IMPORTANT INSTRUCTIONS

- The maximum marks are **300.** Time allotted is **90 MINTUES.**
- There are three sections in the question paper having total **75 questions:**
  - Section – A : Maths (25 Questions)
  - Section – B : Science (25 Questions)
  - Section – C : Aptitude (25 Questions)
- Each question carries **4 marks** each
- **Negative Marking** : **1/4 (one-fourth) marks** will be deducted for every incorrect answer.
- **Use only BLUE/BLACK pen to fill the circles in bubble sheet.**
- Use of pencil is strictly **not allowed.**
- **Do not use marker or white fluid** to hide the marks.

Section – I Mathematics

1. Aditya jogged 350 m and walked 275 m. how much further does he have to go to complete 1 km?
(a) 375 m (b) 385 m (c) 380 m (d) 370 m

2. 10 lakh = _____ ten thousand
(a) 10 (b) 100 (c) 1000 (d) 10000

3. Nidhi is reading a book that contains 9465 pages. She has read 3255 pages. About how many pages are unread?
(a) 6220 (b) 6210 (c) 6200 (d) 6240

4. By how much is the difference between 8, 14, 52, 988 and 3, 21, 53, 209 less than 6 crore?
(a) 10, 700, 201 (b) 10, 700, 222 (c) 10, 700, 221 (d) 10, 702, 201

5. Which is the only prime number between 90 and 100?
(a) 99 (b) 90 (c) 93 (d) 97

6. 27, 63 and 54 _____find the HCF using prime factorisation method.
(a) 7 (b) 9 (c) 12 (d) 18

7. 11, 22 and 33_____find the LCM by listing the multiples.
(a) 66 (b) 62 (c) 63 (d) 22

8. The capacity of two containers is 15 litres and 25 litres. Find the capacity of the largest measuring can that can be used to completely fill both the containers.
(a) 5.5 litre (b) 5 litre (c) 25 litre (d) 42 litre

9. A full moon occurs every 30 days. If the last full moon occurred on a Friday, how many days will pass before a full moon occurs again on a Friday.
(a) 30 days (b) 200 days (c) 150 days (d) 210 days

10. The HCF of two numbers is 20. Their LCM is 120. If one of the numbers is 60, find the other number.

(a) 65 (b) 40 (c) 45 (d) 20

11. XCII_____ convert this into Hindu-Arabic numerals.

(a) 91 (b) 90 (c) 92 (d) 94

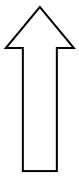
12. Two strings of length $3\frac{1}{2}$ m and $3\frac{1}{3}$ m are joined. What is the total length of the new string?

(a) $5\frac{6}{6}$ (b) $6\frac{5}{6}$ (c) $6\frac{6}{6}$ (d) $7\frac{6}{5}$

13. Convert 7 weeks 17 days into days.

(a) 65 (b) 66 (c) 60 (d) 62

14. Draw the line of symmetry for the following figure.



(a) 

(b) 

(c) No line of symmetry is possible (d) Both a and b

15. The cost of a computer is ₹ 19,565. Find the approximate cost of 409 computers.

(a) 8, 002, 058 (b) 8, 020, 085 (c) 8, 202, 085 (d) 8, 002, 085

16. Karun distributed 18 packets of sweets in the class. Each packet weighed $\frac{4}{9}$ kg. How many kilograms of sweets did he distribute in the class in total?

(a) 9 kg (b) 18 kg (c) 10 kg (d) 8 kg

17. Write the following as decimals.

Three ones and five tenths.

(a) 3.05 (b) 3.5 (c) 35 (d) 3.005

18. On the occasion of her birthday, Ms Roshini distributed 522 sweets among the staff members. If there were 36 teachers in all, how many pieces did each teacher get?

(a) 36.5 (b) 14.5 (c) 1.45 (d) 52.2

19. Convert $\frac{3}{4}$ % percentage into fraction.

(a) $\frac{30}{400}$ (b) $\frac{30}{100}$ (c) $\frac{75}{100}$ (d) $\frac{40}{400}$

