
DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO

MAT : 2012/STS(X)/Mizoram

ROLL NO.

BOOKLET NUMBER

DIRECTORATE FOR STATE COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING
STATE TALENT SEARCH EXAMINATION

2012

MENTAL ABILITY TEST

Time allowed : One and Half Hours (90 minutes)

Maximum Marks : 90

INSTRUCTIONS TO CANDIDATES

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. WRITE YOUR ROLL NUMBER IN THE BOX PROVIDED IN THE ANSWER SHEET.
3. Answers are to be given on a **separate answer sheet**. You have to mark all your responses **ONLY** on the separate Answer Sheet provided. See direction in the Answer Sheet.
4. This Test Booklet contains 90 items(questions). Each item is printed in English. Each item comprises FIVE responses(answer). You will select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
5. **All questions are compulsory**. Every correct answer will be awarded one mark.
6. **ROUGH WORK CAN BE DONE ANYWHERE IN THE TEST BOOKLET BUT NOT ON THE ANSWER SHEET/LOOSE PAPER.**
7. After you have completed filling in all your responses on the Answer Sheet and the examination has concluded, you should hand over to the invigilator **only the Answer Sheet**. You are permitted to take away with you the Test Booklet and rough sheets issued to you.

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Direction:(1-5) In each of the following questions, the numbers are arranged in a particular order or pattern. Choose the missing number from the given alternatives.

1. 5, 9, 16, 29, 54, 103, ?
a) 94 b) 102 c) 103
d) 200 e) 202
2. 4, 5, 7, 10, 11, 13, 16, ?
a) 48 b) 38 c) 20
d) 19 e) 18
3. 2, 5, 10, 17, ?, 37, 50
a) 21 b) 23 c) 26
d) 37 e) 50
4. 3, 9, 17, 27, ? ?
a) 33 b) 37 c) 39
d) 40 e) 41
5. 47, 53, 59, ? , 67, 71
a) 61 b) 63 c) 64
d) 65 e) 66

Direction (6-7) : Find out the wrong number in the series:

6. 2, 3, 4, 4, 6, 8, 9, 12, 16
a) 3 b) 4 c) 6
d) 8 e) 9
7. 4, 8, 16, 30, 88, 164
a) 4 b) 8 c) 16
d) 30 e) 88

Direction (8-12) : Read each question carefully and identify the relationship between the first two words/ numbers, use that relationship to find out the word/ number or pair of words/numbers which when substituted for the question mark maintains the same relationship.

8. SAVE : RESCUE :: SELDOM : ?
a) Frequently b) Rare c) Usually
d) Mostly e) Often
9. MUCH : MORE :: ? : ?
a) Good : Best b) Few : Least c) Ugly : Scary
d) Bad : Worse e) Sweet : Caramel

10. 12 : 35 :: 16 : ?
a) 40 b) 52 c) 53
d) 62 e) 63
11. NATION : FLAG :: ? : ?
a) School : Uniform b) Emblem : Sign
c) House : Child d) Company : Biscuits
e) Organisation : Location
12. HATE : HATRED :: ? : ?
a) Love : Lovable b) Catch : Caught
c) Deep : Depth d) Fault : Fault line
e) Great : Greater

Direction (13-17) : In each of the following questions, five choices have been given out of which four are alike in some manner, while one is different. Choose the one which is different from the rest.

13. a) APPLE b) KITES c) ROGUE
d) POWER e) PALLET
14. a) c d f f g b) a b d d e c) l m o o p
d) o p r r s e) g r t u u
15. a) 459 b) 189 c) 642
d) 357 e) 678
16. a) (131 + 121), (131 - 121)
b) (134 + 235), (431 - 532)
c) (512 + 111), (205 - 111)
d) (602 + 923), (206 - 329)
e) (807 + 509), (708 - 905)
17. a) Kite b) Vulture c) Hawk
d) Bat e) Duck

Direction (18-21) : In the following questions, select the set of conclusion which logically follows from the given statements.

