

Question Booklet SL. No.

ପୃଷ୍ଠା ସଂଖ୍ୟା: 28
(ଉତ୍ତର କାର୍ଯ୍ୟ ପାଇଁ ଦୁଇ ପୃଷ୍ଠା ସହିତ)

No. of pages : 28
(including two pages for
rough work)

ସମୟ : 90 ମିନିଟ୍

Time : 90 Minutes

SMS - 2012-13

PAPER - I

ପ୍ରଶ୍ନ ସଂଖ୍ୟା : 90

No. of items : 90

ପୂର୍ଣ୍ଣ ସଂଖ୍ୟା : 90

Full Mark : 90

12 Digit Roll Number :

Exam. Code	State Code	Year	District Code	Center Code	Serial No.
2	2 2	1 3			

INSTRUCTIONS TO CANDIDATES

Read the following instructions carefully before you answer the questions.

After going through them, if you wish to know anything get them clarified from the invigilator before the starting bell rings. Remember, you are not allowed to talk or ask anything once the starting bell rings.

Each question carries ONE mark. Answer all the questions.

ପରୀକ୍ଷାର୍ଥୀଙ୍କ ପାଇଁ ନିର୍ଦ୍ଦେଶାବଳୀ

ପ୍ରଶ୍ନ ସ୍ମୃତିକର ଉତ୍ତର ଦେବା ପୂର୍ବରୁ ନିର୍ଦ୍ଦେଶଗୁଡ଼ିକୁ ମନ ଦେଇ ପଢ଼ । ଏସ୍ମୃତିକୁ ପଢ଼ିସାରି ଯଦି କିଛି
ଦୁର୍ଘଟଣା ଘଟେ, ପରୀକ୍ଷା ଆରମ୍ଭ ହେବା ପୂର୍ବରୁ ନୀରାକ୍ଷରକାଠାକୁ ଦୁର୍ଘଟଣା
ମନେରଖ, ପରୀକ୍ଷା ଘଣ୍ଟି ବାଜିଯାଉଥିବା ପରେ କଥାବାର୍ତ୍ତା କିଛି ପଚରା ଉଚରା କରିବା ପୂରାପୂରି ନିଷେଧ ।
ପ୍ରତ୍ୟେକ ପ୍ରଶ୍ନର ମୂଲ୍ୟ ଏକ ନମ୍ବର । ସମସ୍ତ ପ୍ରଶ୍ନର ଉତ୍ତର ଦିଅ ।


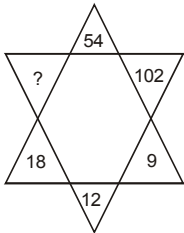
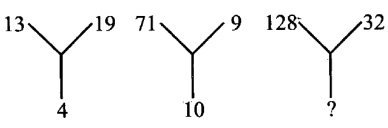
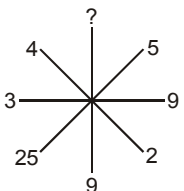

- Immediately after getting the booklet, write down your 12 digit Roll No in the box given above as per your Admission Card.
- Start answering when you are told to do so. Do not turn the pages before that.
- Do not write anything in this Booklet except the 12 digit Roll No. However you can use the blank pages provided for the rough work at the end of this booklet.
- A separate OMR Answer Sheet is supplied for writing the answers. Write down your application from no. & 12 digit roll number on it.
- ଏହି ପୂର୍ଣ୍ଣକାଗି ପାଇବା ମାତ୍ରେ ଉପରେ ଦିଆଯାଇଥିବା କୋଠାରେ ତୁମର ଆବେଦନ କାର୍ଡରେ ଲେଖାଥିବା 12 ଅଙ୍କ ବିଶିଷ୍ଟ ରୋଲ ନମ୍ବର ଲେଖ ।
- ଯେତେବେଳେ କୁହାଯିବ, ଉତ୍ତର ଦେବାକୁ ଆରମ୍ଭ କର । ତା' ପୂର୍ବରୁ ପୃଷ୍ଠାଗୁଡ଼ିକୁ ଓଲଟାଅ ନାହିଁ ।
- ତୁମର 12 ଅଙ୍କ ବିଶିଷ୍ଟ ରୋଲ ନମ୍ବର ବ୍ୟତୀତ ଅନ୍ୟ କିଛି ଏହି ପୂର୍ଣ୍ଣକାଗରେ ଲେଖ ନାହିଁ । କିନ୍ତୁ ଏହି ପୂର୍ଣ୍ଣକାଗରେ ଶେଷରେ ଉତ୍ତର କାମ ପାଇଁ ଲେଖାଥିବା କାଗଜରେ ଉତ୍ତର କାମ କରିପାରିବ ।
- ଉତ୍ତର ଲେଖିବା ପାଇଁ ଖଣ୍ଡିତ ଅଲଗା OMR ଉତ୍ତର କାଗଜ ଦିଆଯାଇଛି । ସେଥିରେ ତୁମର ଦରଖାଷ୍ଟ ପର୍ଯ୍ୟନ୍ତ ନଂ ଏବଂ 12 ଅଙ୍କ ବିଶିଷ୍ଟ ରୋଲ ନମ୍ବର ଲେଖ ।

