

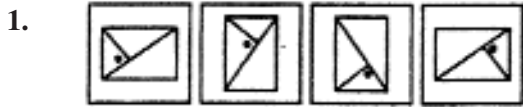
# 2011 NAVODAYA ENTRANCE EXAMINATION

(Based on the questions collected from the candidates that appeared for NET-2011)

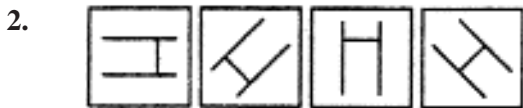
## SECTION – I: MENTAL ABILITY TEST

### PART – I

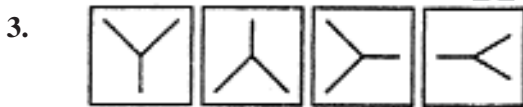
**Directions (Q. 1 – 5):** In the following questions, in each of the questions there are four figures. Three figures are similar in any sense. Find out the odd figure and indicate your correct answer.



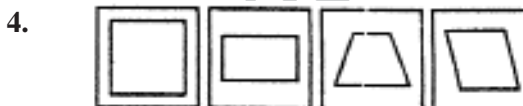
(1) (2) (3) (4)



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



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



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



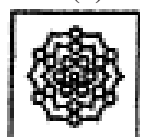
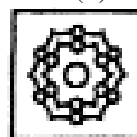
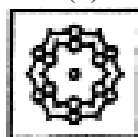
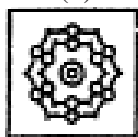
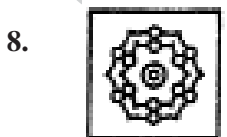
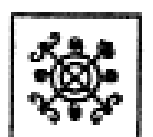
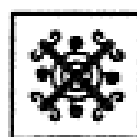
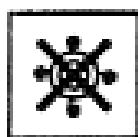
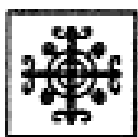
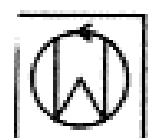
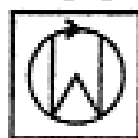
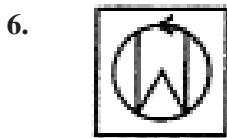
(1) (2) (3) (4)





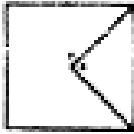
### PART – II


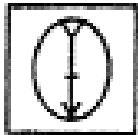
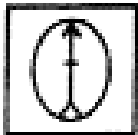
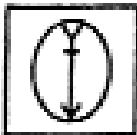
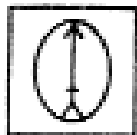
**Directions (Q.6 – 10):** In the following questions, there is problem figure on the left side for the questions and on right side there are four answer figures (1), (2), (3) and (4)., Find out the figure which is exactly similar with the problem figure and indicate your correct answer.

**Problem Figure**

**Answer Figure**

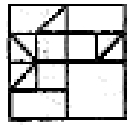
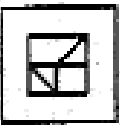
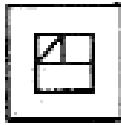
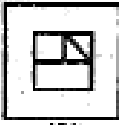
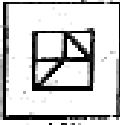
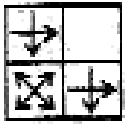
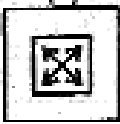
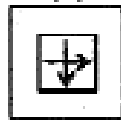
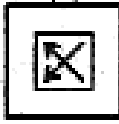
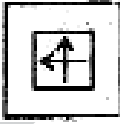
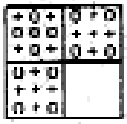
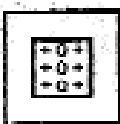
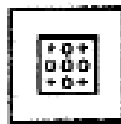
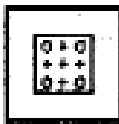
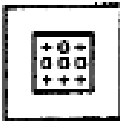
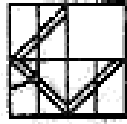
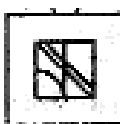
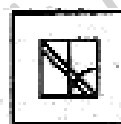


