the wires will be :

(1) 3 (2) 1/3

(3) 8/9 (4) None of these

13. The potential difference between points A and B of adjoining figure is


(1) $\dfrac{2}{3}V$ (2) $\dfrac{8}{9}V$

(3) $\dfrac{4}{3}V$ (4) $2V$

14. Ammonium nitrite on thermal decomposition produced

(1) NH_3 and NO_2 (2) NH_3 and NO

(3) N_2O and H_2O (4) N_2 and H_2O

15. Which of the following process is associated with best possibility of the energy release?

(1) $Li \rightarrow Li^+ + e^-$ (2) $O^- + e^- \rightarrow O^{2-}$

(3) $Cl^+ + e^- \rightarrow Cl$ (4) $Be + e^- \rightarrow Be^-$

16. A helium atom is two times heavier than a hydrogen molecule. At 298 K, the average kinetic energy of a helium atom is

(1) 0.707 times that of a hydrogen molecule

(2) 1.414 times that of a hydrogen molecule

(3) Half that of a hydrogen molecule

(4) Same as that of a hydrogen molecule

17. Consider the following terms:

A: Filtration tank

B: Sedimentation tank

C: Loading tank

D: Chlorination tank

Which order is correct, while supplying of drinking water in the city?

(1) B < C < A < D (2) A < B < C < D

(3) B < A < C < D (4) A < B < D < C

18. The reaction given below represent the processes of reduction to obtain metals from their respective ores. Arrange them in the following order.

Sodium, aluminium, zinc, chromium, iron, copper and mercury

(1) Metal oxide + metal sulphide $\rightarrow$ Metal + SO_2

(2) Metal oxide + $CO \rightarrow$ Metal + CO_2

(3) Metal oxide + $C \rightarrow$ Metal + CO

(4) Metal oxide $\rightarrow$ Metal + O_2

(5) Metal oxide $\xrightarrow{\Delta}$ Metal + O_2

(6) Metal oxide + Aluminium $\rightarrow$ Aluminium oxide + Metal

(7) Metal chloride $\rightarrow$ Metal + Chlorine

(1) 7 4 3 6 2 1 5 (2) 7 4 3 6 2 5 1

(3) 1 3 2 4 6 7 5 (4) 7 4 5 2 6 1 3

19.

I.

II.

III.

IV.
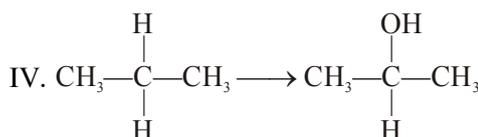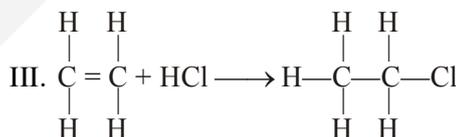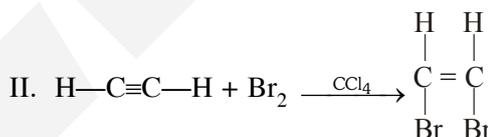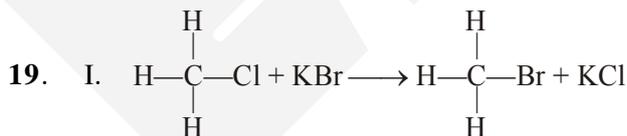
Number of addition reactions among the following is/are

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

20. In the reaction,

$4NH_3(g) + 5O_2(g) \longrightarrow 4NO(g) + 6H_2O(g)$

When 1 mole of ammonia and 1 mole of O_2 are made to react to completion

(1) 1.0 mole of H_2O is produced

(2) 1.0 mole of NO will be produced

(3) All the oxygen will be consumed

(4) All the ammonia will be consumed

21. The following table shows solutions X, Y and Z with their respective pH values.

Solutions	X	Y	Z
pH	3	7	12

Based on the given information which of the following statements is false?

(1) Solution X reacts with metals to liberate H_2 gas.

(2) Solution Y is formic acid.

(3) Solution Z reacts with solution X to form salt and water.