SMS – 2012-13

Answer questions (1-5) based on number series:

1. 7, 176, 297, 378, _____
 (A) 387 (B) 403 (C) 427 (D) 459
2. 3, 10, 101, _____
 (A) 1011 (B) 10101 (C) 10201 (D) 10202
3. 5760, 960, _____, 48, 16, 8
 (A) 120 (B) 160 (C) 192 (D) 240
4. 625, 5, 125, 25, 25, _____, 5
 (A) 625 (B) 125 (C) 25 (D) 5
5. $20, 16\frac{2}{3}, 14\frac{2}{7}, 12\frac{1}{2}, \text{_____}$
 (A) $11\frac{1}{9}$ (B) $11\frac{2}{7}$ (C) $11\frac{2}{3}$ (D) $10\frac{2}{3}$

In each of the questions (6-10), find the missing number from the given alternatives:

6. 
 (A) 9 (B) 25 (C) 49 (D) 64
7. 
 (A) 24 (B) 30 (C) 40 (D) 48
8. 
 (A) 10 (B) 15 (C) 20 (D) 25
9. 
 (A) 81 (B) 64 (C) 32 (D) 20
10. 
 (A) 29 (B) 49 (C) 69 (D) 89

In each of the questions (11-14), there is some relationship between the two terms on the left side of the sign (::). The same relationship exists between the two terms on the right side of the sign (::) of which one is missing. Find the missing one from the given four alternatives.

11. MUMBAI:LATLAZH::DELHI: _____
 (A) CDKGI (B) IHLED (C) CDKGH (D) BCKGH
12. corden : zrogbq :: _____ : pxivro
 (A) srspql (B) munmun (C) mulmul (D) sulsul
13. RATIONAL:RATNIOLA:: _____ :TRILBA
 (A) TIRLAB (B) TRIBAL (C) TRIALB (D) TIRBAL
14. HI : 36 :: DE : _____
 (A) 10 (B) 15 (C) 20 (D) 25

In each of the questions (15-18), choose that set of numbers from the four alternative sets, which is similar to the given set.

15. Given set (17, 15, 8)
 (A) (15, 12, 10) (B) (13, 12, 5) (C) (10, 8, 7) (D) (7, 5, 3)
16. Given set (8, 3, 2)
 (A) (10, 6, 5) (B) (95, 24, 5) (C) (63, 8, 3) (D) (168, 15, 4)
17. Given set (9, 15, 21)
 (A) (7, 21, 8) (B) (5, 10, 25) (C) (10, 14, 16) (D) (4, 8, 12)
18. Given set (223, 324, 425)
 (A) (554, 655, 756) (B) (225, 326, 437) (C) (451, 552, 636) (D) (623, 723, 823)

In each of the questions (19-22) four words have been given out of which three are alike in some manner while one is different. Find out the odd one.