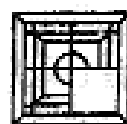

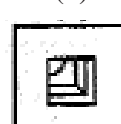
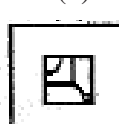



9.  (1)  (2)  (3)  (4) 

10.  (1)  (2)  (3)  (4) 

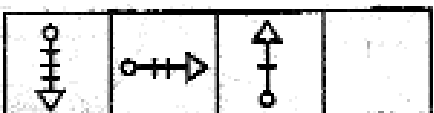
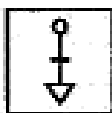

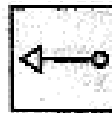
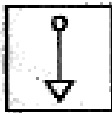
PART - III

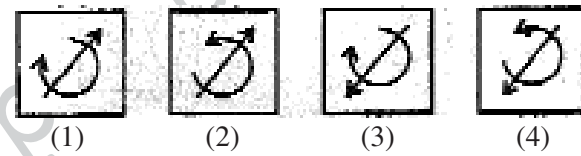
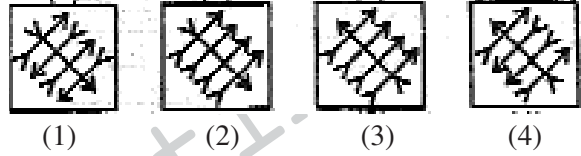
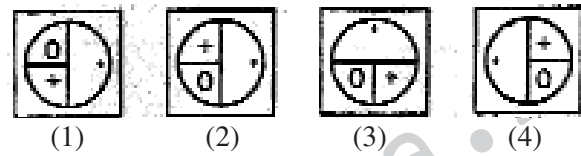
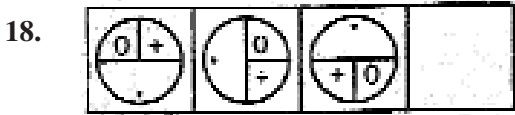
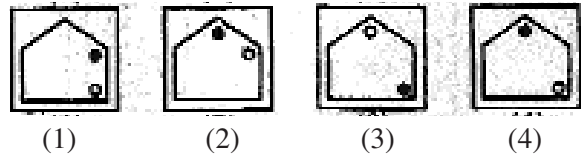
**Directions (Q.11 - 15):** In the following questions, there is a problem figure for question towards the left side. One part of this figure is missing. Observe answer figure (1), (2), (3) and (4). Find out the figure which completes the portion of embedded part of problem figure without changing its direction, indicate your correct answer.

	Problem Figure	Answer Figure
11.		(1)  (2)  (3)  (4) 
12.		(1)  (2)  (3)  (4) 
13.		(1)  (2)  (3)  (4) 
14.		(1)  (2)  (3)  (4) 
15.		(1)  (2)  (3)  (4) 

PART - IV

**Directions (Q. 16 - 20):** There are three problem figures for the question towards the left side and fourth place is vacant. These problem figures are in a series. Find out the proper figure which completes the series. Choose your correct alternative and indicate it.

	Problem Figure	Answer Figure
16.		(1)  (2)  (3)  (4) 

