

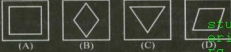


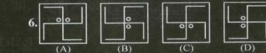


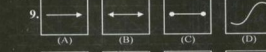
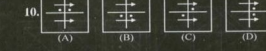


# SOLVED PAPER

## SECTION I : MENTAL ABILITY TEST


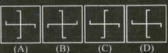

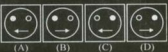

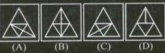

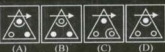
### PART-I

**Directions :** In questions 1 to 10, four figures (A), (B), (C) and (D) have been given in each question. Of these four figures, three figures are similar in some way and one figure is different. Select the figure which is different and indicate the correct letter below it.

1.  (A) (B) (C) (D)
2.  (A) (B) (C) (D)
3.  (A) (B) (C) (D)
4.  (A) (B) (C) (D)
5.  (A) (B) (C) (D)
6.  (A) (B) (C) (D)
7.  (A) (B) (C) (D)
8.  (A) (B) (C) (D)
9.  (A) (B) (C) (D)
10.  (A) (B) (C) (D)

### PART-II

**Directions :** In questions 11 to 20, a problem figure is given on the left-hand side and four answer figures lettered (A), (B), (C) and (D) are given on the right hand side. Select the answer figure which is exactly the same as the problem figure and indicate the letter below the correct answer figure.

11. **Problem Figure**  **Answer Figures**  (A) (B) (C) (D)
12. **Problem Figure**  **Answer Figures**  (A) (B) (C) (D)
13. **Problem Figure**  **Answer Figures**  (A) (B) (C) (D)
14. **Problem Figure**  **Answer Figures**  (A) (B) (C) (D)

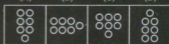
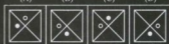
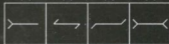
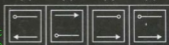
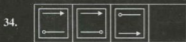
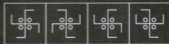


**PART-IV**

**Directions :** In questions 31 to 40, there are three problem figures on the left-hand side and the space for the fourth figure is left blank. The problem figures are in a series. Find out one figure from among the answer figures given on the right-hand side which occupies the blank space for the fourth figure on the left-hand side and which completes the series. Indicate your answer by the letter of the answer figure chosen by you.

**Problem Figures**

**Answer Figures**



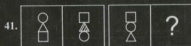
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**PART-V**

**Directions :** In questions 41 to 50, there are three problem figures followed by a mark of interrogation (?) for the fourth one. There exists a relationship between the first two problem figures. A similar relationship should exist between the third and fourth problem figures. Select one figure from the answer figures which replaces the mark of interrogation. Indicate the correct letter of the answer figure.

**Problem Figures**

**Answer Figures**



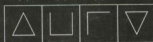
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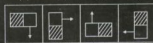
(A) (B) (C) (D)



(A) (B) (C) (D)



(A) (B) (C) (D)



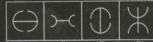
(A) (B) (C) (D)



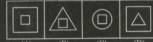
(A) (B) (C) (D)



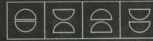
(A) (B) (C) (D)



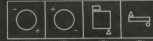
(A) (B) (C) (D)



(A) (B) (C) (D)



(A) (B) (C) (D)



(A) (B) (C) (D)

**PART-VI**


**Directions :** In questions 51 to 60, one part of a square is on the left-hand side and the other one is among the four figures (A), (B), (C) and (D) on the right-hand side. Find the figure on the right-hand side that completes the square. Indicate the correct letter answer of the figure.

Problem Figure	Answer Figures	Problem Figure	Answer Figures
51.	(A)  (B)  (C)  (D)	56.	(A)  (B)  (C)  (D)
52.	(A)  (B)  (C)  (D)	57.	(A)  (B)  (C)  (D)
53.	(A)  (B)  (C)  (D)	58.	(A)  (B)  (C)  (D)
54.	(A)  (B)  (C)  (D)	59.	(A)  (B)  (C)  (D)
55.	(A)  (B)  (C)  (D)	60.	(A)  (B)  (C)  (D)

**SECTION II : ARITHMETIC**

**Directions :** For every question, four probable answers bearing letters (A), (B), (C) and (D) are given. Only one out of these is correct. You have to choose the correct answer.