19. (A) Parrot (B) Crow (C) Bat (D) Pegin
20. (A) Mathematics (B) Geometry (C) Algebra (D) Trigonometry
21. (A) May (B) June (C) July (D) August
22. (A) Cabbage (B) Brinjal (C) Cucumber (D) Papaya

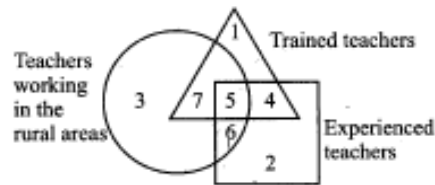
In each of the questions (23-26), choose the number pair which is different from others.

23. (A) 20, 10 (B) 30, 18 (C) 45, 27 (D) 60, 30
24. (A) 7, 26 (B) 8, 30 (C) 10, 35 (D) 15, 30
25. (A) $1/2, 1/8$ (B) $1/3, 1/12$ (C) 9, 3 (D) 24, 6
26. (A) 3, 5 (B) 7, 9 (C) 11, 13 (D) 17, 19

In each of the questions (27-30) choose the group of letters which is different from others.

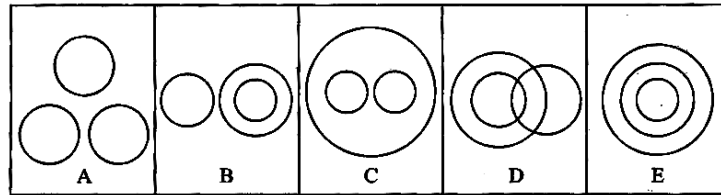
27. (A) AI (B) IU (C) EO (D) OU
28. (A) PUT (B) OWL (C) END (D) ARM
29. (A) EBA (B) XUT (C) TQP (D) GFE
30. (A) NPM (B) IJL (C) QSZ (D) XGT

Study the following diagram and answer questions (31-35).



31. How many experience and trained teachers, who work in the rural areas, are there?
 (A) 5 (B) 4 (C) 6 (D) 2
32. How many experienced and trained teachers work in urban areas?
 (A) 3 (B) 4 (C) 5 (D) 6
33. How many teachers, who are experienced but not trained, work in the rural areas?
 (A) 2 (B) 4 (C) 5 (D) 6
34. How many teachers are there who work in the rural areas but are neither experienced nor trained?
 (A) 1 (B) 2 (C) 3 (D) 4
35. How many trained but inexperienced teachers are there who work out of the rural areas?
 (A) 6 (B) 5 (C) 3 (D) 1

Questions (36-40) are based on the patterns of three circles as shown in the following diagrams. Each question has an item group having relationship with a particular pattern of circles. Find out which item group is related to which pattern of circles.



36. Mammals, Cows, Crows
 (A) E (B) B (C) C (D) D
37. Women, Mothers, Engineers
 (A) E (B) C (C) D (D) A
38. Family, Sons, Daughters
 (A) E (B) B (C) C (D) A
39. Colour, Cloth, Merchant
 (A) A (B) B (C) C (D) D
40. Konark, Manasarovar, India
 (A) E (B) D (C) C (D) B
41. If A = 26, SUN = 27, then CAT = _____
 (A) 27 (B) 27 (C) 57 (D) 58
42. If REASON is coded as 5 and BELOEVED as 7, then what is the code for GOVERNMENT?
 (A) 6 (B) 8 (C) 9 (D) 10
43. If NOIDA is written as 39658, how will INDIA be written?
 (A) 36568 (B) 63568 (C) 63569 (D) 65368
44. If O = 16, FOR = 42, then what is FRONT equal to?
 (A) 61 (B) 65 (C) 73 (D) 78
45. If TERMINATION is coded as 12345671586, how will MOTION be coded?
 (A) 481586 (B) 451586 (C) 485186 (D) 438586

Read the following information and answer questions (46-50)

In a certain code language, 481 means 'sky is blue', 246 means 'sea is deep' and 698 means 'sea looks blue'.