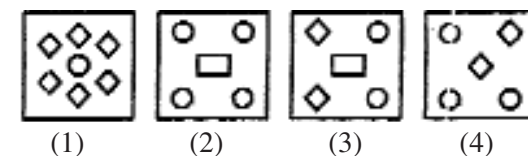
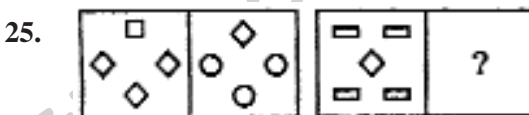
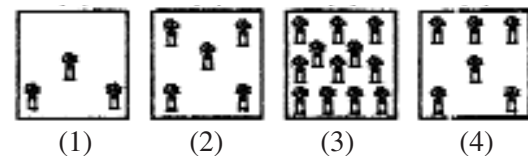
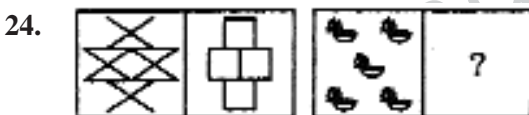
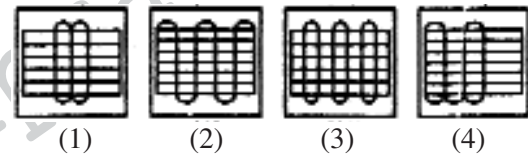
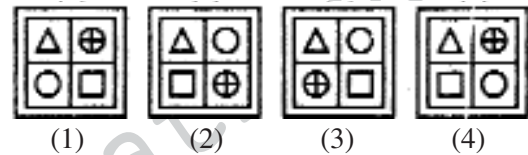
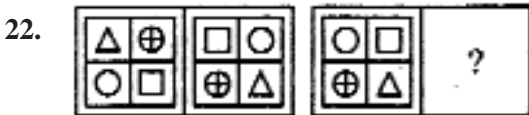
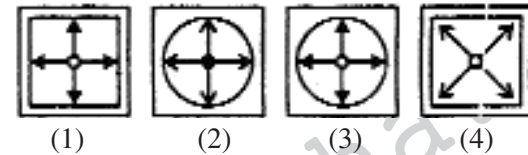
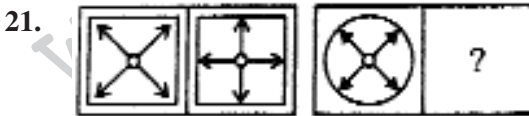


PART - V

**Directions (Q. 21 - 25):** In the following questions, there is question mark after three figures for the fourth figure. There is a relation in some respect between first two problem figures. The same relationship should also be adopted between the third and the fourth problem figures. Find out the answer figure from the given four figures. Indicate your correct response.

Problem Figure

Answer Figure



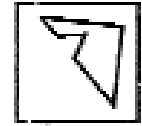
PART - VI

**Directions (Q. 26 - 30):** In the following questions, there is part of square towards the left side. Find out the answer figure which can complete the square in the problem figure. Choose your correct response and indicate it.

Problem Figure

Answer Figure

26.



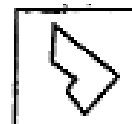
(1)

(2)

(3)

(4)

27.



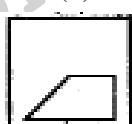
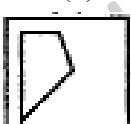
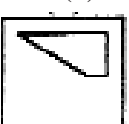
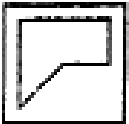
(1)

(2)

(3)

(4)

28.



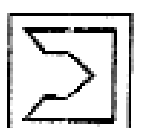
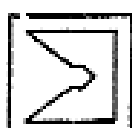
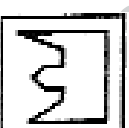
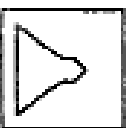
(1)

(2)

(3)

(4)

29.



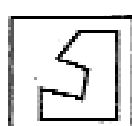
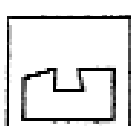
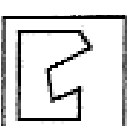
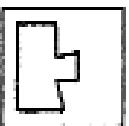
(1)

(2)

(3)

(4)

30.



(1)

(2)

(3)

(4)

PART - VII

Directions (Q. 31 - 35): In the following questions, in each of the question there are four figures. Three figures are similar in any sense. Find out the odd figure and indicate you correct answer.

31.



(1)

(2)

(3)

(4)

32.



(1)

(2)

(3)

(4)

33.



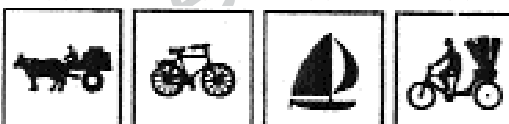
(1)

(2)

(3)

(4)

34.



(1)

(2)

(3)

(4)

35.



(1)

(2)

(3)

(4)

PART - VIII

**Directions (Q. 36 - 40):** In the following questions, there is a problem figure on the left side and on right side there are four answer figures (1), (2), (3) and (4). Find out that figure which is exactly similar with the problem figure and indicate your correct answer.

