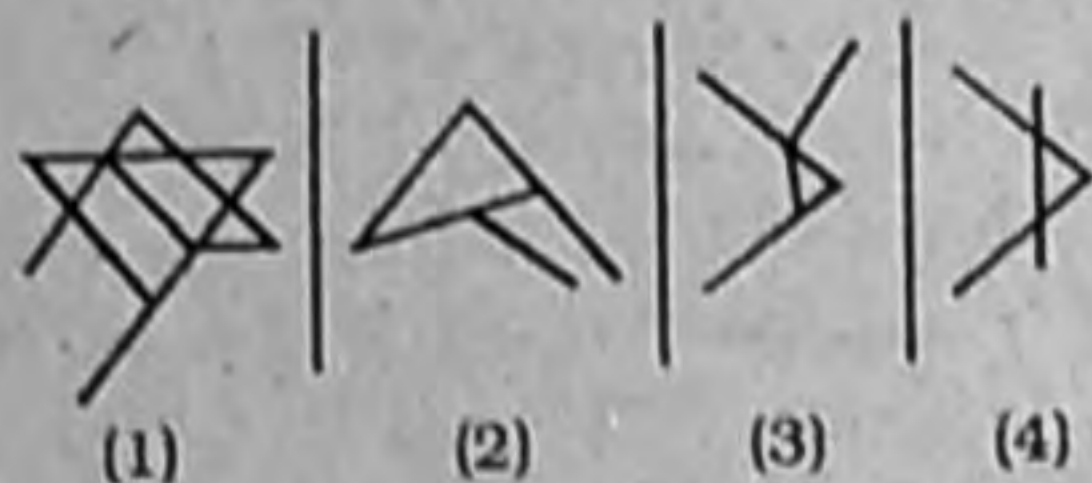


1. The given Problem Figure is embedded in one of the given Answer Figures, Which is that Answer Figure?

Problem Figure :



Answer Figures :



2. $A = (-14 + 4)$ and $B = 4 - 14$, then $AB = ?$

- (1) 100 (2) -100
(3) 0 (4) -1

3. What is the angle between the two hands of a clock when the time shown by the clock is 8 p.m.? (in degrees)

- (1) 240 (2) 120
(3) 60 (4) 50

4. The vast amount of sea weeds present in oceans may produce an endless source of:

- (1) Methane
(2) Ocean thermal energy
(3) Sea wave energy
(4) Nuclear energy

5. Solve the following .

$$78 \div [-4 + (-3) \text{ of } \{27 \div (-18 \div -2)\}] = ?$$

- (1) -6 (2) 13
(3) 6 (4) 15.6

6. Find the mean proportional between 2 and 98?

- (1) 13 (2) 14.5
(3) 16 (4) 14

7. The square root of 4624 is :

- (1) 72 (2) 66
(3) 64 (4) 68

8. Who has been appointed as the Chief Secretary of the Delhi Government in December 2017?

- (1) Ajeet Vasant
(2) Anshu Prakash
(3) Aditya Negi
(4) Akansha Ranjan

9. In the reaction $\text{H}_2\text{O}_2 + \text{Cl}_2 \rightarrow 2\text{HCl} + \text{O}_2$, H_2O_2 acts as :

- (1) an acid
(2) an oxidising agent
(3) a reducing agent
(4) a base

10. The area of the square field is 196 sq.m. Its each side is:

- (1) 16m (2) 17m
(3) 14m (4) 13m

11. The first equation of motion gives the relation between :

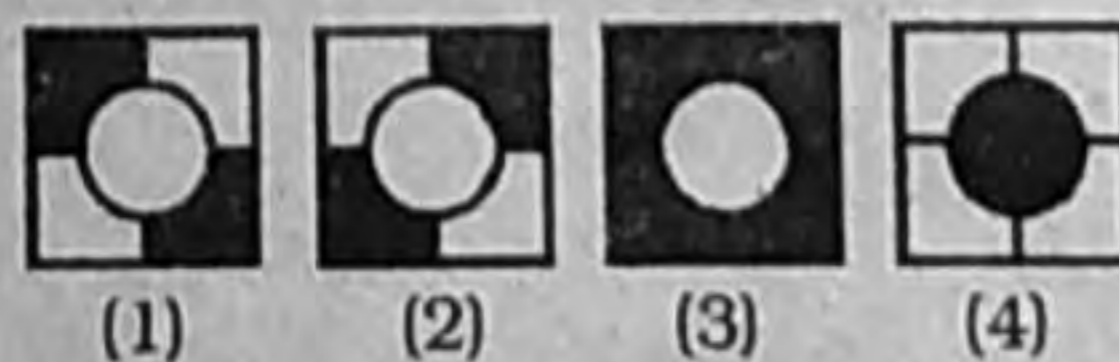
- (1) position and time
(2) position and velocity
(3) velocity and time
(4) velocity and acceleration