18. **Statements**
I : Some cubes are squares.
II: All squares are circles.
- Conclusions:**
I. All cubes are circles.
II. Some circles are cubes.
III. Some circles are squares.
IV. All squares are cubes.

- a) Only conclusion I follows
- b) Only conclusions I, II and III follow.
- c) All conclusions follow.
- d) Only conclusions II and III follow.
- e) No conclusion follows.

19. **Statements**

I : All doors are cots.

II: Some cots are erasers.

Conclusions:

I. Some doors are erasers.

II. All cots are doors.

III. Some cots are doors.

IV. Some erasers are doors.

- a) Only conclusions III and IV follow.
- b) Only conclusions I and II follow.
- c) Only conclusion III follows.
- d) Only conclusion IV follows
- e) All conclusions follow.

20. **Statements**

I : All parrots are koels.

II: No koel is goat.

Conclusions:

I. No parrot is goat.

II. Some parrots are goats.

III. All koels are parrots.

IV. Some goats are parrots.

- a) Only conclusion I follows.
- b) Only conclusion III follows.
- c) Only conclusion II and III follow.
- d) Only conclusion IV follows.
- e) No conclusion follows.

21. **Statements**

I : Some pencils are papers.

II: Some papers are boxes.

Conclusions:

I. Some pencils are boxes.

II. Some boxes are pencils.

III. Some boxes are papers.

IV. Some papers are pencils.

- a) Only conclusions I and II follow.
- b) Only conclusions II and III follow.
- c) Only conclusions III and IV follow.
- d) All conclusions follow.
- e) No conclusion follows.

22. Manuni went to the movies nine days ago. She goes to the movies only on Thursday. What day of the week is today ?

- a) Sunday
- b) Tuesday
- c) Thursday
- d) Friday
- e) Saturday

23. If the fifth day of a month is Friday, which of the following will be the seventh day from 10th of that month?

- a) Wednesday
- b) Thursday
- c) Friday
- d) Saturday
- e) Sunday

24. If 21st November falls five days before Wednesday, then what will be the day on 25th December ?

- a) Monday
- b) Tuesday
- c) Wednesday
- d) Thursday
- e) Friday

25. A clock is so placed that at 12 noon, its minute hand points towards north-east. In which direction does its hour hand point at 1:30 p.m. ?

- a) East
- b) West
- c) North
- d) South
- e) South-East

26. If in a clock, the numbers 1 to 12 are replaced with alphabet starting from F, then, which of the following options shall indicate the time as 9 o'clock ?

- a) M - P
- b) P - M
- c) N - P
- d) Q - N
- e) N - Q

27. Introducing a man, a woman said, "His mother is the only daughter of my father." How is the man related to the woman ?

- a) Father
- b) Uncle
- c) Husband
- d) Brother
- e) Son

28. A couple has five married sons and each one of them have four children. How many members are there in the family ?

- a) 10
- b) 27
- c) 30
- d) 32
- e) 41

29. In a family of six persons, A is the grandfather of F. D and E are children of B and C. C and D are females. How is B related to C ?

- a) Father
- b) Mother
- c) Husband
- d) Wife
- e) Son

Direction (30-32) : *The following questions are based on the following statements:*

- i) In a family of six persons A, B, C, D, E and F, there are two married couples.
- ii) A is son of B.
- iii) D is grandmother of A and mother of B.
- iv) F is granddaughter of E.

30. How many male members are there in the family?

- a) 1 b) 2 c) 3
- d) 4 e) 5

31. What is C to A?

- a) Brother b) Sister c) Father
- d) Mother e) Grandmother

32. Which of the following is true?

- a) F is sister of A b) A is sister of F
- c) C is father of A d) B is mother of F
- e) F is brother of B.

33. O, P, Q, R, S and T are standing on a bench according to their height. P is taller than O but shorter than S. Only S is taller than T. R is shorter than P but taller than Q. Who is the tallest?