(4) Solution X reacts with calcium carbonate to give off CO_2 gas.

22. The volume of water to be added to 50ml of 25 mass% HCl solution (d = 1.5 gm/cm³) to prepare another HCl solution which is 15 mass% having density 1.25 gm/cm³ is

(1) 50 ml   (2) 75 ml

(3) 100 ml   (4) 125 ml

23. In radio active change

$$_zP^A \rightarrow {}_{z+1}Q^A \rightarrow {}_{z-1}R^{A-4} \rightarrow {}_{z-1}S^{A-4}$$

the radiations emitted in sequence are

(1) α, β, γ (2) β, α, γ

(3) γ, α, β (4) β, γ, α

24. Sodium and chlorine atoms combines

(1) to aquire electronic configuration of argon

(2) to aquire highest oxidation states

(3) by exchanging valence electrons

(4) to complete their octets

25. On mixing ethyl acetate with aqueous sodium chloride, the composition of the resultant solution is

(1) $CH_3COOC_2H_5 + NaCl$

(2) $CH_3COONa + C_2H_5OH$

(3) $CH_3COCl + C_2H_5OH + NaOH$

(4) $CH_3Cl + C_2H_5COONa$

26. From 392 mg of H_2SO_4, 1.204×10^{21} molecules are removed. How many moles of H_2SO_4 are left?

(1) 2.0×10^{-3} (2) 1.2×10^{-3}

(3) 4.0×10^{-3} (4) 1.5×10^{-3}

27. The guard cells are also capable of photosynthesis because they have

(1) cytoplasm, nucleus, centrioles

(2) cytoplasm, nucleus, centrosome

(3) cytoplasm, nucleus, chloroplasts

(4) cytoplasm, nucleus, chromosomes

28. In almost all Indian metropolitan cities like Delhi, the major atmospheric pollutant(s) is/ are

(1) Oxides of nitrate and hydrogen

(2) Suspended particulate matter (SPM) and nitrogen

(3) Suspended particulate matter (SPM) and carbon monoxide

(4) Oxides of sulphur and hydrogen

29. Vascular cryptogams or seedless vascular plants belong to

(1) Bryophyta   (2) Pteridophyta

(3) Thallophyta   (4) Spermatophyta

30. Which type of epithelial tissue lines the inner surface of the trachea ?

(1) Squamous

(2) Cuboidal

(3) Hyaline cartilage

(4) Pseudostratified ciliated columnar

31. Brunner's glands are found in which of the following

(1) Submucosa of stomach

(2) Mucosa of ileum

(3) Submucosa of duodenum

(4) Mucosa of oesophagus

**32.** In order to move from the right side of the heart to the left side of the heart, blood must pass through the

(1) Mitral valve   (2) Vena cava

(3) Lungs   (4) Aorta

33. In which one of the following, the genus name, its two characters and its phylum are not correctly matched, whereas the remaining three are correct?

Genus name	Two characters	Phylum
(1) Pila	(a) Body segmented (b) $CaCO_3$ shell is secreted by mantle	Mollusc
(2) Asterias	(a) Spiny skinned (b) Water vascular system	Echinodermata
(3) Sycon	(a) Pore bearing (b) Canal system	Porifera
(4) Periplaneta	(a) Jointed appendages (b) Chitinous exoskeleton	Arthropoda

34. Two contraceptive methods that are generally irreversible and which block the gametes from moving to a site where fertilization can occur are
(1) the male condom and female condom.
(2) the male condom and oral contraceptives.
(3) vasectomy and tubal ligation.
(4) coitus interruptus and rhythm method.

35. The genotypes of a tomato variety were TtHh, Tthh, ttHh, tthh, where T = tall and H = hairy. Which one of the following crosses would produce offspring giving a phenotypic ratio of approximately 1:1:1:1?
(1) TtHh x TtHh
(2) TtHh x Tthh
(3) TtHh x ttHh
(4) TtHh x tthh

36. During the transmission of nerve impulse through a nerve fiber, the potential on the inner side of the plasma membrane has which type of electric charge?
(1) First positive, then negative and continue to be negative.
(2) First negative, then positive and continue to be positive.
(3) First positive, then negative and again back to positive.
(4) First negative, then positive and again back to negative.