20. Find the percentage of ₹ 5 of ₹ 20

(a) 20% (b) 25% (c) 5% (d) 22.5%

21. Cost of 9 bags = ₹ 1935

Cost of 1 bag = _____

(a) ₹ 210 (b) ₹ 212.5 (c) ₹ 230 (d) ₹ 215

22. Arvind sold a toy for ₹ 20 and suffered a loss of ₹ 5. Find his loss percent.

(a) 25% (b) 20% (c) 22% (d) 30%

23. The unit of ratio is expressed in _____.

(a) metre (b) gram (c) litre (d) None of these

24. If $x : 95 = 51 : 85$, the value of x is _____
(a) 76 (b) 57 (c) 114 (d) none of these

25. Fractions with the same denominators are called _____ fractions.
(a) Proper (b) like (c) unlike (d) None of these

Section – II
SCIENCE

26. Select the animal pair who have similar breathing mechanisms.
(a) Bat : Fish (b) Turtle : Lizard
(c) Butterfly : Mouse (d) Earthworm : Cockroach

27. Neha lives in a hostel and has six roommates. Out of them four fell ill. Which of them can make Neha fall ill?
(a) Rati who has anaemia (b) Sashi who has scurvy
(c) Nidhi who developed a dust allergy (d) Swati who has cold

28. Select the plant pair that shows similar mode of vegetative reproduction.
(a) Radish, Potato (b) Coconut, Mango (c) Rose, Dahlia (d) Carrot, Turnip

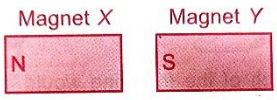
29. Which of the following statements is incorrect?
(a) Precious metals like gold and platinum are used for making jewellery.
(b) Dentists use powdered pumice for polishing our teeth.
(c) Black gold is another name of granite.
(d) Shale is used to make tiles and bricks.

30. Which of the following statements is correct?
(a) The mantle or the upper layer of the Earth is made of volcanoes.
(b) The liquid that comes out of a volcano is called magma.
(c) Based on the nature of eruption, volcanoes can be active, dormant or extinct.
(d) The magnitude of tsunami is measured on Richer Scale developed by Charles Richter in 1985.

31. A compass works with the help of
(a) Solar energy (b) Moon's gravity
(c) Earth's magnetic field (d) Earth's gravity

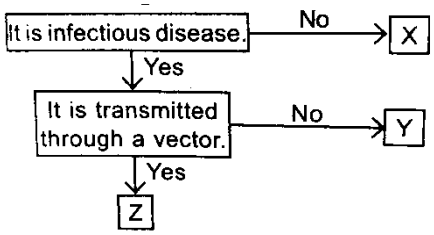
32. A liquid can be changed into a solid by the process of _____.
(a) Condensation (b) Evaporation (c) Freezing (d) Melting

33. The magnets shown here will



(a) Attract each other (b) Repel each other (c) Pull each other (d) Cannot say.

34. Refer to the given flow chart.



Identify X, Y and Z and select the correct statement regarding them.

(a) X could be anaemia whereas Z could be plague.

(b) Y could be measles whereas Z could be scurvy.

(c) X could be rickets whereas Y could be dengue

(d) Y could be malaria whereas Z could be cholera.

35. Read the given paragraph.

X and Y are animals which possess backbone and flippers and breathe through lungs. X lays egg whereas Y gives birth to young ones.

Select the option which correctly identifies X and Y.

	X	Y
(a).	Turtle	Platypus
(b).	Frog	Porcupine
(c).	Penguin	Dolphin
(d).	Seal	Whale

36. _____ is a rodent, it feeds by _____.

(a) Cow, biting (b) Mosquito, sucking (c) Rat, gnawing (d) Rabbit, tearing

37. Study the given steps involved in formation of fruit from flower.

P. The ovary develops into a fruit.

Q. The pollen grains grow long tube inside the style.

R. The ovules grow into seeds

S. The male gametes fuse with the egg.

T. The pollen grains are deposited on the stigma of another flower.

U. The pollen tube enters the ovary.

Select the option which arranges given steps into correct sequence.

(a) T → U → Q → S → R → P (b) Q → T → U → R → S → P

(c) T → Q → U → S → R → P (d) U → Q → T → S → R → P

38. A fire extinguisher sprays foam or gas to cut off the supply of

(a) Fuel (b) Air (c) Water (d) Heat

39. Select the activity that is an example of physical change.

(a) Melting of icecream (b) Rusting of iron nails

(c) Making curd from milk (d) All of these

40. Planet X is closer to Sun than planet Y. It can be inferred that ____.

(a) Planet X has longer revolution period than planet Y

(b) Planet Y has longer revolution period than planet X

(c) Planet X has longer rotation period than planet Y

(d) Planet Y has longer rotation period than planet X

41. Which of the things listed below are biodegradable?
(i) Wooden log (ii) Plastic bag (iii) Gold necklace
(iv) Roasted chicken (v) Credit card (vi) Apple
(a) (i) and (ii) only (b) (iii) and (iv) only
(c) (iii), (iv) and (v) only (d) (i), (iv) and (vi) only