46. What number is the code for blue?
(A) 1 (B) 6 (C) 8 (D) 9
47. What number is the code for sea?
(A) 4 (B) 6 (C) 8 (D) 9
48. What number is the code for deep?
(A) 2 (B) 4 (C) 6 (D) 8
49. What number is the code for looks?
(A) 4 (B) 6 (C) 8 (D) 9
50. What number is the code for sky?
(A) 8 (B) 6 (C) 4 (D) 1
51. If A is to the south of B and C is to the east of B, in what direction is A with respect to C?
(A) North-east (B) North-west (C) South-east (D) South-west
52. A watch reads 4.30. If the minute hand points East to what direction will the hour hand point?
(A) North (B) North-east (C) North-west (D) South-east
53. Paresh is 7 ranks ahead of Sumit in a class of 39. If Sumit's rank is seventeenth from the last, what is Paresh's rank from the start?
(A) 14 (B) 15 (C) 16 (D) 17
54. A, B, C, D, E and F are sitting in a row. E and F are at the centre. A and B are at the ends. C is sitting on the left of A. Then who is sitting on the right of B?
(A) D (B) C (C) E (D) F
55. P is 300km eastward of O and Q is 400km south of O. R is exactly in the middle of Q and P. The distance between Q and R is _____ km.
(A) 500 (B) 250 (C) $250\sqrt{2}$ (D) 300

Questions (56-60) are based on the following information:

Data on 450 candidates, who took on examination in Social Science, Mathematics and Science, are given below:

Passed in all Subjects
Failed in all Subjects
Failed in Mathematics
Failed in Science
Passed in Social Science only
Passed in Mathematics only
Passed in Science only

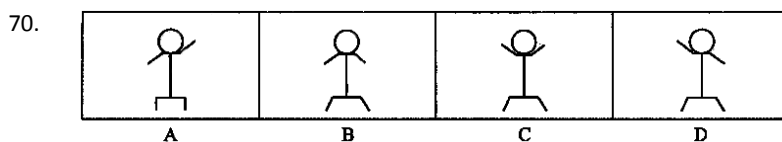
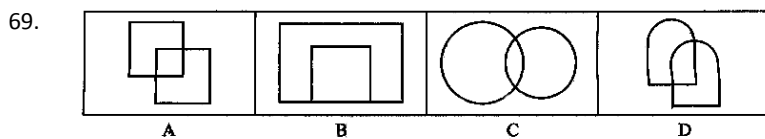
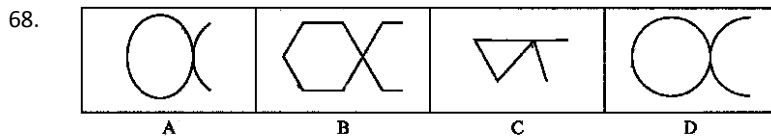
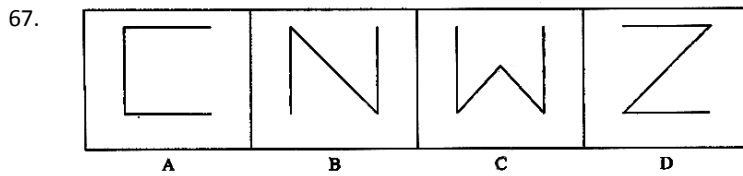
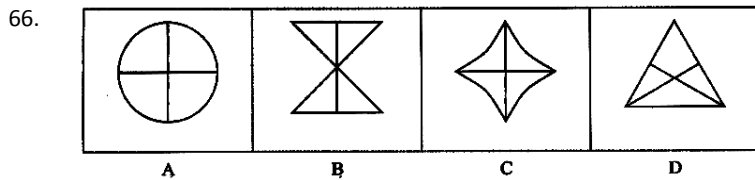
56. How many failed in Social Science only?
(A) 15 (B) 21 (C) 30 (D) 42
57. How many failed in one subject only?
(A) 152 (B) 144 (C) 61 (D) 56
58. How many passed in Mathematics and at least one more subject?
(A) 210 (B) 203 (C) 170 (D) 94
59. How many failed in two subject only?
(A) 56 (B) 61 (C) 152 (D) 162
60. How many passed at least in one subject?
(A) 450 (B) 390 (C) 304 (D) 167

Answer questions (61-65) based on the following information:

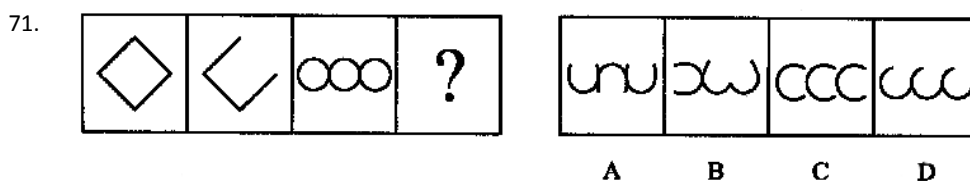
A cube painted red on two adjacent faces and black on the faces opposite to the red faces and green on the remaining faces is cut into 64 smaller cubes of equal size.