37. Which of the following sets of animals produce the same substances as their chief excretory product?
(1) Fish, pigeon and frog
(2) Camel, housefly and snake
(3) Frog, monkey and dog
(4) Amoeba, ant and antelope

38. The diagram below shows a section through part of the human digestive system.
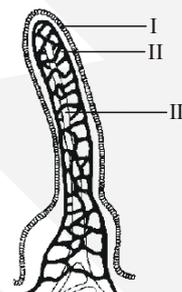
What are the structures I, II and III?

	I	II	III
(1)	epithelium	capillaries	lacteal
(2)	epithelium	capillaries	artery
(3)	mucus	muscle fibres	artery
(4)	lacteal	muscle fibres	mucus

39. Swine flu is _____ disease, caused by _____, can be prevented by _____.
(1) Communicable, protozoa, BCG
(2) Respiratory, H_1N_1 virus, Tamiflu
(3) Liver, *Salmonella typhi,* DPT
(4) Infectious, HIV virus, Tamiflues

40. Read the two statements A and B.
Statement A : The number of mitochondria in a cell do not correspond to the function of the cell.
Statement B : Mitochondria are common to both plant and animal cells.
Choose the correct option from those given below.
(1) Statement A is correct, B is wrong
(2) Statement B is correct, A is wrong
(3) Both the statements A and B are correct
(4) Both the statements A and B are wrong

41. Product of divisors of 7056 is
(1) $(84)^{48}$
(2) $(84)^{44}$
(3) $(84)^{45}$
(4) $(84)^{33}$

42. 125 identical cubes are cut from a big cube and all the smaller cubes are arranged in a row to form a long cuboid. What is the percentage increase in the total surface area of the cuboid over the total surface area of the cube?

(1) $234\frac{2}{3}\%$ (2) $235\frac{1}{3}\%$

(3) $134\frac{2}{3}\%$ (4) $195\frac{2}{3}\%$

43. If $m^2 - 4m + 1 = 0$, then the value of $\left(m^3 + \frac{1}{m^3}\right)$ is

(1) 48   (2) 52   (3) 64   (4) 68

44. Let a, b, c, be the positive numbers. The following system of equations in x, y and z.

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} - \frac{z^2}{c^2} = 1$$

$$\frac{x^2}{a^2} - \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1$$

$$-\frac{x^2}{a^2} + \frac{y^2}{b^2} + \frac{z^2}{c^2} = 1, \text{ has}$$

(1) no solution

(2) unique solution

(3) infinitely many solutions

(4) finitely many solutions

45. $\sin^6 A + \cos^6 A$ is equal to

(1) $1 - 3\sin^2 A\cos^2 A$ (2) $1 - 3\sin A\cos A$

(3) $1 + 3\sin^2 A\cos^2 A$ (4) 1

46. The radius of a circle is 20 cm. The radii (in cm) of three concentric circles drawn in such a manner that the whole area is divided into four equal parts, are :

(1) $20\sqrt{2}$, $20\sqrt{3}$, 20   (2) $\frac{10\sqrt{3}}{3}$, $\frac{10\sqrt{2}}{3}$, $\frac{10}{3}$

(3) $10\sqrt{3}$, $10\sqrt{2}$, 10   (4) 17, 14, 9

47. ABCD and EFGA are the squares of side 4 cm, each. In square ABCD, DMB and PMQ are the arcs of circles with centres at A and C respectively. In square AEFG, the shaded region is enclosed by two arcs of circles with centres at A and F, respectively. What is the ratio of the shaded regions of the squares ABCD and AEFG respectively.
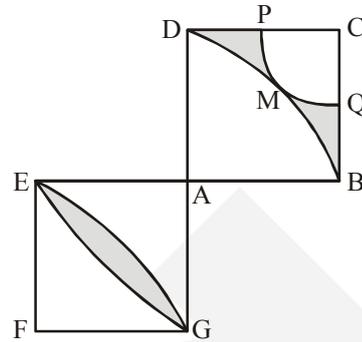
(1) $\frac{2 + \pi(\sqrt{2} - 2)}{(\pi - 2)}$ (2) $\frac{(\pi - 2)}{2(\sqrt{2} + 1 - \pi)}$