- a) O b) P c) Q
- d) R e) S

34. A lady runs 12 km towards north, then 6 km towards south and then 8 km East. How far is she from her starting point and in which direction?

- a) 5 km N-E b) 5 km E c) 5 km N
- d) 10 km N-E e) 10 km E

35. A man is walking towards east. What direction should he not follow if he should walk towards north?

- a) right, right, left, right, right
- b) right, right, left, left, left
- c) right, right, right
- d) right, left, right, left
- e) none of the above

36. Sarah's house faces South. From there, she runs ahead 10 m, turns left and runs 5 km. Then she turns left again and runs 15 m and then again turns left and runs 10 m. Finally, she turns right and runs 5 m to reach her friend's house. What direction is Sarah's friend's house facing?

- a) North b) South c) West
- d) East e) South-West

37. Two friends Jack and Bunny start a race, and together they run for 50 m. Jack turns right and runs 60 m while Bunny turns left and runs 40 m. Then Jack turns left and runs 50 m while Bunny turns right and runs 50 m. How far are the two friends from each other?

- a) 100m b) 60m c) 50m
- d) 35m e) 20 m

38. In a certain code language, HJIZT code is deciphered as MONEY, in the same way NOVGZ will be deciphered as :

- a) STUMP b) STALE c) STICK
- d) SPIRE e) STARE

39. PLANNING is coded in a certain language as UFFHSCSA. How will AUTHORITY be coded in the same language?

- a) FOYBTLNND b) FYOTBNNLT
- c) FBOYTLNTN d) FBOYTNLTN
- e) FYOBTNNTL

Direction (40-43) : *Read the following coding scheme and then answer the questions. The word TEMPLE has been coded in five different ways:*

- a) VGORNG b) ELPMET c) WDPOOD
- d) ELPMET e) TIMTLI

Which coding scheme has been followed in question 40-43 ?

WORD	CODE
40. NOBLE	NSBPE
41. GRAND	ITCPF
42. JETLAG	MDWKDF
43. DETERMINE	ENIMRETED

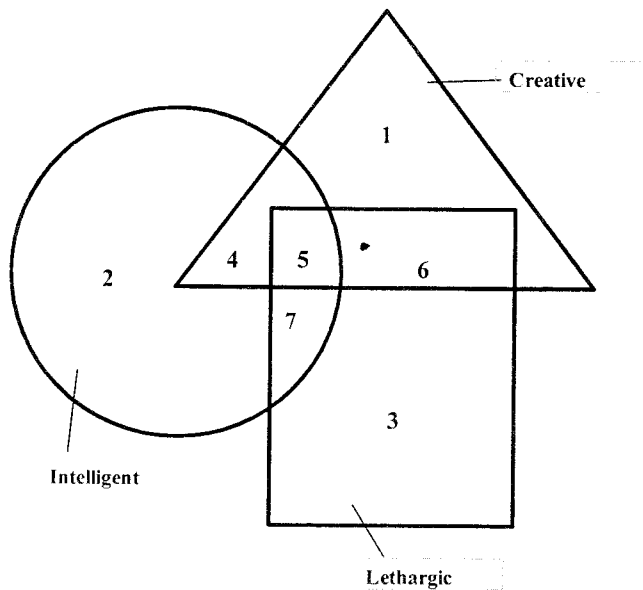
44. In a certain code language, 'pit dar na' means 'you are good'; 'dar tok pa' means 'good and bad'; 'tim na tok' means 'they are bad'. In that language, which word stands for 'they'?