61. How many smaller cubes have not face painted?
 (A) 0 (B) 4 (C) 8 (D) 16
62. How many smaller cubes have only one face painted?
 (A) 32 (B) 24 (C) 16 (D) 8
63. How many smaller cubes have less than three faces painted?
 (A) 8 (B) 24 (C) 28 (D) 48
64. How many smaller cubes have three faces painted?
 (A) 8 (B) 16 (C) 24 (D) 28
65. How many smaller cubes have one face green and one of the adjacent faces black or red?
 (A) 8 (B) 16 (C) 24 (D) 28

In each of the questions (66-70), there are four figures. Three of them are similar in some way and one is different. Identify that odd figure.

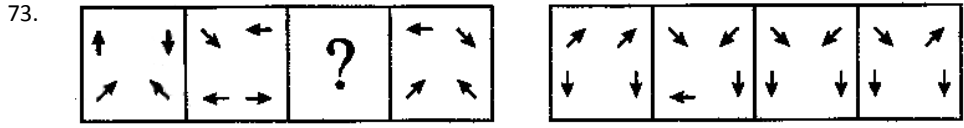


In each of the questions (71-75), which one of the four numbered figures from the right side row will replace the question mark in the left side row so as to maintain the sequence?

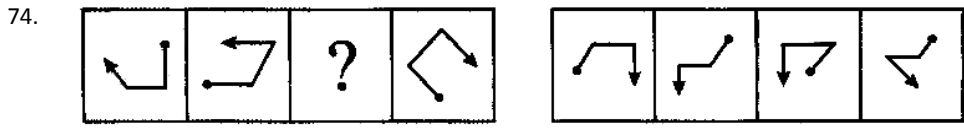




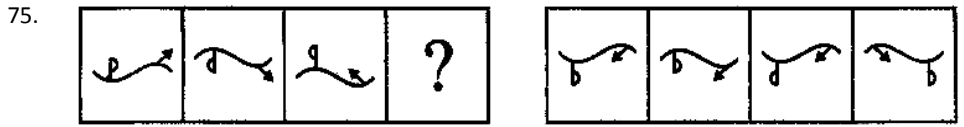
A B C D



A B C D

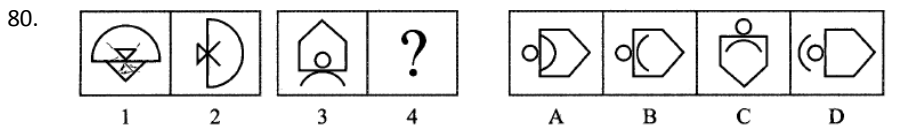
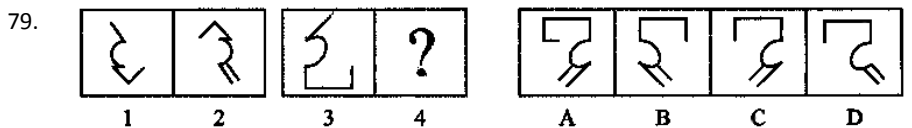
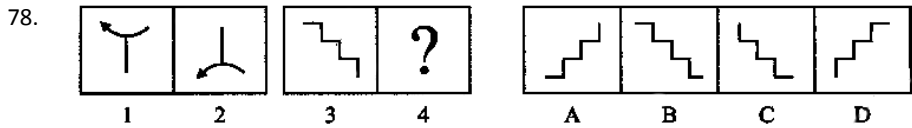
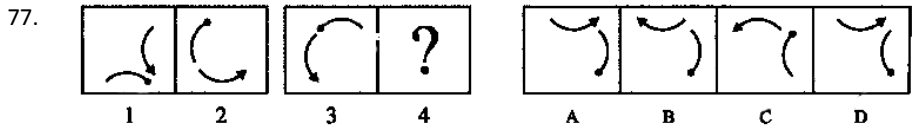
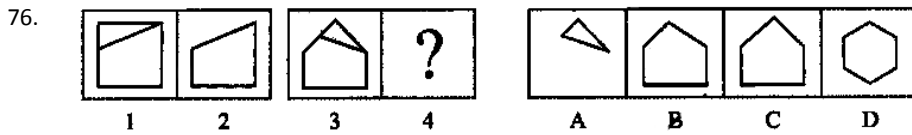