(3) $\frac{4}{3}$ (4) none of these

48. An A.P. whose first term is unity and in which the sum of the first half of any even number of terms to that of the second half of the same number of terms is in constant ratio, the common difference 'd' is given by

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

49. A bag contains 4 red and 3 black balls. A second bag contains 2 red and 4 black balls. One bag is selected at random. From the selected bag, one ball is drawn. Find the probability that the ball drawn is red.

(1) $\frac{23}{42}$ (2) $\frac{19}{42}$ (3) $\frac{7}{32}$ (4) $\frac{16}{39}$

50. In right angled $\triangle ABC$, $\angle B = 90°$, if P and Q are points on the sides AB and BC respectively, then
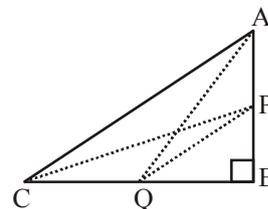


(1) $AQ^2 + CP^2 = 2(AC^2 + PQ^2)$

(2) $AQ^2 + CP^2 = AC^2 + PQ^2$

(3) $(AQ^2 + CP^2) = \frac{1}{2}(AC^2 + PQ^2)$

(4) $(AQ + CP) = \frac{1}{2}(AC + PQ)$

51. If x is a natural number which is a perfect square, then the number $x + \sqrt{x}$ must end in

(1) 0 or 5   (2) 0 or 1 or 9

(3) 0 or 2 or 6   (4) 0 or 4 or 8

52. The elevation of a tower at a station A due north of it is 45° and at a station B due west of A is 30°. If AB = 40 m, find the height of the tower :

(1) 26.26 m   (2) 28.28 m

(3) 38.5 m   (4) none of these

53. O is orthocentre of a triangle PQR, which is formed by joining the mid-points of the sides of a ΔABC, O is :

(1) orthocentre   (2) incentre

(3) circumcentre   (4) centroid

54. ABCD is a square, in which a circle is inscribed touching all the sides of square. In the four corners of square 4 smaller circles of equal radii are drawn, containing maximum possible area. What is the ratio of the area of larger circle to that of sum of the areas of four smaller circles?
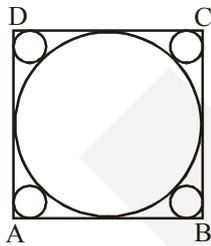
(1) $1 : (68 - 48\sqrt{2})$ (2) $1 : 17\sqrt{2}$

(3) $3 : (34 - 12\sqrt{2})$ (4) none of these

55. Points A and B are 90 km apart from each other on a highway. A car starts from A and another from B at the same time. If they go in the same direction, they meet in 9 hours and if they go in opposite directions, they meet in 9/7 hours. Find their speed (in km/h).

(1) 25, 45   (2) 20, 50

(3) 30, 40   (4) 35, 65

56. The equation $|x + 1| |x - 1| = a^2 - 2a - 3$ can have real solutions for x if a belongs to :

(1) $(-\infty, -1] \cup [3, \infty)$

(2) $[1 - \sqrt{5}, 1 + \sqrt{5}]$

(3) $[1 - \sqrt{5}, -1] \cup [3, 1 + \sqrt{5}]$

(4) none of the above

57. The number of common terms to the two sequences 17, 21, 25, ..., 417 and 16, 21, 26, ..., 466 is :

(1) 19   (2) 20   (3) 21   (4) 84

58. An open box is made of wood 2 cm thick. Its internal length is 86 cm, breadth 46 cm and height is 38 cm. The cost of painting the outer surface of the box at Rs. 10 per m^2 is :

