# Previous Paper (Solved)

# JAWAHAR NAVODAYA VIDYALAYA SELECTION TEST—2013\*

CLASS VI

# SECTION-I: MENTAL ABILITY TEST

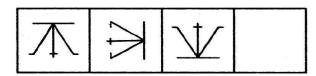
### PART-I

**Directions (Q. 1-5):** *In each of the following questions,* a problem figure is given on the left and four answer figures A, B, C & D are given on the right hand side. Select the answer figure in which the problem figure is hidden. Indicate your answer in the answer sheet.

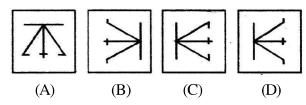
|         | Problem<br>Figures |     | Answ<br>Figu |     |     |  |  |
|---------|--------------------|-----|--------------|-----|-----|--|--|
| 1.      | =                  | (A) | (B)          | (C) | (D) |  |  |
| 2.      |                    | (A) | (B)          | (C) | (D) |  |  |
| 3.      |                    | (A) | (B)          | (C) | (D) |  |  |
| 4.      |                    | (A) | (B)          | (C) | (D) |  |  |
| 5.      | $\Diamond$         | (A) | (B)          | (C) | (D) |  |  |
| PART-II |                    |     |              |     |     |  |  |

**Directions** (Q. 6-10): In each of the following questions, there are three figures 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 which occupies the blank space for the fourth figure and completes the series. Indicate your answer in the answer sheet.

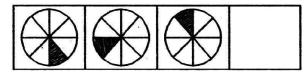
#### 6. Problem Figures



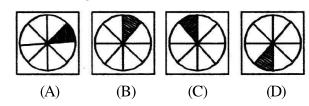
#### **Answer Figures**



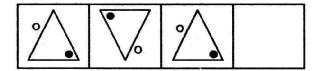
#### 7. Problem Figures



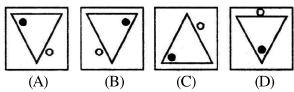
#### **Answer Figures**



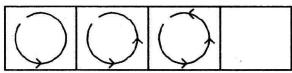
#### 8. Problem Figures



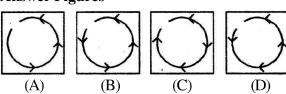
#### **Answer Figures**



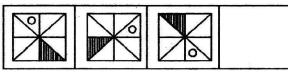
#### 9. Problem Figures



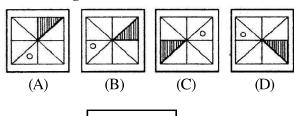
#### **Answer Figures**



#### 10. Problem Figures



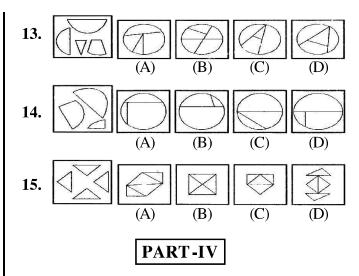
#### **Answer Figures**



## PART-III

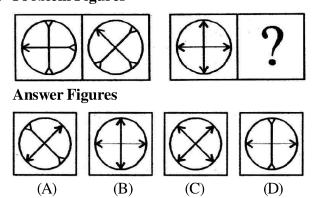
**Directions** (**Q. 11-15**): In each of the following questions, a problem figure is given on the left and four answer figures A, B, C & D are given on the right hand side. Select the answer figure which is formed from the cut-pieces of the problem figure. Indicate your answer in the answer sheet.

|     | Problem<br>Figures |     | Answ<br>Figur |     |     |
|-----|--------------------|-----|---------------|-----|-----|
| 11. |                    | (A) | (B)           | (C) | (D) |
| 12. |                    | (A) | (B)           | (C) | (D) |

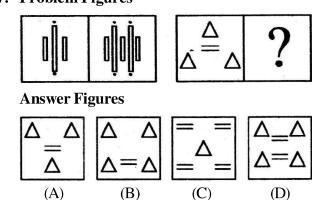


Directions (Q. 16-20): In each of the following questions, there are three Problem Figures followed by a questions mark (?) for the fourth one. There exists a relationship between the first two Problem Figures. A similar relationship should exist between the third and fourth Problem Figures. Select one figure from the Answer Figures which replaces the question mark and encircle the letter of the Answer Figure selected by you.