- a) na b) tok c) tim
- d) pit e) dar

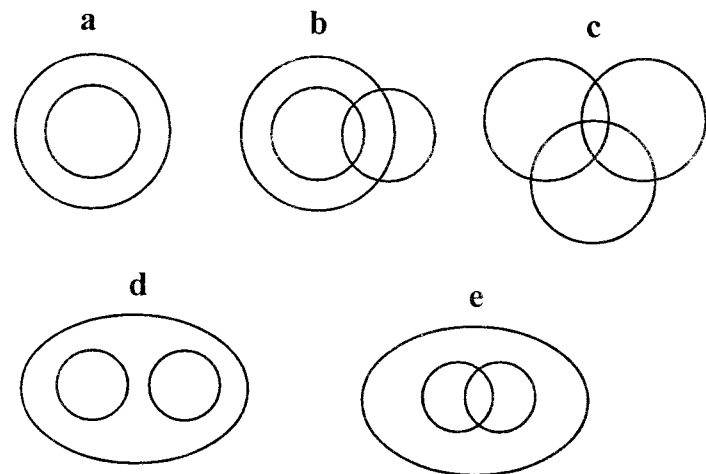
45. If red is called 'air', air is called 'black', black is called 'sky', sky is called 'blue', blue is called 'wind' and wind is called 'white', where do birds fly?

- a) air b) sky c) wind
- d) blue e) black

Direction (46-49) : Refer to the given diagram and answer the questions given below:



46. Which number represents those persons who are creative and lethargic ?
 a) 1 b) 3 c) 4
 d) 5 e) 6
47. Which number represents those persons who are intelligent and lethargic ?
 a) 7 b) 6 c) 5
 d) 4 e) 3
48. Which number represents those persons who are intelligent, lethargic as well as creative?
 a) 2 b) 4 c) 5
 d) 6 e) 7
49. Which number represents those who are intelligent but neither lethargic nor creative ?
 a) 1 b) 2 c) 4
 d) 5 e) 6



50. Birds, Fruits, Mangoes.
 51. Swimmers, Bachelors, Men.
 52. Smart, Engineers, Women.
 53. Doctors, Architect, Humans.
 54. Scholars, People, Indians.

Direction (55-56) : The numbers inside the figure given below follow some rules. Identify the number which when substituted for the question mark (?) maintains that rule.

55.

1	2	3
4	5	6
4	?	18

a) 7 b) 8 c) 9
 d) 10 e) 14

56.

13	16	17
23	16	37
59	?	91

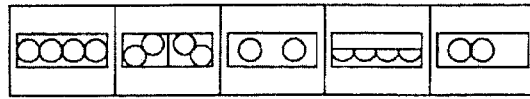
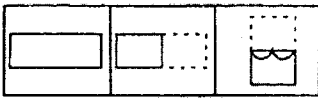
a) 32 b) 40 c) 48
 d) 50 e) 61

Direction (50-54) : From the five logical diagrams given below, select the one which best illustrates the relationship among the three given classes in the following questions.

Direction (57 - 61) : In each of the following questions, a paper is folded and cut with scissor as shown in the problem figures given below. You have to select from the answer figures a, b, c, d and e, a figure which will appear on the unfolded paper shown in the third problem figure.

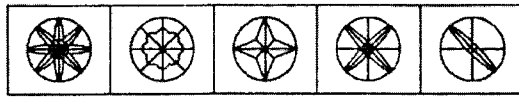
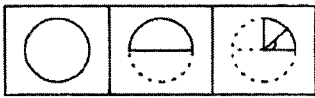
57. Problem Figures

Answer Figures



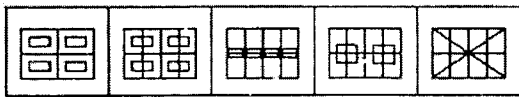
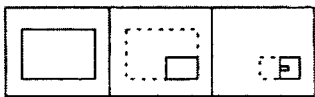
a b c d e

58.



a b c d e

59.



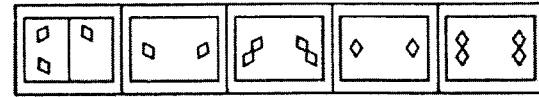
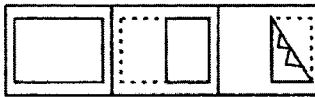
a b c d e

60.



a b c d e

61.