(1) Rs. 18.5   (2) Rs. 8.65

(3) Rs. 15.70   (4) Rs. 17.50

59. In the adjoining figure ∠ACE is a right angle there are three circle which just touch each other and AC and EC are the tangents to all the three circles. What is the ratio of radii of the largest circle to that of the smallest circle?
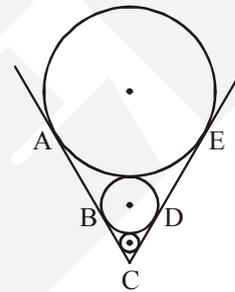
(1) $17 : 12\sqrt{2}$ (2) $1 : (17-12\sqrt{2})$

(3) $12 : 17\sqrt{2}$ (4) none of the above

60. If a, b, c are all positive, then the minimum value of the expression

$$\frac{(a^2 + a + 1)(b^2 + b + 1)(c^2 + c + 1)}{abc} \text{ is}$$

(1) 3   (2) 9   (3) 27   (4) 1

61. The rivalry between the Parsis and the racist Bombay Gymkhana ended when:

(1) The Parsis built their own Gymkhana to play cricket

(2) A Parsi team beat the Bombay Gymkhana in cricket in 1889

(3) Both (1) and (2)

(4) None of the above

62. Among the following which one is not an major Iron-ore belt -

(1) Orissa - Jharkhand belt

(2) Amarkantak plateau, Maikal hills and the plateau region of Bilaspur- Katni.

(3) Durg - Bastar - Chandrapur Belt

(4) Bellary - Chitradurga - Chikmaglur - Tumkur in Karnataka.

63. Which of the following is the deepest landlocked and well-protected port ?
(1) Mumbai   (2) New Mangalore
(3) Tuticorin   (4) Vishakhapatnam

64. Identify the crop -
(a) Have very high nutritional value.
(b) Third most important food crop
(c) Rain-fed crop, mostly grown in the moist areas
(d) Maharashtra is the largest producer
(1) Maize   (2) Bajra
(3) Jowar   (4) Ragi

65. There were revision of laws by MCC between 1770s and 1780s. They were:
(1) The weight of the ball and the width of the bat were specified
(2) The first leg-before law was published in 1774
(3) The third stump became common, and the first six seam cricket ball was created
(4) All the above

66. **Statement I** - These projects would integrate development of agriculture and the village economy with rapid industrialisation and growth of the urban economy.
Statement II - Jawahar Lal Nehru proudly proclaimed the Dams as the 'Temples of Modern India'.
(1) Statement I is right, but Statement II is wrong.
(2) Statement II is right, but Statement I is wrong.
(3) Both Statement I & II are true and Statement I is correct explanation of Statement II.
(4) Statement I and Statement II are true but statement I is not the correct explanation of Statement II.

67. Which of the following statements are true regarding the Western Ghats -
(a) Cause orographic rain by facing the rain bearing moist winds to rise along the western slopes of the Ghats.
(b) Height of the Ghats progressively increases from North to South.
(c) Are known by different local names such as Shevaroy hills and the Javadi hills east.
(d) Highest peaks include the Anaimudi (2695 metres) and the Doda Betta (2637 metres).

(1) (a), (b) & (c) are correct.
(2) (b), c) & (d) are correct.
(3) (a), (b) & (d) are correct.
(4) All are correct

68. It is a medicinal plant found in various parts of Himachal Pradesh and Arunachal Pradesh. A chemical compound called 'taxol' is extracted from the bark, needles, twigs and roots of this tree, and it has been successfully used to treat some cancers - the drug is known as the biggest selling drug in the world.
We are talking about -
(1) Himalayan Yew
(2) Madhuca Insignis
(3) Hubbardia Heptaneuron
(4) Rhododendron

69. Which of our neighbouring country touches the boundary of the following Indian States - Uttarakhand, Uttar Pradesh, Bihar, W.Bengal & Sikkim ?
(1) China   (2) Nepal
(3) Bhutan   (4) Bangladesh