#### 16. Problem Figures

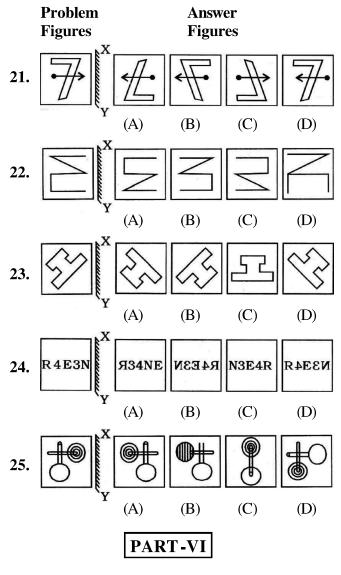


#### 17. Problem Figures



# 18. Problem Figures **Answer Figures** (C) (D) (A) (B) 19. Problem Figures **Answer Figures** 8 (A) (B) (C) (D) 20. Problem Figures **Answer Figures** (A) (B) (C) (D) PART-V

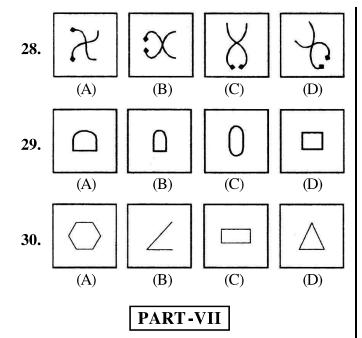
**Directions (Q. 21-25):** In each of the following questions, a Problem Figure is given on the left and four Answer figure A, B, C & D are given on the right hand side. Select the Answer figure which is exactly similar to the mirror-image of the problem figure when the mirror is placed at XY. Indicate your answer in the answer sheet.



**Directions (Q. 26-30):** In each of the following questions, four figures marked A, B, C and D have been given. Of these four figures, three figures are similar in some way and one figure is different. Select the figure which is different and encircle the letter below it.

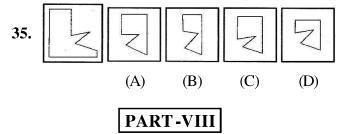
# 26. (A) (B) (C) (D) 27. (A) (B) (C) (D)

JNV-VI (PP-E)-3-II

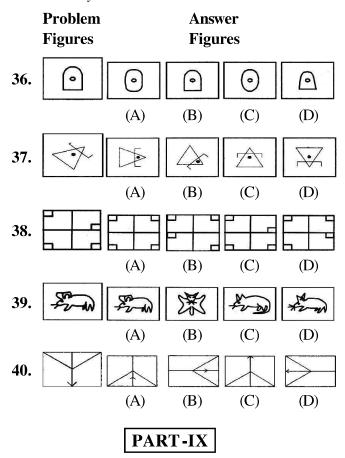


**Directions** (Q. 31-35): In each of the following questions, one part of the geometrical figure is on the left-hand side and the other one is among the four figures marked A, B, C and D on the right-hand side. Find the figure in the right-hand side that completes the problem figure. Encircle the letter given below of that figure.

|     | Problem |     | Answ    |     |     |  |  |
|-----|---------|-----|---------|-----|-----|--|--|
|     | Figures |     | Figures |     |     |  |  |
| 31. |         | (A) | (B)     | (C) | (D) |  |  |
| 32. |         | (A) | (B)     | (C) | (D) |  |  |
| 33. |         | (A) | (B)     | (C) | (D) |  |  |
| 34. |         | (A) | (B)     | (C) | (D) |  |  |



**Directions (Q. 36-40):** In each of the following questions, a problem figure is given on the left-hand side and four answer figures marked 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 your answer in the answer sheet.



**Directions (Q. 41-45):** In each of the following questions, a piece of paper is folded and in some questions punched also. The problem figure is given on left and answer figures A, B, C and D are given on the right-hand side. Select the answer figure that will be formed on unfolding the paper. Indicate your answer in the answer sheet.