42. Greenhouse gases cause global warming. Which of the following is a greenhouse gas?
(a) Oxygen (b) Nitrogen (c) Carbon dioxide (d) Magnesium oxide

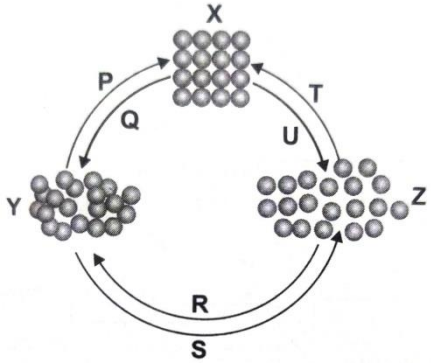
43. Select the incorrect match.
(a) Bharatnatyam – Tamil Nadu (b) Kuchipudi – Madhya Pradesh
(c) Kathakali – Kerala (d) Odissi – Odisha

44. In India, crops that are grown in winter are called rabi crops. Which of the following are rabi crops?
(i) Radish (ii) Mustard (iii) Rice (iv) Millet
(v) Cabbage (vi) Watermelon (vii) Peach (viii) Cauliflower
(a) (i), (ii) and (vii) only (b) (iii), (iv), (v) and (vi) only
(c) (iv), (vi) and (viii) only (d) (i), (ii), (v) and (viii) only

45. _____is the tool used for sowing seeds in agriculture.
(a) Hoe (b) Plough (c) Seed drill (d) Shovel

46. Select the incorrect match from the following.
(a) Venus - Called morning or evening star
(b) Saturn - Its rings are made of ice, rocks and dust
(c) Jupiter - Largest and fastest spinning planet
(d) Mercury - Hottest planet

47. Study the given diagram carefully and select the option.



(a) X – Solid, Y – Liquid, R – Heating
(b) Y – Gas, Z – Liquid, T – Heating
(c) X – Solid, Z – Gas, P – Freezing
(d) Y – Gas, X – Liquid Q - Cooling

48. Which of the following is categorised as contact force?
(a) Gravitational (b) Magnetic (c) Frictional (d) Electrical

49. Tanmay heated a bimetallic strip made up of metal X and metal Y. After a few minutes, he observed that it curled as shown.



What can be concluded from this experiment?

(a) Metal X expands more than metal Y. (b) Metal Y expands more than metal X.

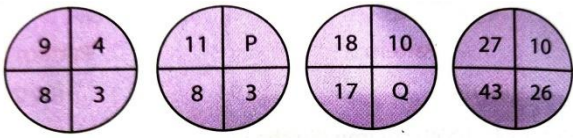
(c) Metal X expands and metal Y contracts. (d) Metal Y expands and metal X contracts.

50. Select the option that correctly gives the examples of physical and chemical changes.

	Physical change	Chemical change
(a)	Tearing of paper	Breaking of glass
(b)	Burning of paper	Cooking of food
(c)	Rusting of iron	Melting of butter
(d)	Formation of ice	Burning of wood

Section – III
Mental Ability

51. Find the missing numbers P and Q respectively.



(a) 9 and 8 (b) 8 and 9 (c) 9 and 0 (d) 6 and 9

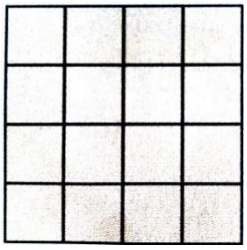
52. 9 : 89 :: 100 : ?

(a) 901 (b) 1009 (c) 10008 (d) 9999

53. Find the odd one out.

(a) KNQ (b) PSV (c) TWY (d) MPS

54. Count the number of unit squares in the given figure.



(a) 14 (b) 12 (c) 16 (d) 13

55. Garima ranked 7th in a class of 49 students from the top. What is her rank from the bottom in the class?

(a) 49th (b) 48th (c) 43rd (d) 50th

Direction (56 -60): In each of the following questions, some letters are given which are numbered 1, 2, 3, 4 and 5 followed by four alternatives containing combinations of these numbers. Find that combination of numbers so that letters arranged accordingly form a meaningful word.

56. E O L W R
1 2 3 4 5

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

57. R U G O P
1 2 3 4 5

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

58. E T N H T
1 2 3 4 5

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

59. O S U H T
1 2 3 4 5

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

60. Y M O N E
1 2 3 4 5

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

61. Five students participated in an exam.

- Kavya ranked higher than Abhay.
- Abhay ranked higher than Sumit.
- Kavya ranked lower than Nancy.
- Anshu ranked between Kavya and Abhay.