**Problem Figure**

**Answer Figure**

36.			(1)		(2)		(3)		(4)	
37.			(1)		(2)		(3)		(4)	
38.			(1)		(2)		(3)		(4)	
39.			(1)		(2)		(3)		(4)	
40.			(1)		(2)		(3)		(4)	

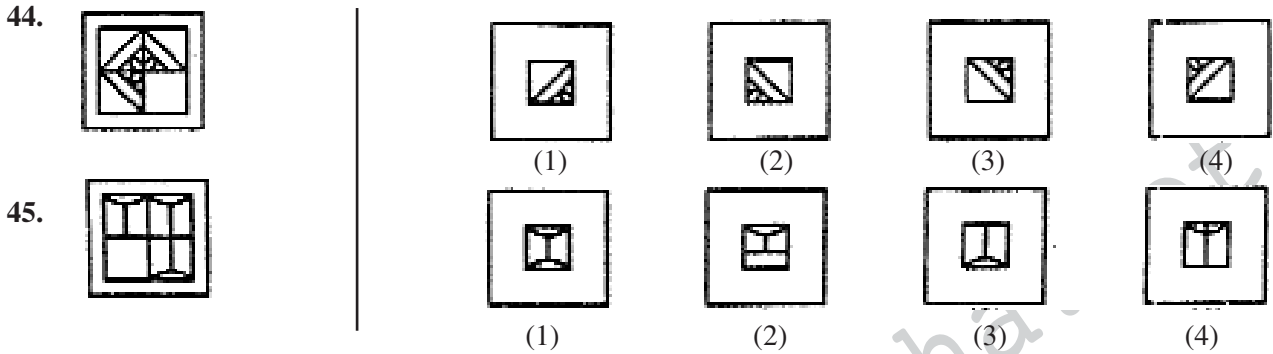
PART - IX

**Directions (Q. 41 - 45):** In the following questions, there is a problem figure for question towards the left side. One part of this figure is missing. Observe answer figure (1), (2), (3) and (4). Find out the figure which completes the portion of embedded part of problem figure without changing its direction, indicate your correct answer.