12. Choose the correct figure to fill in the blank space.

Problem Figure :



Answer Figures :



13. The velocity of light in vacuum is :

- (1) $3 \times 10^8 \text{ ms}^{-1}$
(2) $2 \times 10^8 \text{ ms}^{-1}$
(3) $3 \times 10^7 \text{ ms}^{-1}$
(4) $3 \times 10^6 \text{ ms}^{-1}$

14. A and B can complete a task in 12 days. However, A had to leave a few days before the task was completed and hence it took 16 days in all to complete the task. If A alone could complete the work in 21 days, how many days before the work getting over did A leave?

- (1) 7 (2) 5
(3) 9 (4) 3

15. Which of the following sportspersons recently wrote the autobiographical book 'Ace Against Odds'?

- (1) Saina Nehwal
(2) Anil Kumble
(3) Yuvraj Singh
(4) Sania Mirza

16. Who is the captain of the Indian men's volleyball team as of February 2018?

- (1) K. Udayakumar
(2) Navjit Singh
(3) GR Vaishnav
(4) Gurinder Singh

17. Who won the 2017 Women's Hockey Asia Cup held in Japan?


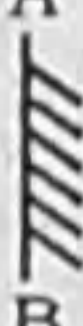
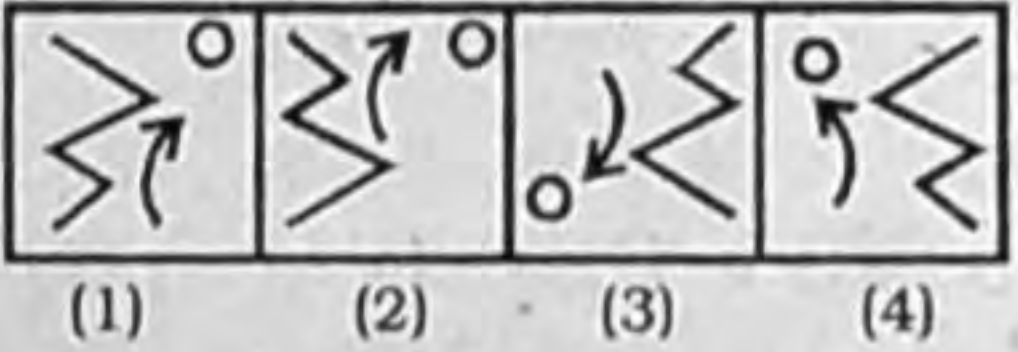
- (1) China (2) India
(3) Japan (4) South Korea

18. Pipes A, B and C are attached to an empty cistern. While the first two can fill the cistern in 4 and 10 hours, respectively, the third can drain the cistern, when filled, in 6 hours. If all the three pipes are opened simultaneously when the cistern is three-fifth full, how many hours will be needed to fill the cistern?

- (1) $\frac{36}{11}$ (2) $\frac{48}{11}$

- (3) $\frac{60}{11}$ (4) $\frac{24}{11}$

19. The difference between the place values of '4' and '2' in the number 833749502 is:-
 (1) 49998 (2) 30098
 (3) 39098 (4) 39998
20. Which one of the following is not a borderline element?
 (1) Boron
 (2) Silicon
 (3) Polonium
 (4) Bismuth
21. In an alloy of German silver the ratio of copper to zinc was 17 : 7 while that of nickel to zinc was 4 : 3. The ratio of copper to zinc to nickel in the alloy was :
 (1) 17 : 21 : 4
 (2) 51 : 21 : 28
 (3) 68 : 28 : 21
 (4) 17 : 28 : 3
22. The number of solutions of the pair of linear equations $x + 2y - 8 = 0$ and $2x + 4y = 16$ is :
 (1) 0
 (2) 1
 (3) Infinitely many
 (4) 2
23. Which Indian stock exchange is planning to launch its own Initial Public Offering (IPO)?
 (1) Saurashtra Kutch Stock Exchange (SKSE)
 (2) National Stock Exchange (NSE)
 (3) Cochin Stock Exchange (CoSE)
 (4) Bombay Stock Exchange (BSE)
24. An alloy is an example of :
 (1) Colloidal solution
 (2) Emulsion
 (3) Solid solution
 (4) Heterogeneous mixture
25. Fill in the blank with the most appropriate option. The pitch of a sound depends on its _____.
 (1) frequency
 (2) wavelength
 (3) amplitude
 (4) timbre