#### 41. Problem Figures







#### **Answer Figures**









42. Problem Figures







**Answer Figures** 









43. Problem Figures







**Answer Figures** 





(B)





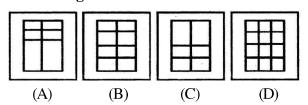
#### 44. Problem Figures







**Answer Figures** 



#### 45. Problem Figures



(A)





**Answer Figures** 



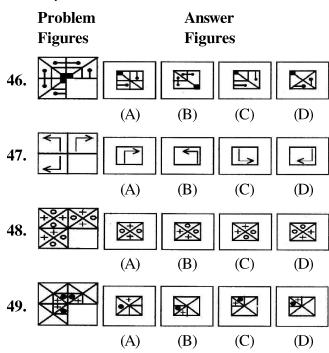






PART-X

**Directions (Q. 46-50):** *In each of the following* questions, there is a problem figure on the left-hand side, a part of which is missing. Observe the answer figures A, B, C and D on the right-hand side and find out the answer figure which, without changing the direction fits in the missing part of the problem figure in order to complete the pattern in the problem figure. Indicate your answer in the answer sheet.



田田

(A)

翢

**(B)** 

田

(C)

翻

(D)

# **SECTION-II: ARITHMETIC**

**Directions (Qs. 51-75):** Each of the questions given below is followed by four alternatives A, B, C and D in which only one is correct answer. Read the question and the following alternatives carefully and select the correct answer.

**51.** When the expression (35.624 – 26.510) is divided by 14, then quotient is:

A. 6.51

B. 0.651

C. 0.0651

D. 65.1

**52.** Sum of first-ten odd numbers is:

A. 10

B. 50

C. 75

D. 100

**53.** The next term of the series

4, 7, 11, 18, 29, ..... is:

A. 47C. 40

B. 45

D. 36

**54.** What will be the sum of prime numbers in the following numbers?

17, 8, 21, 13, 41, 2, 27, 31, 51

A. 104

B. 102

C. 155

D. 125

55. The equivalent decimal of

 $7 + \frac{4}{10} + \frac{9}{100} + \frac{8}{100}$  is:

A. 7.21

B. 7.498

C. 2.8

D. 0.7498

**56.** If the area of a rectangular field, whose dimensions are  $64 \text{ m} \times 3.6 \text{ m}$ , is equal to the area of a square field, then the side of the square (in m.) is:

A. 64

B. 48

C. 36

D. 24

**57.** A car moves from the point A to B which is 210 km apart, at the speed of 60 km/hr at 9.30 in the morning. After what time will the car arrive at the point B?

A. 12.00 noon

B. 12.30 p.m.

C. 1.00 p.m.

D. 1.30 p.m.

**58.** A contractor undertakes to complete a work in 20 days. He employs 30 labourers on this job. How many more labourers would he employ to complete the work in 15 days?

A. 50

B. 40

C. 30

D. 10

**59.** A milk container fully fills with milk when 48 litres of milk is poured in the container. If its

 $\frac{7}{12}$  part was filled by milk and half portion of the milk is taken out, then how much milk

the milk is taken out, then how much milk should be added to fill the container fully?

A. 14 *l* 

B. 28 *l* 

C. 34 *l* 

D. 40 *l* 

**60.** Different types of cloth are available in the following way:

I. 23 m for ₹ 460

II. 38 m for ₹ 912

III. 15 m for ₹ 375

IV. 18 m for ₹ 396

In above option the cheapest cloth is:

A. I

B. II

C. III

D. IV

**61.** Pankaj got 15 marks less than Charu, and Charu got 5 marks more than Kanta. If their total marks are 112, then marks obtained by Kanta is:

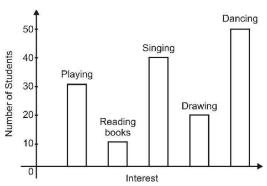
A. 29

B. 39

C. 44

D. 45

**62.** The bar chart given below shows the interest of the students of certain classes:



Interest of students less than 30 and more than 50 is:

A. in singing

B. in playing

C. in drawing

D. in dancing

**63.** Weight of a necklace is 25 g 35 mg, weight of a bangle is 15 g 5 mg and weight of a ring is 10 g 450 mg. Total weight of jewellery is:

A. 40.300 g

B. 50.49 g

C. 50.85 g

D. 45.130 g

**64.** Given pictograph showing the selling of potatoes in 4 days by a certain store.

Day 1: \* \* \* \* \*

Day 2: \* \* \*

Day 3: \* \* \* \* \* \*

Day 5: \* \* \* \*

(\* Showing 50 kg)

Total selling of potatoes in 4 days (in kg) are:

A. 1080

B. 900

C. 700

D. 800

**65.** Using a digit only once from the digits 6, 4, 2, 1 and 0 the smallest number of 5 digits will be

A. 12460

B. 01246

C. 61024

D. 10246

**66.** In the numbers X, Y, Z and T, the greatest digit 7 is used only once and other digits are not known:

X : \*7 \* \*

Y:7\*\*\*

Z: \* \* 7 \*

T:\*\*\*7

The greatest number in X, Y, Z and T is:

A. X

B. Y

C. Z

D. T

**67.** The difference between the greatest number and smallest number of 5 digits is:

A. 1

B. 900

C. 9000

D. 89999

**68.** The HCF of 360, 108 and 252 is:

A. 36

B. 54

C. 72

D. 116

**69.** Three bells ring respectively at an interval of 12 minutes, 15 minutes and 18 minutes. They rang together at 10.30 in the morning. At what time will they ring together again?