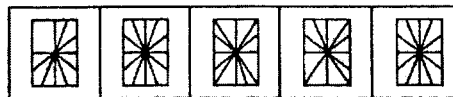
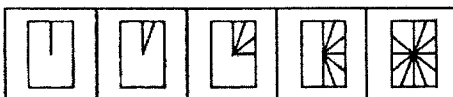


a b c d e

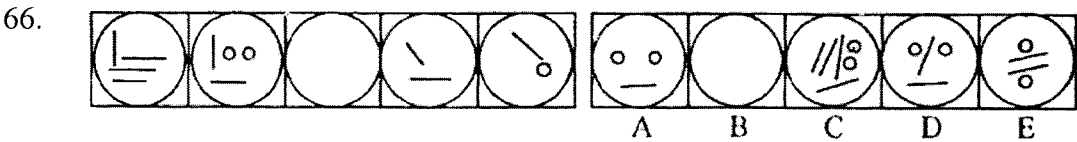
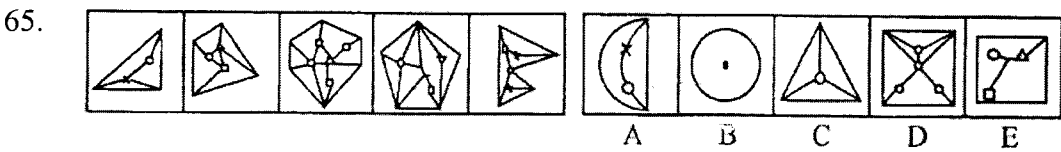
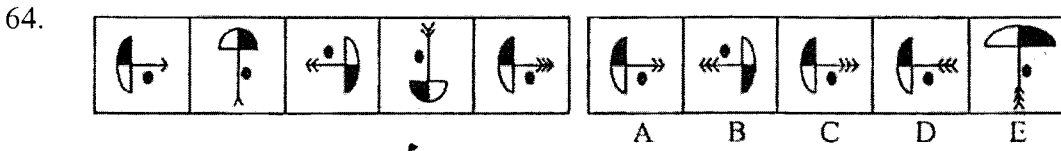
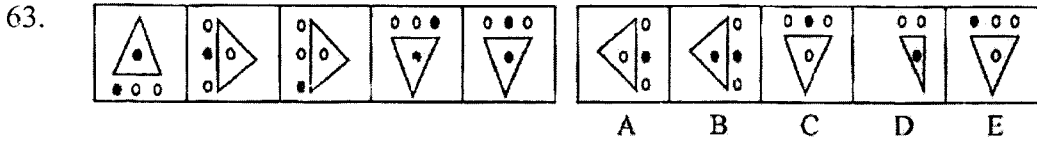
Direction (62 - 66) : In each of the following questions, there are two sets of figures - problem figures and answer figures. Problem figures form some kind of series. You have to select one figure from the answer figures which will continue that series.

62. Problem Figures

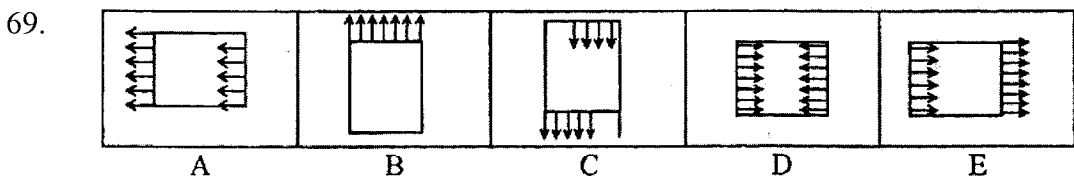
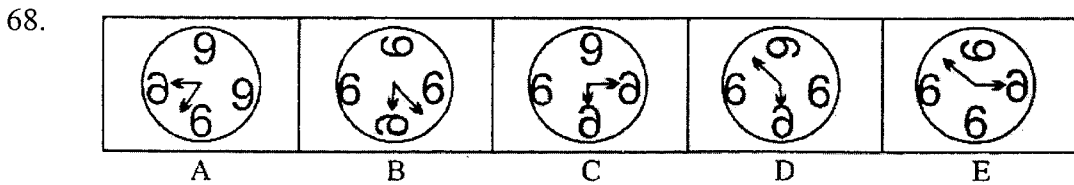
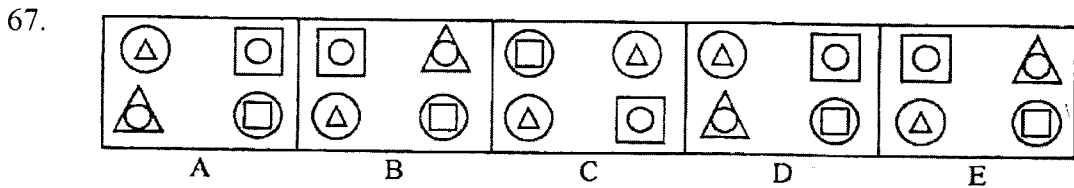
Answer Figures