**Problem Figure**

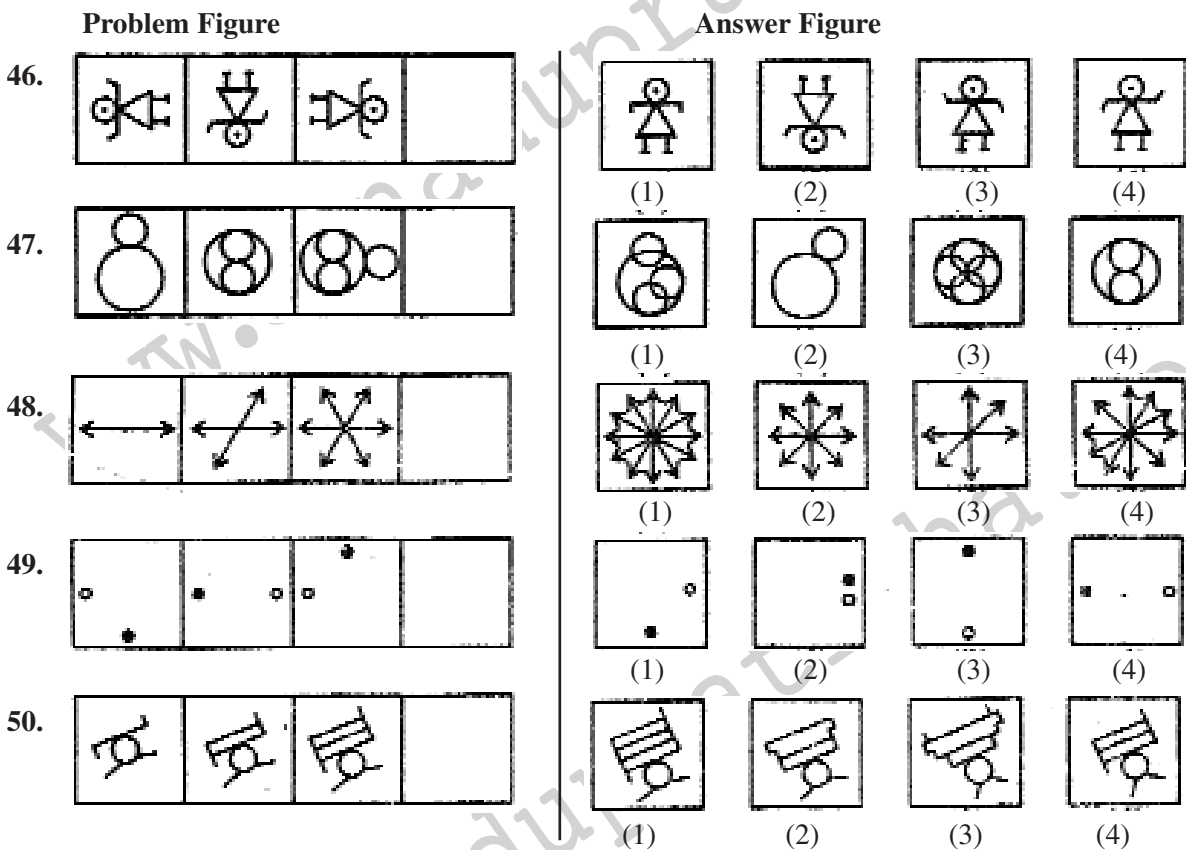
**Answer Figure**

41.			(1)		(2)		(3)		(4)	
42.			(1)		(2)		(3)		(4)	
43.			(1)		(2)		(3)		(4)	



PART - X

**Directions (Q. 46 - 50):** There are three problem figures for the question towards the left side and fourth place is vacant. These problem figures are in a series. Find out the proper figure which completes the series. Choose your correct alternative and indicate it.



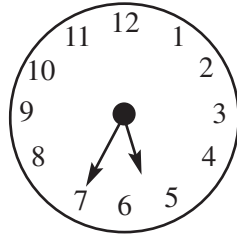
SECTION - II : ARITHMETIC

**Directions:** For every question, four probable answers bearing numbers 1, 2, 3 and 4 are given. Out of these only one is correct. You have to find the correct answer and write the number in the box against the number corresponding to the question on the answer sheet.

51. Chandrakanth bought a house for Rs. 2,00,000 and spent Rs. 50,000 on repairs to that house. If he wants to get 20% profit, what should be its sale price?  
 1) Rs. 2,00,000                      2) Rs. 3,00,000                      3) Rs. 30,000                      4) Rs. 5,00,000
52. Amith arranged a party on his birthday. He bought four (4) packs of biscuits. Each packet has 8 biscuits in it. There are 28 students in his class, if each student was given one biscuit, how many biscuits remained?  
 1)  $(4 \times 8) + 28 = \dots\dots\dots$                       2)  $28 - (4 \times 8) = \dots\dots\dots$   
 3)  $(28 - 8) \times 4 = \dots\dots\dots$                       4)  $(4 \times 8) - 28 = \dots\dots\dots$

53. Amrutha started doing her evening household chores at 4.45 pm. After completing the work she looked at the clock (showing 5.35 pm). How long did she take to complete the work?

- 1) 40 minutes
- 2) 45 minutes
- 3) 50 minutes
- 4) 55 minutes



54. Mrs. Bhatia wanted to distribute 75 pencils and 60 erasers to her students equally. How many students are there in her class?