A. 12:00 noon

B. 1:00 pm

C. 1:30 pm

D. 3:00 pm

**70.** The sum of two numbers is 125600. If one number is less than the other number by 14400, then value of the small number is:

A. 70000

B. 84400

C. 55600

D. 62800

**71.** The value of  $150 \times 0 \times 5 \times 4 + 700$  is:

A. 0

B. 3700

C. 2300

D. 700

**72.** If a positive integer is added to the numerator and denominator of a given fractional number then.

A. there will be no difference in the fractional number

B. new fractional number will be greater than the given fractional number

C. new fractional number will be smaller than the given fractional number

D. new fractional number can either be smaller than the first fractional number or bigger also

**73.** The value of 68% of 320 is:

A. 2176

B. 217.6

C. 21.76

D. 21760

74. What will be the cost price of a shirt whose selling price is ₹ 2500 at the profit of 25%?

A. ₹ 1,250

B. ₹ 1,750

C. ₹ 2,000

D. ₹ 2,425

**75.** ₹ 15,000 amounts to ₹ 25,800 in 8 years at simple interest. The rate of interest will be:

A.  $5\frac{1}{2}\%$ 

B. 9%

C. 10%

D. 11%

# **SECTION-III: LANGUAGE**

**Directions** (Qs. 76-90): Read the following passages carefully and answer the questions given below them.

# PASSAGE-1

The purpose of education is to make the student an expert in his subject. This must be clearly understood, and mere muddling through lessons and lectures and books and passing examination are

relegated to secondary importance as means to the end—which is excellence in the field chosen.

But there are so many fields, and no man can become an expert in all the fields. It is necessary to decide which fields are the important ones that a man should know well.

It is clear that one's own work is the most important. This has been realised and modern

civilization has accordingly provided vocational education. It is now possible to acquire high professional skill in the various fields, medicine, engineering, production, commerce and so on—but with good and bad mixed together, and no standard for guidance.

- **76.** The purpose of education is to make the student:
  - A. an expert in all fields
  - B. an expert in his subject
  - C. only capable of earning
  - D. confident only
- 77. What, according to the writer, is the end?
  - A. excellence in the field chosen
  - B. passing the examination
  - C. earning more and more money
  - D. cramming lectures and books
- **78.** According to the passage, can a man become an expert in all fields?
  - A. Yes
- B. Partially yes
- C. Sometimes
- D. No
- **79.** According to the writer, which of the following is the most important work?
  - A. someone else's work
  - B. one's own work
  - C. nobody's work
  - D. everyone's work
- **80.** The modern civilization has provided
  - A. vocational education
  - B. art of conversation
  - C. adult education
  - D. higher education

#### PASSAGE-2

English education, which was introduced in India in the earlier part of the nineteenth century, established her cultural contact with the West. Prior to this, India had for centuries remained in a state of isolation, although in very early times she had sent out cultural missions to the other Asiatic countries. India really began to borrow from the West and assimilate new ideas on an extensive scale only after the British had taken up the direction of her educational policy.

It is true that Western education at first exerted an unsettling: influence on young men and led to errors in life and conduct. They hated everything Indian, aped western manners and modes of life, and forgot their glorious past. There were scholars who ignored modern Indian languages, avoided classical Indian literature, and made a fetish of speaking and writing English.