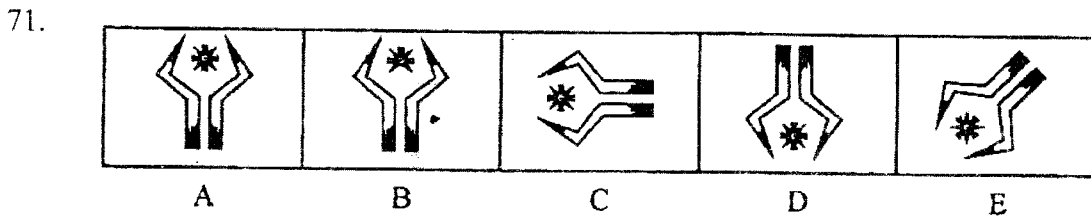
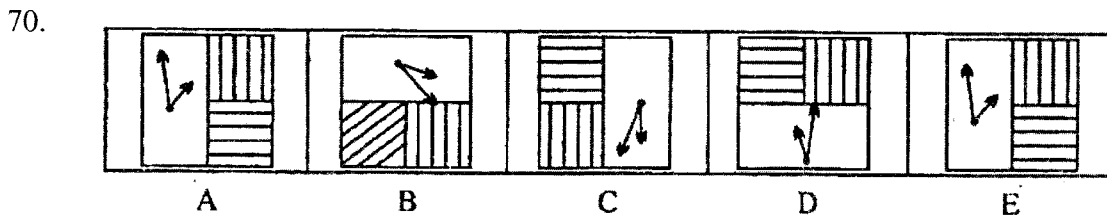


A B C D E



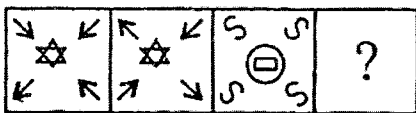
Direction (67 - 71) : In each of the following questions, out of the five figures A, B, C, D and E, four are similar in a certain way. One figure is not like the other four. Choose the figure which is different from the rest.



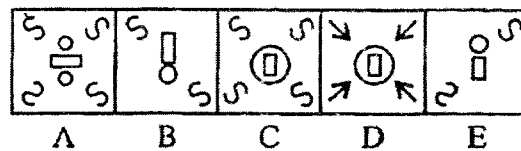


Direction (72 - 76) : In each of the following questions, there are two sets of figures - problem figures and answer figures. In the problem figures, there is a definite relationship between the first two figures. Establish a similar relationship between the third and fourth figures by choosing a suitable figure from the set of answer figures.