- 1) 7 students
- 2) 15 students
- 3) 25 students
- 4) 60 students

55. What is the closest number to the product of  $2.002 \times 157.5$ ?

- 1) 315
- 2) 345
- 3) 347
- 4) 300

56. What are the numbers that should take the place of '?' Question marks in the last row?

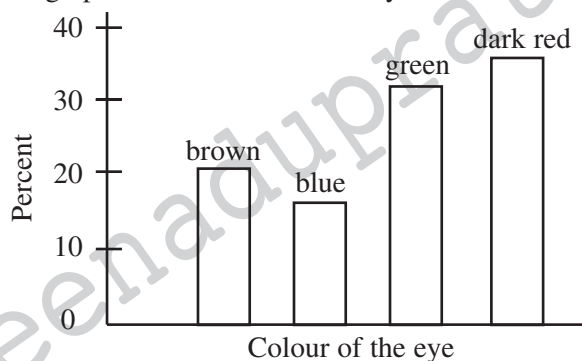
<b>21</b>	<b>42</b>	<b>66</b>
<b>23</b>	<b>46</b>	<b>72</b>
<b>25</b>	<b>50</b>	<b>78</b>
<b>?</b>	<b>?</b>	<b>?</b>

- 1) 27      54      84
- 2) 27      54      165
- 3) 27      54      87
- 4) 27      54      162

57. Renuka borrowed Rs. 2,50,000 from her friend to buy a car at the rate of 4.5% interest per annum. What would be the total interest per year?

- 1) Rs. 3,62,500
- 2) Rs. 2,61,250
- 3) Rs. 2,58,333
- 4) Rs. 11,250

58. The following bar graph shows the colours of eyes of students of class 8.



As per the information how many students have green eyes?

- 1) 130 students
- 2) 120 students
- 3) 80 students
- 4) 30 students

59. The distance between two cities on a map is 8.6 cms. The map used a scale of 1 cm = 8 kms. Then what is the actual distance between the two cities?

- 1) 0.6 km.
- 2) 16.6 km.
- 3) 68.8 km.
- 4) 64.8 km.

60. Which of the following numbers leaves a remainder when divided by '6'?

- 1) 30
- 2) 36
- 3) 42
- 4) 55

61. If  $\square = 5$ ,  $\bigcirc = 8$ ,  $\triangle = 6$ , what is the value of  $\star$  in the following equation?

$$(\square \times \bigcirc) - \triangle = \star$$

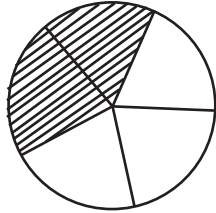
- 1) 22                                      2) 28                                      3) 32                                      4) 34

62. Which of the following is lower than '1'?

- 1)  $1\frac{1}{2} + \frac{2}{3}$                               2)  $1\frac{1}{2} - \frac{2}{3}$                               3)  $1\frac{1}{2} \times \frac{2}{3}$                               4)  $1\frac{1}{2} \div \frac{2}{3}$

63. Which of the following numbers represents the part of the circle followed with lines?

- 1) 0.6  
2) 0.5  
3) 0.4  
4) 0.25



64. What is the LCM of 6, 8 and 12?

- 1) 6                                      2) 8                                      3) 12                                      4) 24

65. How do you write 389, 607 in words?

- 1) three hundred eighty nine, six hundred seven  
2) three hundred thousand eighty nine, six hundred seven  
3) three hundred eighty nine thousand six hundred seventy  
4) three hundred eighty nine thousand six hundred seven

66. Which of the following two are equal to 1.5?

- 1) 15%,  $\frac{5}{2}$                               2) 1.5%,  $\frac{6}{4}$                               3) 150%,  $\frac{5}{2}$                               4) 150%,  $\frac{3}{2}$

67. What is the highest odd number we can get using 2, 9, 7, 1, 0 and without repeating any of those numbers?

- 1) 97210                                      2) 92107                                      3) 92170                                      4) 97201

68. A farm house is 43 metres long and 27 metres wide. If we want to put a wire around that house for three rounds what would be the length of the required wire?