26. If Metal A displaces Metal B from its solution, then Metal A _____.
 (1) is more reactive than B
 (2) is less reactive than B
 (3) is heavier than B
 (4) has the same reactivity as B
27. Solve the following :
 $60 \div 5 \times (16 - 8 \div 2) \div 3 = ?$
 (1) 3 (2) 48
 (3) 1 (4) $\frac{1}{3}$
28. Who took charge as the Chief Minister of Goa after the 2017 elections ?
 (1) Bharat Vir Wanchoo
 (2) Manohar Parrikar
 (3) Churchill Alemao
 (4) Dayanand Narvekar
29. Select the correct mirror image of the Problem Figure from the given Answer Figures.
Problem Figure :

 A

 B
- Answer Figures :**

 (1) (2) (3) (4)
30. Ages of Lalu and Balu are in the ratio of 1 : 2. After 7 years their ages ratio changes to 3 : 5. The elder person's age is :
 (1) 32 years (2) 24 years
 (3) 20 years (4) 28 years
31. In sexual reproduction a parent contributes :
 (1) Half of their genes
 (2) Three-fourth of their genes
 (3) All the genes
 (4) One-fourth of their genes
32. To get number 40, the number $6\frac{2}{9}$ should be multiplied with

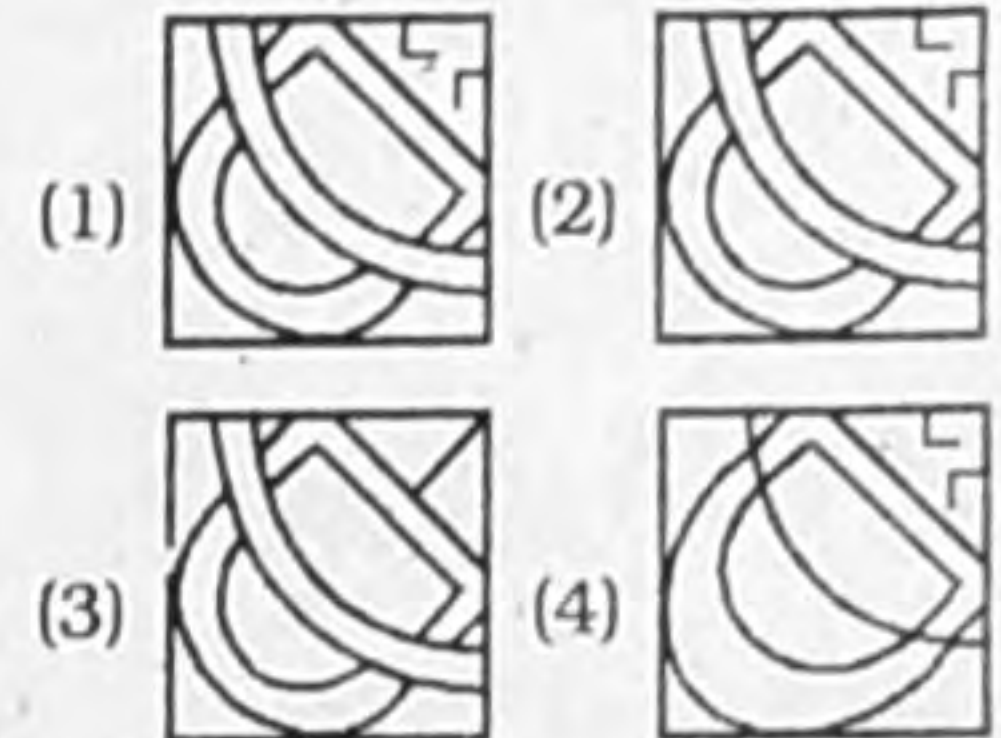
- (1) $7\frac{3}{7}$ (2) $3\frac{5}{7}$
 (3) $7\frac{3}{6}$ (4) $6\frac{3}{7}$