61. In per cent, what is 10.01 written as?  
 (A) 10.01% (B) 10%  
 (C) 1001% (D) 100100%
62. In the number 30746, which digit has the greatest place value?  
 (A) 3 (B) 7 (C) 4 (D) 6
63. How many seconds are there in 24 hours?  
 (A) 30 (B) 60  
 (C) 3600 (D) 86400
64. What is the LCM of 16, 80 and 48?  
 (A) 8 (B) 16  
 (C) 240 (D) 480
65. What is the smallest 5-digit number which can be formed with the digits 4, 0 and 9?  
 (A) 40940 (B) 40009  
 (C) 99940 (D) 90004
66. What is the result of simplification of the expression  $2.5 + 0.5 \times 0.1 - 0.05$ ?  
 (A) 0.45 (B) 49.95  
 (C) 0.25 (D) 100
67. An engine pumps out 84500 litres of water in an hour. The engine is run for 10 hours a day. How many litres of water will it pump out in 5 days?  
 (A) 169 (B) 4225  
 (C) 42250 (D) 4225000

68. On dividing 93.45 by 0.015, what is the approximate answer?  
 (A) 0.6 (B) 60 (C) 600 (D) 6000
69. 4.4% is equivalent to which of the following?  
 (A)  $\frac{4.4}{10}$  (B)  $\frac{4.4}{100}$  (C)  $\frac{44}{10}$  (D)  $\frac{44}{100}$
70. What is the decimal equivalent of  $1\frac{5}{8}$ ?  
 (A) 1.58 (B) 1.62  
 (C) 1.622 (D) 1.625
71. A shopkeeper bought 15 tables at the rate of Rs. 500 each and 20 chairs at the rate of Rs. 300 each. He spent Rs. 40 on transportation. He sold the tables and chairs at a flat rate of Rs. 380 each. What is gain or loss?  
 (A) Rs. 240 loss (B) Rs. 240 gain  
 (C) Rs. 250 loss (D) Rs. 250 gain
72. A man borrows Rs. 600 from his friend. He agrees to pay it back after 8 months together with simple interest at 8% per annum. What amount will he pay back?  
 (A) Rs. 32 (B) Rs. 384  
 (C) Rs. 984 (D) Rs. 632
73. If 1 cm = 10 mm, how much is 10 cu cm?  
 (A) 100 cu mm (B) 1000 cu mm  
 (C) 10000 cu mm (D) 100000 cu mm
74. A soap cake measures 7 cm in length, 5 cm in breadth and 2.5 cm in height. How many soap-cakes can be placed in a cardboard box whose length, breadth and height are, respectively, 56 cm, 40 cm and 25 cm?  
 (A) 64 (B) 640  
 (C) 6400 (D) 6440
75. What will be the next row of numbers in the following pattern?  
 4, 16, 64  
 6, 36, 216  
 8, 64, 512  
 (A) 8, 68, 518 (B) 10, 100, 1000  
 (C) 10, 200, 2000 (D) 10, 500, 5000
76. What is the prime factorisation of 37800?  
 (A)  $2 \times 2 \times 3 \times 3 \times 5 \times 5 \times 7 \times 7$   
 (B)  $2 \times 2 \times 2 \times 3 \times 3 \times 3 \times 5 \times 7$   
 (C)  $8 \times 27 \times 25 \times 7$   
 (D)  $2 \times 4 \times 25 \times 27 \times 7$
77. A moped costs Rs. 7,250. A scooter costs Rs. 3,750 more. What is the total cost of a moped and a scooter?  
 (A) Rs. 18,250 (B) Rs. 11,000  
 (C) Rs. 14,750 (D) Rs. 3,500
78. At the start of a journey, the meter of a car reads 678.3 km. At the end of the journey, the meter reads 913.5 km. What was the distance covered by the car during the journey?  
 (A) 687.3 km (B) 931.5 km  
 (C) 1591.8 km (D) 235.2 km
79. A school library has different subject books, as shown in the following pictograph:
- |         |                          |                          |                          |                          |                          |                          |                          |
|---------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Math    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Hindi   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| English | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| History | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
- One  symbol represents 50 books. Read the pictograph and answer the following question:
- Which subject books are minimum in number?  
 (A) Math (B) Hindi  
 (C) English (D) History
80. How much is the area of the shaded portion in the following figure?
- 
- (A) 11 sq cm (B) 9 sq cm  
 (C) 11 cu cm (D) 9 cu cm

### SECTION III : LANGUAGE (ENGLISH)

**Directions :** There are four passages in this Section. Each passage is followed by five questions. Read each passage carefully and answer the questions that follow. For each question four probable answers bearing letters (A), (B), (C) and (D) are given. Only one out of these is correct. You have to choose the correct answer and indicate your correct response.

### PASSAGE 1

Desert is a place where there is sand all around. It is a hot and dry place. There is very little rain in Deserts. So, very few trees grow there. The only plants that grow in the deserts are cactus, date palms and thorny bushes which do not need much water to grow.

The Sahara is the biggest desert in the world. It stretches across the whole of North Africa. The Arabian desert is also a very large desert. In India too, there is a desert called Thar desert in Rajasthan. Life in a desert is tough. The days are very hot and nights are cool.