- 1) 70 metres                                      2) 140 metres                                      3) 105 metres                                      4) 420 metres

69. What is the value of the following expression?

$$\frac{10}{13} + \frac{5}{13} - \frac{12}{13} + \frac{6}{13} + \frac{6}{13} - \frac{3}{13}$$

- 1)  $\frac{8}{13}$                                       2)  $\frac{10}{13}$                                       3)  $\frac{12}{13}$                                       4)  $\frac{6}{13}$

70. Give the ascending order of the following numbers.

$\frac{3}{8}$ , 38%, 0.0038

- 1) 38%,  $\frac{3}{8}$ , 0.0038                                      2)  $\frac{3}{8}$ , 0.0038, 38%

- 3) 0.0038,  $\frac{3}{8}$ , 38%                                      4) 0.0038, 38%,  $\frac{3}{8}$



71. Of 200 students in a school 3 out of every 5 enjoy playing cricket. How many students of that school do not enjoy playing cricket?
- 1) 60 students                      2) 80 students                      3) 100 students                      4) 120 students
72. Give the simplification of the following expression.
- $$3\frac{2}{3} + 1\frac{1}{2} - 0.875 + 8(15 - 6)$$
- 1) 89.17                      2) 83.63                      3) 76.29                      4) 75.87
73. Give the equivalent of  $\frac{5}{8}$  in terms of percentage
- 1) 0.625%                      2) 1.6%                      3) 62.5%                      4) 160%
74. Which of the following two values represent 25%?
- 1) 0.25,  $\frac{1}{4}$                       2) 2.5,  $\frac{4}{16}$                       3) 0.25,  $\frac{2}{5}$                       4) 0.025,  $\frac{2}{5}$
75. The weight of a truck is  $2\frac{1}{4}$  tonnes. Is now loaded with  $1\frac{2}{3}$  tonne gravel and  $\frac{1}{2}$  tonne sand. What is the weight of the loaded truck?
- 1) 5 tonnes                      2)  $4\frac{5}{12}$  tonnes                      3)  $4\frac{2}{3}$  tonnes                      4)  $4\frac{1}{2}$  tonnes

### SECTION – III: LANGUAGE

**Directions:** There are three 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 numbers 1, 2, 3 and 4 are given. Out of these only one is correct. You have to choose the correct answer and write the number in the box against the number corresponding to the question on the answer sheet.

#### PASSAGE – I

Trees are useful to man in many ways. Man gets from trees pulses, vegetables, spices, shelter, fodder etc.

Trees protect us from Sun's harmful rays. They provide us cool shade. They reduce the speed of winds. They change the direction of winds also. They take in carbon dioxide and give out oxygen. They thus purify atmosphere. They also release water vapour thus making weather pleasant.

Trees prevent the spread of dust and smoke. They take in harmful gases. 500 square meters of greenery can clear 70% sulphur dioxide and nitric acid of urban areas.

Trees work as natural and free airconditioners.

76. Trees DO NOT give us.....
- 1) wheat    2) mango  
3) dates    4) carbon dioxide
77. How do trees give us cool shade?
- 1) by stopping Sun's rays from hitting us  
2) by changing wind's direction  
3) by stopping the spread of smoke and dust  
4) by taking in carbon dioxide from atmosphere

78. One benefit we derive from trees...
- 1) releasing into atmosphere of carbon dioxide
  - 2) purifying air
  - 3) providing warm places
  - 4) absorbing humidity
79. Environment means...
- 1) trees
  - 2) situation
  - 3) pleasantness
  - 4) surroundings
80. Which of the following is not a gas?
- 1) oxygen
  - 2) carbon dioxide
  - 3) solar rays
  - 4) nitric oxide

### PASSAGE – II

Tigers today are endangered. They are becoming extinct fast. Without tiger biodiversity loses its natural balance. We have to create awareness in general public. Governments should initiate strong measures to prevent illegal killing of tiger, construction of dams and deforestation.

Government of India started "Tiger Conservation" project in 1973. It established tiger sanctuaries in Jim Corbett National Park and Sariska Tiger reserve. The tragedy is that a large number of tigers in Sariska tiger reserve died.

WWF and Nokia together are providing alternative employment to people of that area so that they don't trouble tigers.