- **81.** When was English education introduced in India?
  - A. in the twentieth century
  - B. in the later part of the nineteenth century
  - C. in the earlier part of the nineteenth century
  - D. in the eighteenth century
- **82.** When did India begin to borrow from the West?
  - A. after the British had taken up the direction of her educational policy
  - B. before the British had taken up the direction of her educational policy
  - C. in the twentieth century
  - D. none of the above is correct
- **83.** What did India send out to other Asiatic countries?
  - A. economic mission
  - B. military forces
  - C. cultural missions
  - D. none of these
- **84.** Western education exerted an unsettling influence on:
  - A. old men
- B. young men
- C. old women
- D. children
- **85.** Young men forgot their:
  - A. glorious past
- B. present
- C. future
- D. originality

## PASSAGE-3

Each nation has its own peculiar character which distinguishes it from others. But the peoples of the world have more points in which they are all like each other than points in which they are different. One type of person that is common in every country is the one who always tries to do as little as he possibly can and to get as much in return as he can. His opposite, the man who is in the habit of doing more than is strictly necessary and is ready to accept what is offered in return, is rare everywhere.

Both these types are usually unconscious of their character. The man who avoids effort is always talking about his 'rights'; he appears to think that society owes him a pleasant easy life. The man who is always doing more than his sheer talks of 'duties' feels that the individual is in debt to society, and not society to the individual. As a result of their view, neither of these men thinks that he behaves at all strangely.

- **86.** What type of person is common in every nation?
  - A. A person who wants to do little and get more
  - B. A person who wants to do more and get little
  - C. Each person is different
  - D. There is no such type of person that is common in every country
- 87. A person doing more and getting little:
  - A. is rare everywhere
  - B. is found in our country
  - C. is common in all countries
  - D. is found nowhere
- 88. The man who talks about his 'rights':
  - A. avoids meeting other people
  - B. avoids hard work
  - C. knows his duties well
  - D. believes in hard work
- 89. The man who talks of 'duties':
  - A. is always hard working
  - B. avoids hard work
  - C. does not know his duties well
  - D. always thinks of his 'right' first
- **90.** Which one of the following thinks that the individual is in debt to the society?
  - A. a person who talks of his 'rights only'
  - B. a person who is always doing more than his sheer talks of 'duties'
  - C. every citizen of the country
  - D. a person who talks of his 'duties' only

**Directions (Qs. 91-92):** *In each question, fill in the blanks correctly and meaningfully.* 

- **91.** Practically, very little work could be completed in the last week as it was ......
  - A. full of working days
  - B. a very hectic week
  - C. full of holidays
  - D. a very busy week
- **92.** He tames animals because he ......
  - A. is fond of them

- B. hates them
- C. is afraid of them
- D. wants to set them free

**Directions** (Q. 93): A sentence has been given in Active voice. From the given options, choose the one which best expresses the given sentence in Passive voice.

- **93.** I am solving the questions.
  - A. The questions are being solved by me.
  - B. The questions have been solved by me.
  - C. The questions are to be solved by me.
  - D. The question are solved by me.

**Directions (Q. 94):** A sentence has been given in Direct Narration followed by four options in Indirect Narration, only one is correct. Select the correct answer.

- **94.** She said, "I am an early-riser".
  - A. She regretted that she was an early-riser.
  - B. She said that she is an early-riser.
  - C. She said that she was an early-riser.
  - D. She regretted that she is an early-riser.

**Directions (Qs. 95-96):** In the following questions choose the word which best expresses the opposite of the given word.

- **95.** LEND
  - A. Borrow
- B. Cheat
- C. Pawn
- D. Hire
- **96.** ADDITION
  - A. Division
- B. Enumeration
- C. Subtraction
- D. Multiplication

**Directions (Qs. 97-98):** In the following questions some of the sentences have errors and some are correct. Find out which part of a sentence has an error, the number of that part is your answer. If a sentence is free from errors, then your answer is D i.e., No error.

- **97.** (A) Either Ram or/(B) you is responsible/(C) for this action./(D) No error.
- **98.** (A) Do you know/(B) how old were you/(C) when you came here?/(D) No error.

**Directions (Qs. 99-100):** *Find the correctly spelt words.* 

- **99.** A. Damage
- B. Dammage
- C. Damaige
- D. Dammege
- 100. A. Occurad
- B. Occurred
- C. Ocurred
- D. Occured

# **ANSWERS**

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

# SOME SELECTED EXPLANATORY ANSWERS

- **1.** The problem figure is hidden in answer figure (A).
- **2.** The problem figure is hidden in answer figure (B).
- **3.** The problem figure is hidden in answer figure (B).
- **4.** The problem figure is hidden in answer figure (B).
- **5.** The problem figure is hidden in answer figure (B)
- **6.** In every next figure the main design rotates 90° clockwise and two small lines more in the reverse direction.
- **7.** In every next figure the shaded portion of the circle moves ahead two steps clockwise.
- **8.** The first and third figures are similar. Hence, the answer figure will be similar to the second figure.
- **9.** In every next figure an arrow-head is added in the anticlockwise direction.