81. The biggest desert in the world is in :  
(A) India (B) Africa (C) Arabia (D) America
82. Date palms grow in :  
(A) Plains (B) Hilly regions  
(C) Deserts (D) Snowy regions
83. In desert regions :  
(A) There is no rainfall  
(B) It rains heavily  
(C) There is enough rain  
(D) There is a little rain
84. The climate in a desert is :  
(A) Pleasant (B) Difficult  
(C) Comfortable (D) Cold
85. Very few trees grow in deserts because :  
(A) Most trees need water to grow  
(B) There is sand all-around  
(C) Nights are very cold  
(D) There is no one to take care of trees

### PASSAGE 2

About three hundred and fifty years ago there lived in India an Emperor called Shah Jahan. He had a beautiful and intelligent wife, whom he loved very much. Her name was Mumtaz Mahal; its shortened form, Taj Mahal, means 'pride of the palace'. In the year 1630 this beloved wife of the emperor died. The emperor decided, out of love for his wife, to build her the most beautiful tomb that had ever been seen. Shah Jahan gathered the best artists and architects from India, Turkey, Persia and Arabia to design the building. It took more than 20,000 men working over a period of 18 years to build the Taj Mahal, perhaps the most beautiful building in India.

86. Taj Mahal was built :  
(A) Out of love for Mumtaz Mahal  
(B) Because Mumtaz Mahal was intelligent

- (C) To let the world know that Mumtaz Mahal was beautiful  
(D) To protect Mumtaz Mahal from his enemies

87. Which one of the following pairs is not associated with buildings?  
(A) Painters and carpenters  
(B) Teachers and doctors  
(C) Architects and engineers  
(D) Masons and plumbers
88. Which of the following is the work of an 'Architect'?  
(A) To advise the king  
(B) To build a palace  
(C) To design a building  
(D) To supervise cooking of meals
89. Which one of the statements agrees with the paragraph?  
(A) Shah Jahan wanted to build a palace for himself  
(B) Artists and Architects from India asked Shah Jahan to give them work  
(C) 'Pride of the palace' means 'Shah Jahan'  
(D) Shah Jahan decided to build a beautiful tomb for his beloved wife
90. People consider Taj Mahal as :  
(A) A large river  
(B) The most beautiful building in India  
(C) A very tall building  
(D) A memory of an emperor

### PASSAGE 3

Long ago, a large redwood tree, which was very tall, stood in the forest. "Why am I here?" the redwood asked. But sadly no one heard him. The redwood tree stood there for many more years. It had green needle like leaves, and it was green all year. That is why the birds liked the tree. And they grew up and had babies. They all lived in that redwood tree.

About two hundred bird families called it a home. At sundown the sound of nesting birds was so loud that deers couldn't rub their backs on the tree's trunk. The bird noises hurt their ears.

One day the tree asked the same question he had asked for all those years. "Why am I here? I wish someone would cut me down and build ten homes with my wood. Then I would be good for something."

A black bird heard the tree. She flew up from the ground to the tip of the top telling all the other birds, "Our tree wants to leave the

forest. Our tree does not think he is doing good things. All together let us tell the tree." They said, "Today you are two hundred homes, not ten homes but twenty times ten ! You are home for all of us. Please don't leave the forest." That day the tree was happy to find out why he was there.

91. Birds liked the redwood tree because :
- (A) They could eat its seeds and sit on its branches
  - (B) It was green all year round and had needle like leaves
  - (C) They could live close to the ground
  - (D) They could live near the top
92. The tree was sad because :
- (A) It was lonely in the forest
  - (B) It wanted its wood to be made into homes
  - (C) The deer rubbed its back against the tree
  - (D) The bird noises hurt its ears
93. 'From the ground to the tip of the top' means :
- (A) Under the tree
  - (B) From the ground to the middle of the tree
  - (C) From the ground to the topmost part of the tree
  - (D) From the middle to the topmost part of the tree
94. The writer wrote this story mainly to :
- (A) Tell why the redwood trees are important to the forest
  - (B) Make people buy redwood trees to build houses
  - (C) Make birds happy
  - (D) Tell facts about why redwood trees are unhappy
95. How does the redwood tree feel at the end of the story?
- (A) Angry (B) Happy (C) Afraid (D) Funny

#### PASSAGE 4

Man-made satellites play a very important role in the modern man's world today. It helps in the study of space which has fascinated and inspired people for centuries and also helps us to find out more about the earth and our solar system. Advances in satellite technology have diversified to such an extent that it has improved our quality of life. Satellites help us communicate with people anywhere in the world, forecast weather, look at climate change and monitor disaster. Almost everyone today use satellite technology. Paying by credit card, or using an ATM machine—all involve satellite technology. Thus, satellites have become an integral part of present-day man.

96. Satellites help in the study of :
- (A) Animals (B) Space
  - (C) Plastics (D) Bacteria
97. The word 'fascinated' used in the paragraph means :
- (A) Pleased (B) Interested
  - (C) Affected (D) Enthused
98. Which of the following sequences is correct as mentioned in the paragraph?
- (A) Technology—Monitor—Study
  - (B) Monitor—Study—Technology
  - (C) Study—Monitor—Technology
  - (D) Technology—Study—Monitor
99. The phrase 'present-day man' means :
- (A) Man who is present
  - (B) Man present everyday
  - (C) Man of everyday
  - (D) Man of today
100. Satellite technology cannot be used for :
- (A) Speaking to a friend in America
  - (B) Washing and drying clothes
  - (C) Taking out money from a bank
  - (D) Warning against a storm