81. The reason for fast decrease in tigers' numbers
- 1) People killing tigers for pleasure
  - 2) Increasing temperatures which tigers cannot bear
  - 3) Deforestation depriving tigers of natural habitat
  - 4) Tigers becoming food for bigger animals
82. We have to conserve tigers because
- 1) the world loses a beautiful animal
  - 2) the tiger is India's national animal
  - 3) tigers maintain balance in nature
  - 4) it is a crime to kill animals
83. Jim Corbett national park and Sariska tiger reserve are described as tiger sanctuaries. What is meant by a sanctuary?
- 1) A place protected by walls on all sides
  - 2) Place meant for tigers alone
  - 3) Place providing food and treatment to animals
  - 4) A large forest area where wild animals can live in natural conditions
84. Which of the following is NOT done by WWF and Nokia?
- 1) Searching for ways to prevent tigers' death
  - 2) Providing alternative employment to people of that area so that they don't cut trees
  - 3) They are trying to develop the area as touring centre
  - 4) They are preventing people from destroying tiger's habitat.

85. "Extinction" means.....

- 1) Saving oneself from danger
- 2) placing a species in the danger of total destruction
- 3) accepting to do a dangerous activity
- 4) killing someone

**PASSAGE – III**

Birbal's original name is Mahesh Das. Right from his childhood he was Akbar's courtier. He grew up as an intelligent and good natured man. He saved Akbar from many a critical situation.

One day Akbar hosted dinner for his friends. To entertain the guests, Akbar invited an expert story – teller. The story teller narrated many interesting stories. Akbar presented him with a bag – full of gold coins. Pleased highly, the story teller praised Akbar as being greater than Indra, lord of heaven.

Later Akbar asked all those present there if he was really greater than Indra. Akbar being their king, all of them replied "Yes, King".

Then Akbar asked Birbal the same question. Birbal said, "Yes, you are greater than Indra because you can do what Indra can't do". Akbar asked what was that he could do and Indra couldn't. The Birbal said that Akbar, could expel an evil man from his kingdom. Indra couldn't do the same because he was the king of the whole universe.

86. How did Birbal help Akbar?

- 1) Narrated excellent stories
- 2) Helped solve critical problems
- 3) Entertained guests
- 4) Fought wars

87. How did Akbar entertain his guests at dinner?

- 1) with songs
- 2) with poetry
- 3) inviting a story – teller to narrate stories
- 4) with dance

88. How did Akbar honour the story teller?

- 1) with applause
- 2) with a bag full of gold coins
- 3) by praising
- 4) presenting with a gold chain

89. Why did all the guests agree with the story – teller when he said that Akbar was greater than Indra?

- 1) to satisfy the king
- 2) because they felt the story – teller was right
- 3) because they are good natured
- 4) because they don't know what to say

90. Why did Birbal say that Akbar was greater than Indra?

- 1) because Akbar was really greater than Indra
- 2) Akbar could expel an evil man from his kingdom whereas Indra couldn't
- 3) Because Akbar's kingdom was larger than Indra's
- 4) because Indra was the lord of the whole universe



100. We all applauded with our laughter and claps because .....

- 1) Amith was injured
- 2) the book was torn
- 3) students acted well in the play.
- 4) the teacher punished a student.

**ANSWERS**

1-2; 2-4; 3-4; 4-3; 5-3; 6-4; 7-3; 8-1; 9-2; 10-2; 11-3; 12-1; 13-2; 14-3; 15-1; 16-3; 17-4; 18-2; 19-2; 20-4; 21-3; 22-4; 23-3; 24-2; 25-2; 26-3; 27-4; 28-3; 29-3; 30-2; 31-4; 32-4; 33-2; 34-3; 35-3; 36-3; 37-4; 38-3; 39-1; 40-1; 41-1; 42-2; 43-4; 44-4; 45-3; 46-4; 47-3; 48-2; 49-2; 50-1; 51-2; 52-4; 53-3; 54-2; 55-1; 56-1; 57-4; 58-2; 59-3; 60-4; 61-4; 62-2; 63-3; 64-4; 65-4; 66-4; 67-4; 68-4; 69-3; 70-3; 71-2; 72-3; 73-3; 74-1; 75-2; 76-4; 77-1; 78-2; 79-4; 80-3; 81-3; 82-3; 83-4; 84-3; 85-2; 86-2; 87-3; 88-2; 89-1; 90-2; 91-2; 92-3; 93-4; 94-1; 95-3; 96-4; 97-3; 98-3; 99-2; 100-3.