33. Select the option that will correctly fit in the blank space in the following figure.

Question Figure :



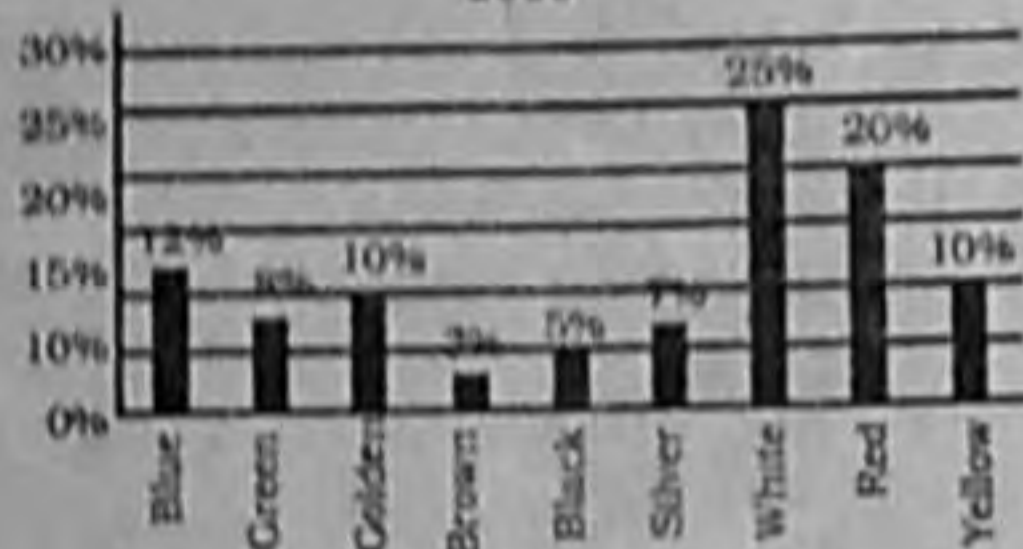
Answer Figures :



34. Which one of the following statements would be INCORRECT to use?
 (1) An atom of a compound
 (2) A mole of an element
 (3) A mole of a compound
 (4) An atom of an element
35. Which of the following organisms can reproduce by regeneration and budding?
 (1) Yeast
 (2) Plasmodium
 (3) Hydra
 (4) Planaria
36. 'Square' is related to 'Line' in the same way as 'Cube' is related to _____.
 (1) Rectangle
 (2) Square
 (3) Point
 (4) Circle
37. What are transition elements ?
 (1) Elements whose two outermost shells are incomplete
 (2) Elements which possess properties of both, metals and non-metals
 (3) They have eight electrons in the outermost shell
 (4) Elements whose three outermost shells are incomplete

38. Study the following graph and answer the question that follows.

Sales of Bikes in India as per the Colour in 2009



If the total number of bikes sold in 2009 was 10000 how many more yellow bikes were sold than green ones?

- (1) 200 (2) 2000
(3) 1000 (4) 800
39. Mechanical energy is the combination of kinetic energy and _____.

- (1) Heat energy
(2) Chemical energy
(3) Potential energy
(4) Nuclear energy

40. Which of the following is the main thinking part of the human brain?

- (1) Hind- brain
(2) Cerebellum
(3) Mid-brain
(4) Fore-brain

41. Consider the given statements to be true and decide which of the Conclusions logically follow(s) from the statements.

Statements :

Some angles are gods.
All living being are gods.

Conclusions :

1. Some angels are living beings.
2. Some living being are angels.
(1) Nether 1 nor 2 follows.
(2) Only Conclusion 2 follows.
(3) Both 1 and 2 follow.
(4) Only Conclusion 1 follows.