70. Match the following -

	Column A		Column B
1.	Alluvial soil	(a)	Lacks humus and moisture. The lower horizons of the soil are Occupied by Kankar because of the increasing calcium content Downwards.
2.	Black soil	(b)	Develops in areas with high temperatures and heavy rainfall. Humus content of the soil is low,
3.	Red & Yellow soil	(c)	Deposited by three important Himalayan river systems – the Indus, the Ganga and the Brahmaputra.
4.	Laterite Soil	(d)	Climatic condition along with the parent rock material are the Important factors for the formation.
5.	Arid Soil	(e)	Found in southern parts of the middle Ganga plain and along the Piedmont zone of the Western Ghats.

(1) 1. (c), 2.(d), 3.(e), 4.(a),5. (b)
(2) 1. (d), 2.(a), 3.(e), 4.(b),5. (c)
(3) 1. (c), 2.(d), 3.(e), 4.(b),5. (a)
(4) 1. (c), 2.(b), 3.(d), 4.(e),5. (a)

71. Towards the close of summer season, pre-monsoon showers are common specially in Kerala & Karnataka, are often referred to as _____
(1) Kal Baisakhi
(2) Mango Showers
(3) October Heat
(4) Burst of the Monsoon

72. The Gwalior state tried to prohibit its use in 1921 during the non co-operation movement. During the Khilafat movement it was worn by large numbers of Hindus and Muslims. A group of Santhals who attacked the police in 1922 in Bengal demanding the release of Santhal prisoners believed that it would protect them from bullets - three of them died as a result. For what does 'it' stands in the above statement-
(1) Phenta   (2) Chapkan
(3) Corset   (4) Gandhi Cap

73. Bamboos, Sal, Shisham, Sandalwood, Khair, Kusum, Arjun, Mulberry are commercially important species of -
(1) Tropical Rain Forests
(2) Tropical Deciduous forests
(3) The thorn forests and scrubs
(4) Montane forests

74. Despite being their greatest player he was never made captain of the Hindus because he was born a Dalit and upper-caste selectors discriminated against him. But his younger brother, Vithal, a batsman did become captain of the Hindus in 1923 and led the team to a famous victory against the Europeans.
Who is 'He' in the above statement -
(1) S.A. Brelvi
(2) Palwankar Baloo
(3) Ramachandra Guha
(4) C.K.Nayadu

75. Cricket did not become popular in the countries in South America because :
(1) South American countries were not under American, Spanish and Portuguese influence
(2) Unlike other games like football and hockey, cricket remained a Britain colonial game
(3) It was a part of British colonial game
(4) It was limited to the countries that was not the part of British empire

76. How did the cricket boards become rich?
(1) By organising large number of matches
(2) Through patronage from rich industrialists
(3) By selling television rights to television companies
(4) None of the above

77. Which of the following is not true about the major step taken towards decentralisation in 1992
(a) Constitutionally mandatory to hold regular elections to local government bodies.
(b) At least one-third of all local positions are reserved for women.
(c) An institution under State government, called State Election Commission has been created in each state to conduct panchayat and municipal elections.
(d) State governments are not required to share some powers and revenue with local government bodies.
(e) Seats are reserved for the Scheduled castes, Scheduled tribes and Other Backward classes.
(1) (a) &(c) are not correct.
(2) Only (e) is not correct.
(3) (c) & (b) are not correct.
(4) Only (d) is not correct.

78. Which of these sentences is not correct about medieval France?
(1) The items of clothing a person could purchase was regulated not only by income but by soical rank
(2) The material to be used for clothing was legally prescribed
(3) Everybody could wear expensive materials
(4) None of the above

79. **Statement I** - The proportion of women among the highly paid and valued jobs is still very small.
Statement II - Parents prefer to spend their resources for their boy's education rather than spending equally on their sons and daughters.
(1) Statement I is right, but Statement II is wrong.
(2) Statement II is right, but Statement I is wrong.
(3) Both Statement I & II are true and Statement I is correct explanation of Statement II.
(4) Statement I and Statement II are true but statement II is the correct explanation of Statement I