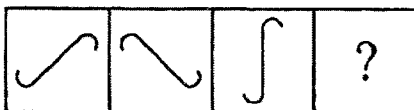
72. Problem Figures



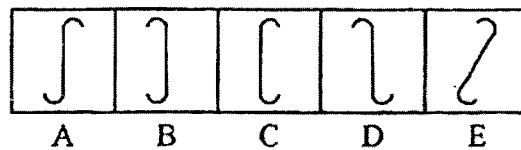
Answer Figures



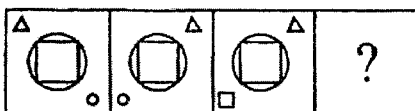
73. Problem Figures



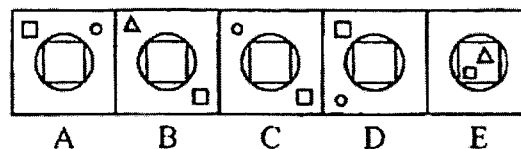
Answer Figures



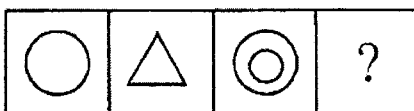
74. Problem Figures



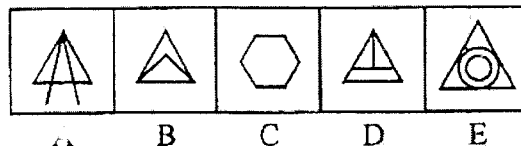
Answer Figures



75. Problem Figures



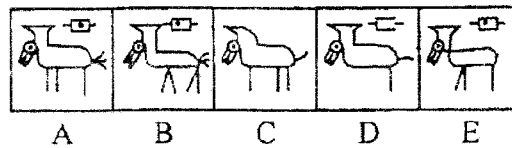
Answer Figures



76. Problem Figures



Answer Figures



77. If A stand for '-', B stands for '×', C stands for '÷', then what is the value of 21 D 3A 1B 8C 5 ?

- a) 46 b) 42 c) 36
d) 32 e) 26

78. If + means ÷, - means ×, × means + and ÷ means -, then the value of 6 + 2 ÷ 3 × 4 - 3 is ?

- a) 6 b) 8 c) 10
d) 12 e) 14

79. If 30 - 20 = 40 and 20 - 15 = 20, then 50 - 30 = ?

- a) 60 b) 70 c) 80
d) 90 e) 100

80. If 3 = 0, 4 = 4, 5 = 10, then, 7 = ?

- a) 14 b) 18 c) 21
d) 24 e) 28

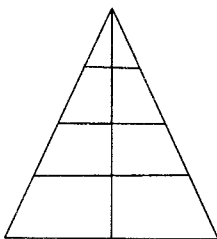
81. If H = 8 and P = 11, what is the value of ARM ?

- a) 23 b) 32 c) 35
d) 49 e) 58

82. If HE = 18 and MEN = 32, what will MENTAL equals ?

- a) 97 b) 91 c) 87
d) 72 e) 69

83. Find the number of triangles in the figure below:



- a) 10 b) 12 c) 13
d) 14 e) 15

Direction (84 - 87) : Select the alternative whose alphabets when placed at the missing places, complete the series.

84. b _ a _ bab _ ab _ a

- a) abab b) abbb c) baba
d) bbab e) aaab

85. a _ aa _ a _ baa _ aaba

- a) bbba b) bbab c) bbaa
d) baab e) baba

86. kal _ _ lal _ aka _ lala _ la

- a) lalal b) alall c) lalll
d) allal e) laali

87. _ a _ _ aa _ aab _ a

- a) abaab b) ababb c) aabab
d) babba e) abbaa

88. You are ninth in the queue from either end. How many people are there in the queue ?

- a) 16 b) 17 c) 18
d) 19 e) 20

89. Arrange the following in a systematic order :

1. Fruits 2. Roots 3. Trunks
4. Leaves 5. Flowers 6. Branches
a) 2,3,6,4,5,1 b) 3,2,5,1,6,4 c) 1,3,6,4,2,5
d) 2,3,6,1,4,5 e) 2,6,3,5,1,4

90. If the words INTIMATION, INFORMATION, INTEREST, INTERROGATION and INSTIGATION are arranged according to the dictionary, what will be the fourth letter of the last word ?

- a) O b) A c) R
d) T e) I

Space for Rough Work