42. Select the option that represents the number of triangles in the given figure :



- (1) 10 (2) 8
(3) 11 (4) 9
43. The area of a square is equal to its side, if the side is 1 unit.
(1) Always
(2) Sometimes
(3) Often
(4) Never
44. Which of the following is the primary sex organ in man?
(1) Prostrate
(2) Testis
(3) Vas deferens
(4) Seminal vesicles
45. Who is the author of the Indian English Novel 'When Dimple Met Rishi' published in 2017?
(1) Chetan Bhagat
(2) Rahul Mehta
(3) Sandhya Menon
(4) Nidhi Chanani
46. One of the largest salt deserts in the world, the 'Rann of Kutch' is primarily located in which state of India?
(1) Madhya Pradesh
(2) Gujarat
(3) Telangana
(4) Assam
47. The _____ architecture mainly consists Chaityas, Viharas, Stupas and Stambhas.
(1) Maurya (2) Buddhist
(3) Hindu (4) Mughal
48. Which compound is formed when a Magnesium ribbon is burnt in air?
(1) Magnesium Nitrate
(2) Magnesium Carbonate
(3) Magnesium Oxide
(4) Magnesium Nitride
49. If $x^2 + ax + b$, when divided by $x + 3$, leaves a remainder of -1 and $x^3 + bx + a$, when divided by $x - 3$ leaves a remainder of 39, then $a + b = ?$
(1) -14 (2) -38
(3) 14 (4) 38
50. If V is the brother of U, U is the sister of W and X is the husband of U, then U is V's

- (1) Aunt
(2) Sister
(3) Sister-in-law
(4) Mother
51. Consider the given statements as true and decide which of the given Conclusions can definitely be drawn from the given statements.
Statements :
Dhoni is a good batsman.
Batsmen are smart.
Conclusions :
1. All smart people are batsmen.
2. Dhoni is smart.
(1) Only Conclusion 2 follows
(2) Only Conclusion 1 follows
(3) Both 1 and 2 follow
(4) Neither 1 nor 2 follows
52. RB75E%M3W48Q9#B2ASMS
In the above sequence which term is third to the right of the twelfth term from the left end?
(1) # (2) B
(3) A (4) 2
53. Consider the given statements true and decide which of the given Conclusions can definitely be drawn from the given statements.
Statements :
Some eagles are kites.
All kites are birds.
Conclusions :
1. Some birds are eagles.
2. Some eagles are birds.
(1) Neither 1 nor 2 follows.
(2) Only Conclusion 1 follows.
(3) Only Conclusion 2 follows.
(4) Both 1 and 2 follow.
54. The base of a triangle is half the base of a parallelogram having the same area as that of the triangle. The ratio of the corresponding heights of the triangle to the parallelogram will be :
(1) 1 : 4 (2) 4 : 1
(3) 2 : 1 (4) 1 : 2

55. Parties and the seats won by them are listed in the following table.

S. No.	Party	South	East	West	North
1	A	40	37	35	27
2	B	6	26	76	86
3	C	83	71	4	21
4	D	1	7	3	11

Based on the given data, the total number of candidates elected is _____.

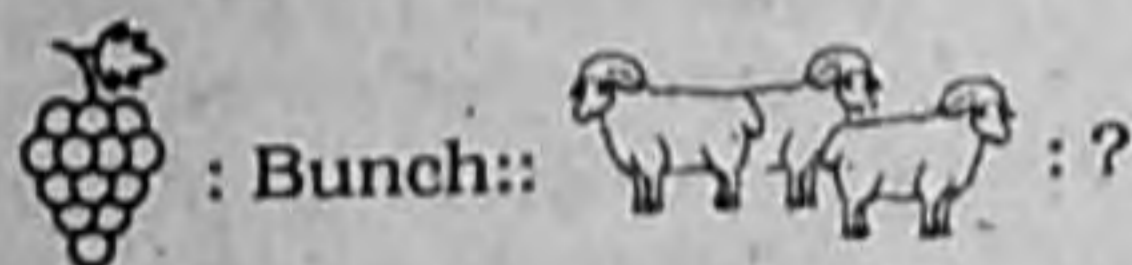
- (1) 534 (2) 524
(3) 535 (4) 543

56. Consider the given question and decide which of the following statements is sufficient to answer the question. If X scored an average of 50 marks in History, Language and Science, how much did he score in Science?

Statements :

- His average score in History and Language is 25.
- He got 30 marks in Language.
 - Both 1 and 2 are sufficient to answer the given question.
 - 2 alone is sufficient while 1 alone is not sufficient to answer the given question.
 - 1 alone is sufficient while 2 alone is not sufficient to answer the given question.
 - Neither 1 nor 2 is sufficient to answer the given question.