- **10.** In every next figure the circle and the shaded part is moving two steps clockwise.
- **11.** The answer figure (A) will be formed by the cut-pieces of the problem figure.
- **12.** The answer figure (B) will be formed by the cut-pieces of the problem figure.
- **13.** The answer figure (C) will be formed by the cut-pieces of the problem figure.
- **14.** The answer figure (D) will be formed by the cut-pieces of the problem figure.
- **15.** The answer figure (B) will be formed by the cut-pieces of the problem figure.
- **16.** From first to second figure the design moves 45° in clockwise. Moving the third figure by 45° clockwise will get the answer figure (C).
- **17.** From first to second figure the number of both designs are increased by one.
- **18.** From first to second figure, the design rotates 180°, or inverts.
- **19.** From first to second figure design **□** comes in place of design **○**.

- 20. The first figure is mirror-image of second figure.
- 21. Answer figure (B) is the mirror-image of the problem figure.
- 22. Answer figure (B) is the mirror-image of the problem figure.
- 23. Answer figure (D) is the mirror-image of the problem figure.
- 24. Answer figure (B) is the mirror-image of the problem figure.
- 25. Answer figure (A) is the mirror-image of the problem figure.
- **26.** In figure (B) position of the curve is different. In figure (B) it corresponds to the bigger circle while in other figures it corresponds to small circles.
- **27.** In figure (D) the two lines are parallel while in other figures the two lines are either meeting or intersecting each other.
- **28.** Figure (A) is different from the other figures. Other three figure are similar.
- **29.** Figure (D) is formed only from straight lines. Other figures are formed from both curves and straight lines.
- **30.** Except figure (B) all other are closed figures.
- **31.** By joining answer figure (B) with the problem figure, triangle will be formed.
- **32.** By joining answer figure (C) with the problem figure, square will be formed.
- **33.** By joining answer figure (B) with the problem figure, square will be formed.
- **34.** By joining answer figure (B) with the problem figure, square will be formed.
- **35.** By joining answer figure (C) with the problem figure, square will be formed.
- **36.** Answer figure (B) is similar to the problem figure.
- **37.** Answer figure (D) is similar to the problem figure.
- **38.** Answer figure (C) is similar to the problem figure.
- **39.** Answer figure (A) is similar to the problem
- **40.** Answer figure (C) is similar to the problem figure.

- 41. On unfolding the paper it will appear like figure (B).
- 42. On unfolding the paper it will appear like figure (A).
- 43. On unfolding the paper it will appear like figure (D).
- 44. On unfolding the paper it will appear like figure (D).
- 45. On unfolding the paper it will appear like figure (C).
- **46.** Answer figure (C) will complete the pattern of the problem figure.
- **47.** Answer figure (C) will complete the pattern of the problem figure.
- **48.** Answer figure (D) will complete the pattern of the problem figure.
- **49.** Answer figure (D) will complete the pattern of the problem figure.
- **50.** Answer figure (C) will complete the pattern of the problem figure.

**51.** 
$$\frac{(35.624 - 26.510)}{14} = \frac{9.114}{14} = 0.651$$

- **52.** Sum of first-ten odd numbers = 1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 + 17 + 19 $= \frac{10}{2} [2 \times 1 + (10 - 1)2] \qquad \left[ \because S_n = \frac{n}{2} [2a + (n - 1)d] \right]$  $=\frac{10}{2}[2+18] = \frac{10}{2} \times 20 = 100.$
- **53.** 4, 7, 11, 18, 29, |47| because, 29 - 18 = 1118 - 11 = 711 - 7 = 447 - 29 = 18Hence, next number is 47.
- **54.** Prime numbers are 17, 13, 41, 2 and 31 :. Sum of prime numbers = 2 + 13 + 17 + 31 + 41 = 104.
- **55.** 7 + .4 + .09 + .008 = 7.498
- **56.** Area of rectangular field =  $l \times b$  $64 \times 36 = 2304 \text{ m}^2$

According to the question,

Area of rectangular field = area of square field  $\therefore$  Area of square = 2304 m<sup>2</sup>

Side of square =  $\sqrt{2304}$  = 48 m.