80. Which of the following were used by Bastar tribals as messages inviting villagers to rebel against the British ?

(a) Mango boughs & a lump of earth

(b) Thorny bark of the Semur tree & fruit of the Mahua tree

(c) Chillies and arrows

(d) Agricultural implements like yokes & ploughs

(1) only (a) is correct

(2) (a) & (b) both are correct

(3) (a) & (c) are correct

(4) (a), (b) & (c) are correct

81. On _____ of November, 1949, we hereby adopt, enact & give to ourselves this constitution?

(1) 29　　(2) 26　　(3) 25　　(4) 20

82. Statement I - Unlike the things that were used as money earlier, modern currency is not made of precious metals, has no value of its own. Still used as the medium of exchange.

Statement II - The law legalises the use of rupee as a medium of payment that cannot be refused in settling transactions in India.

(1) Statement I is right, but Statement II is wrong.

(2) Statement II is right, but Statement I is wrong.

(3) Statement I and II both are right but Statement I is the clear explanation of Statement II.

(4) Statement I and II both are right but Statement II is the clear explanation of Statement I.

83. When was the report of State Reorganisation Commision was implemented ?

(1) 31 Oct. 1947　　(2) 1 Nov. 1956

(3) 23 Sept. 1950　　(4) 26 Jan. 1949

84. A farmer sells wheat to a floor mill for Rs. 8 per kg. The mill grinds the wheat and sells the floor to a biscuit company for Rs. 10 per kg. The biscuit company uses the floor and things such as sugar and oil to make four packets of biscuits. It sells biscuits in the market to the consumers for R. 60/ Rs. 15 per packet. Which prices will be included in the GDP ?

(1) Price of the wheat i.e. Rs. 8 per kg, sold to the floor mill.

(2) Rs. 10 per kg, the price, which the mill charges to the biscuit company.

(3) Rs. 60, price at which biscuits are sold in the market to the consumers.

(4) Rs. 8 + Rs.10 + Rs. 60 = Rs. 78

85. Identify the factor responsible for the changes that have occured in caste system in modern India

(1) Illiteracy

(2) Strong positions of landlords

(3) Economic Development

(4) Strengthening of caste hierarchy

86. According to 2004 Per Capita Income in US $ of India is.

(1) $ 1870　　　　(2) $ 2225

(3) $ 3139　　　　(4) $ 1490

87. What are activists protesting for in the given picture :

(1) Protest against Posco

(2) Protest against hike in price of onion and LPG

(3) Protest for reservation

(4) Protest for Human rights.

88. 'More than 15 million people are directly engaged in this industry. It also promotes national integration, provides support to local handicrafts and cultural pursuits. It also helps in the development of international understanding about our culture and heritage.'

(1) Iron & Steel Industry

(2) Textile Industry

(3) Tourism Industry

(4) Railways

89. By the end of the 19th century, the new culture taking shape in India was :

    (1) A visual culture with cheap prints and calendars, so that even the poor could decorate the walls of their homes with them

    (2) Visible images reproduced in multiple copies which shaped popular ideas about modernity, tradition, religion, politics, society and culture

    (3) Painters producing images for mass circulation

    (4) Ravi Varma starting a new visual culture

90. Which of the following statements are correct about Textile industry

    (a) Contributes significantly to industrial production (14 %)

    (b) Employment generation (35 million persons directly - the second largest after agriculture)

    (c) Foreign Exchange earnings (about 24.6 %)

    (d) Contributed 4 % towards GDP.

    (e) Second industry in the country which is self-reliant and complete in the value chain i.e., from raw material to the highest value added products.

    (1) (a), (b), (c) & (d) are correct

    (2) (b), (c), (d) & (e) are correct

    (3) (a), (c), (d) & (e) are correct

    (4) All are correct

91. He was born in Haryana. A successful enterpreuner and leader of the Panthic Akali Party in the Punjab assembly. Later defence minister in the Union Cabinet.