57. Select the missing term based on the given related pair.



- (1) Crowd (2) Swarm
(3) Flock (4) Army

58. Simple interest on a certain sum of money for 3 years at 5% per annum is Rs. 5250. What will be the compound interest on that sum at the same rate for the same period?

- (1) Rs. 5,510.88
(2) Rs. 5,516.88
(3) Rs. 5,512.88
(4) Rs. 5,517.88

59. Consider the argument and decide which of the given assumptions is/are implicit.

Argument :

Today is Sunday.

Assumptions :

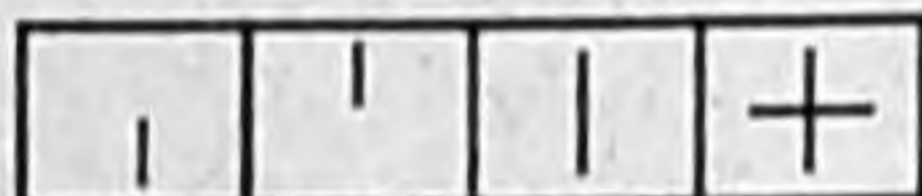
- Tomorrow is Monday.
- Today is a holiday.
 - Only assumption 1 follows
 - Only assumption 2 follows
 - Neither 1 and 2 follows
 - Both 1 nor 2 follow

60. Select the option that will correctly fit in the blank space in the following figure.

Question Figure :

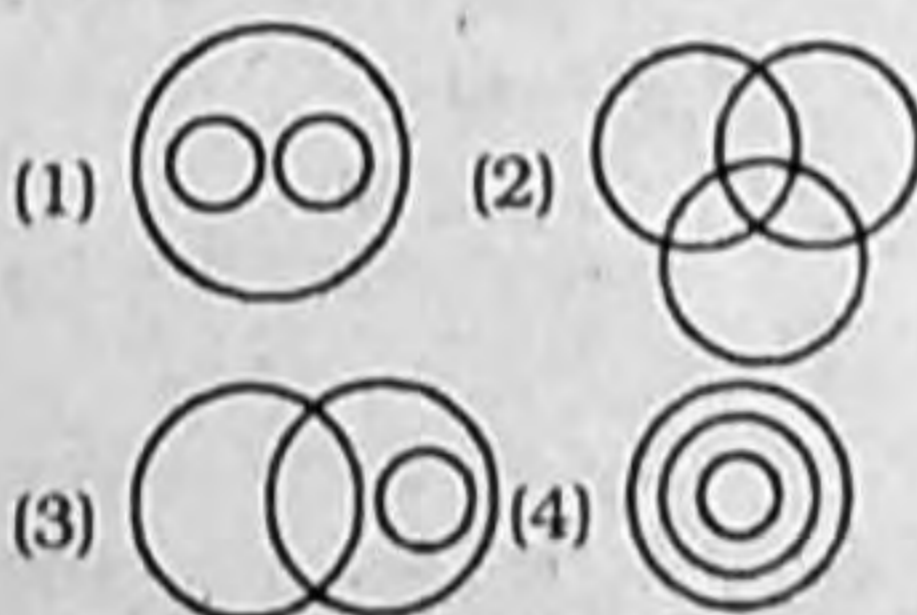


Answer Figures :



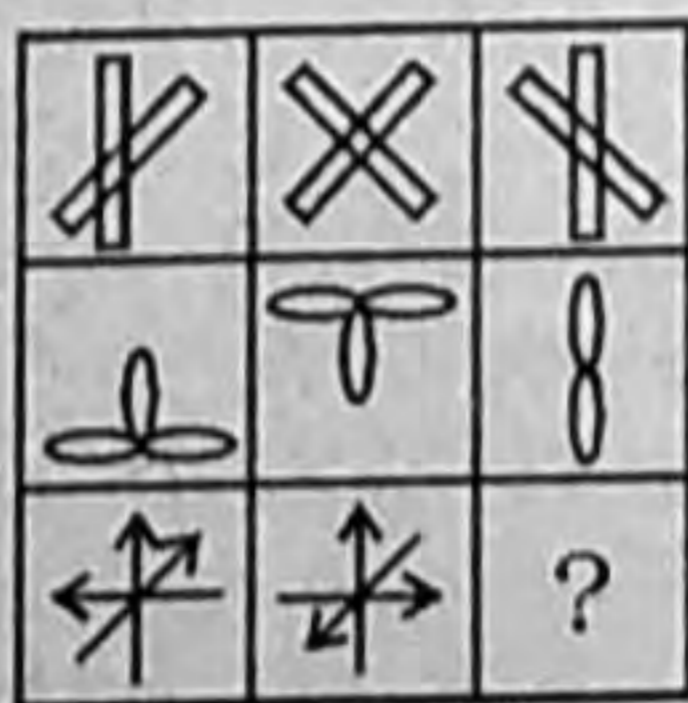
- (1) (2) (3) (4)