Who ranked the highest?

(a) Kavya (b) Anshu (c) Nancy (d) Abhay

62. If air 'is called 'water', 'water' is called 'stone', 'stone' is called 'tree', 'tree' is called 'ship', 'ship' is called 'boat' and 'boat' is called 'car', then where do birds live?

(a) tree (b) stone (c) ship (d) boat

Direction (63-64): If the code of INDIAN is 243254 and the code of HOLAND is 670543, then what will be the code of the word given in each of the following questions?

63. AINOH

(a) 54276 (b) 52467 (c) 54627 (d) 52476

64. NIDHO

(a) 45373 (b) 49537 (c) 42367 (d) 94537

65. Select the odd one out.



66. Which of the following numbers will replace the (?) to continue the pattern given below?

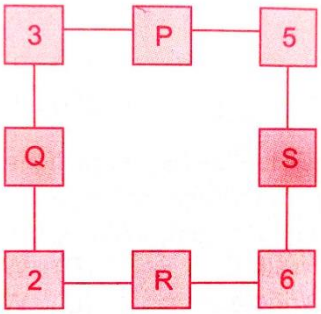


(a) 130 (b) 238 (c) 230 (d) 300

67. Five friends X, Y, Z, U and V are sitting in a row facing North. U is between V and Y, Y is to the immediate left of Z, X is to the immediate left of V. Who is in the middle?

(a) U (b) X (c) Y (d) V

68. Find P + Q + R + S, so that the sum of all the numbers along each line is 15.

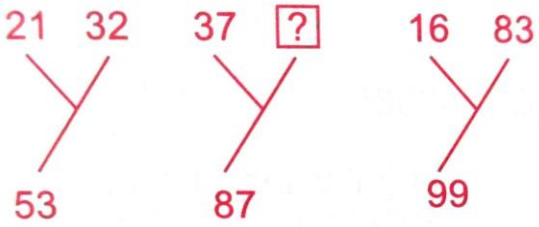


(a) 28 (b) 27 (c) 24 (d) 23

69. 21 students are standing in a line. Deepak is in the middle. What is his position from left end as well as from right end?

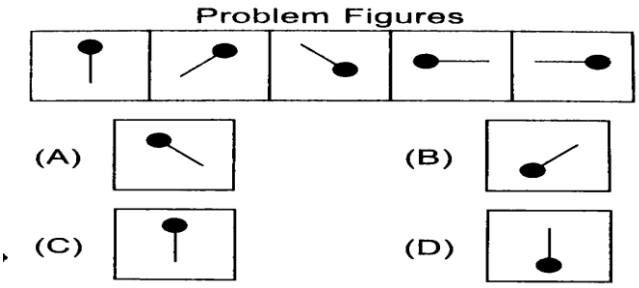
(a) 12th (b) 10th (c) 11th (d) 9th

70. Find the missing number, if same rule is followed in all the three figures.

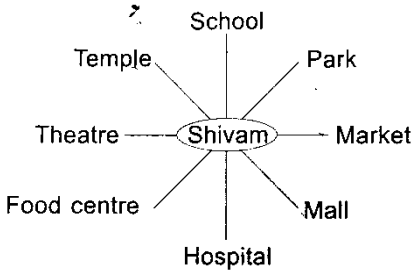


(a) 40 (b) 50 (c) 55 (d) 62

71. Select a figure from the options which will continue the same series as established by the Problem Figures.



Direction (Q. No. 72-73) : Study the given figure carefully and answer the following questions.



72. If Shivam is facing towards the school, then how many degrees must he turn anti-clockwise to face the mall?

(a) 225° (b) 180° (c) 0° (d) 90°

73. After turning 180° clockwise and then 135° anti-clockwise, Shivam is facing the theatre. Where was he facing before the turns?

(a) Food Centre (b) Temple (c) Market (d) Hospital

74. There is a certain relationship between the pair of letters given on either side of : : . Identify the relationship of the first pair and find the missing term of the second pair.

ACG : DHJ : : PRV : __?__

(a) SYW (b) WSY (c) SZW (d) SWY

75. Which one of them will come in the middle, if all are arranged alphabetically as in a dictionary?

Butter, Butcher, Butler, Burger, Butterfly

(a) Butler (b) Butcher (c) Butterfly (d) Burger