    (1) Mukhpal Chaddha

    (2) Jaipal Singh

    (3) Durgabai Deshumkh

    (4) Baldev Singh

92. Match the following columns

	Column A		Column B
(a)	Solar Energy	(i)	Known as 'Gobar Gas plants' in rural India
(b)	Wind Power	(ii)	The Gulf of Kuchchh provides ideal conditions
(c)	Biogas	(iii)	Parvati valley near Manikaran in H.P and the other Is located in the Puga Valley, Ladakh
(d)	Tidal energy	(iv)	Largest plant of India is located at Madhapur, near Bhuj
(e)	Geo-Thermal Energy	(v)	Largest cluster is located in T.N from Nagarcoil to Madurai

    (1) (a) iv, (b) v, (c) i, (d) ii, (e) iii

    (2) (a) iv, (b) v, (c) ii, (d) i, (e) iii

    (3) (a) v, (b) iv, (c) ii, (d) i, (e) iii

    (4) (a) v, (b) iv, (c) i, (d) ii, (e) iii

93. In 2004, a total of 11 candidates contested elections in that constituency. The total eligible voters were 14.39 lakh. Which district is the text talking about ?

    (1) Kalahandi   (2) Balasore

    (3) Mayurbhanj   (4) Gulbarga

94. Plant grows well in tropical and sub-tropical climates endowed with deepend fertile well-drained soil, rich in humus and organic matter. Requires warm and moist frost-free climate all through the year. Frequent showers evenly distributed over the year ensures continous growth. Requires abundant, cheap & skilled labour.

    Which crop we are talking about -

    (1) Sugarcane   (2) Jute

    (3) Tea   (4) Coffee

95. The denial of universal suffrage in Europe, led to   .

    (1) Revolutions

    (2) Women and non-propertied men organising opposition movements, demanding equal rights throughout 19th and early 20th centuries

    (3) Demand of equal political rights

    (4) Return of monarchy

96. India recieves nearly _____ percent of the global precipitation and ranks _____ in the world in terms of water availability per person per annum.

(1) 2, 122   (2) 3, 133

(3) 4, 133   (4) 2, 133

97. Who among the following is a part of of Political Executive ?

(1) District Collector

(2) Secretary of the ministry of Home Affairs

(3) Home Minister

(4) Director Generalof Police

98. Match the following Columns

	Column A		Column B
(a)	Normal Species	(i)	Andaman Teal, Nicobar Pigeon, Andaman Wild Pig
(b)	Endangered Species	(ii)	Himalayan Brown Bear, Wild Asiatic Buffalo, Desert Fox, Hornbill
(c)	Vulnerable Species	(iii)	Cattle, Sal, Pine, Rodents
(d)	Rare Species	(iv)	Asiatic Cheetah, Pink Head Duck
(e)	Endemic Species	(v)	Blue Sheep, Asiatic Elephant, Gangetic Dolphin
(f)	Extinct Species	(vi)	Black Buck, Crocodile, Indian Wild Ass

(1) (a) v, (b) iii, (c) vi, (d) ii, (e) i, (f) iv

(2) (a) vi, (b) ii, (c) iv, (d) i, (e) iii, (f) v

(3) (a) ii, (b) v, (c) i, (d) iv, (e) iii, (f) vi

(4) (a) iii, (b) vi, (c) v, (d) ii, (e) i, (f) iv

99. The revolutions of 1830 and 1848 AD were led by :

(1) Liberal nationalists belonging to the aristocratic class

(2) The peasants

(3) Liberal nationalists belonging to the educated middle class elite, consisting of professors, school teachers, clubs and members of the commercial middle class

(4) All the above

100. Which of the following is not a feature of Black Soil

(1) Also known as Regur, Black, Cotton soil

(2) Climatic condition along with the parent rock material are the important factors for the formation of Black soil

(3) Are made up of extremely fine i.e. clayey material, well known for their capacity to hold moisture

(4) Are poor in soil nutrients, such as calcium carbonate, magensium, potash and lime. Are generally rich in phosphoric contents.