61. Select the most suitable Venn diagram to represent the following relationship. India, Maharashtra and Kerala.

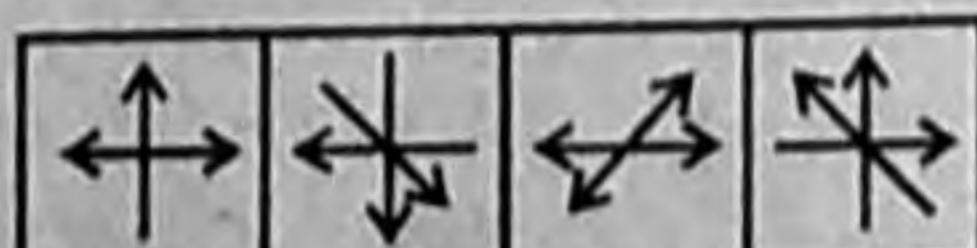


62. Choose the correct figure that replaces the question mark.

Question Figure :



Answer Figures :



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

63. X drives 30 km south, then turns right and drives 30 km, then turns left and drives 20 km and then turns left and drives 30 km. How far is X from his/her initial position?

- (1) 20 km (2) 30 km
(3) 60 km (4) 50 km

64. Sita's bucket has thrice the capacity as Ramu's bucket. It takes 60 turns for Sita's bucket to fill the empty drum. How many turns it will take for both the buckets of Sita's and Ramu's, having each turn together to fill the empty drum?

- (1) 45 (2) 40
(3) 50 (4) 30

65. After his stint as the Reserve Bank Governor, which University in USA did Raghuram Rajan join as professor of Finance?

- (1) Harvard Business School, Boston
(2) Berkeley Haas, California
(3) Booth School, Chicago
(4) Columbia Business School New York

66. The centre of the reflecting surface of a spherical mirror is called the :

- (1) radius
(2) centre of curvature
(3) pole
(4) focus

67. Surya works 3 times as fast as Ramya and is able to complete a work in 40 days less than the number of days taken by Ramya. Find the time in which they can complete the work together.

- (1) 20 days (2) 15 days
(3) 25 days (4) 30 days

68. The missing letter in the word 'MA_T' is :

- (1) R (2) C
(3) P (4) O

69. Which of the following branches of mathematics was invented by Newton?

- (1) Calculus (2) Logic
(3) Algebra (4) Geometry

70. Which of the following scientists gave the law that governs the force of attraction/repulsion between two charged particles?

- (1) Charles Dufay
- (2) Michael Faraday
- (3) Archimedes
- (4) Charles Coulomb

71. In the following series, one letter is missing as shown by the question mark (?).
Select the missing letter from the given options.

N, L, J, H, ?

- (1) F (2) G
- (3) E (4) B

72. (2, 14, 16), (3, 21, 24), (8, 56, 64), (5, 35, 41)

The set that does NOT belong to the group is :

- (1) (5, 35, 41)
- (2) (2, 14, 16)
- (3) (3, 21, 24)
- (4) (8, 56, 64)

73. From the top of a platform 7 metre high, the angle of elevation of a tower was 30° . If the platform was positioned $50\sqrt{3}$ metre away from the tower, how tall was the tower?

- (1) 57 metre
- (2) 50 metre
- (3) $(25\sqrt{3} + 7)$ metre
- (4) $25\sqrt{3}$ metre

74. The volume of a right circular cone, with a base radius the same as its altitude, and the volume of a hemisphere are equal. The ratio of the radii of the cone to the hemisphere is :

- (1) 2 : 1 (2) $\sqrt{2} : 1$
- (3) $\sqrt[3]{2} : 1$ (4) $\sqrt[3]{3} : \sqrt[3]{2}$

75. Which one of the following is a cation?

- (1) Carbonate
- (2) Nitrate
- (3) Ammonium
- (4) Hydroxide