A B C D

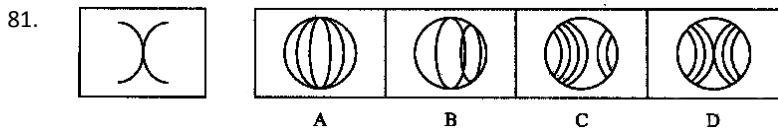


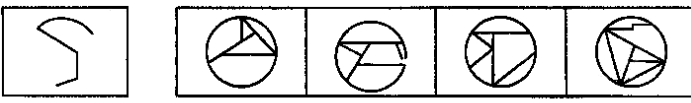
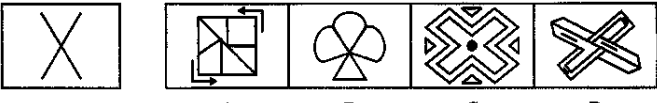
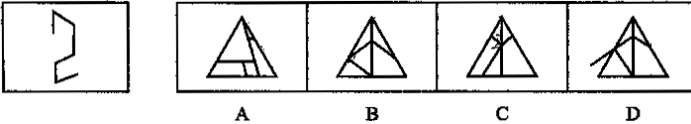
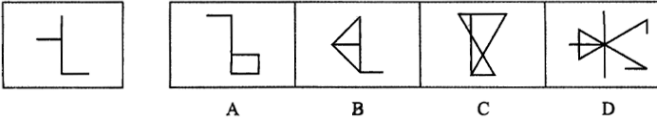
A B C D

In each of the questions (76-80) there is some relationship between figures 1 & 2. Establish a similar relationship between figures 3 & 4 by choosing a suitable figure from the answer figures.

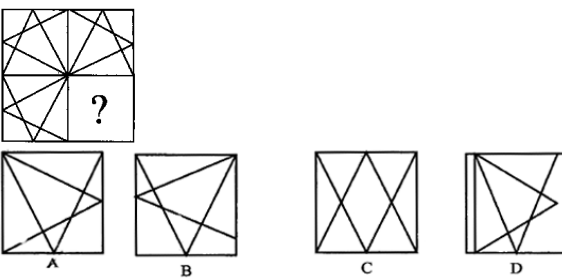


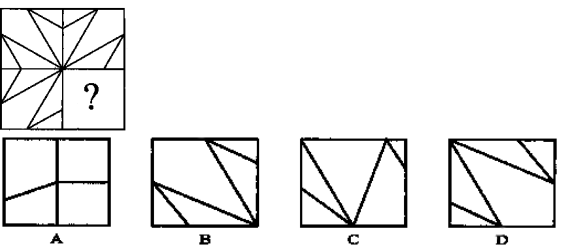
In each of the questions (81-85), a part of the figure is given. Select one from the given four figures in which that part is embedded.

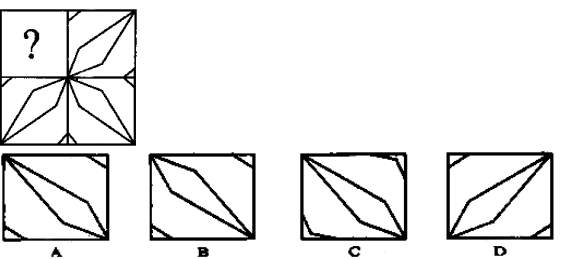


82. 
83. 
84. 
85. 

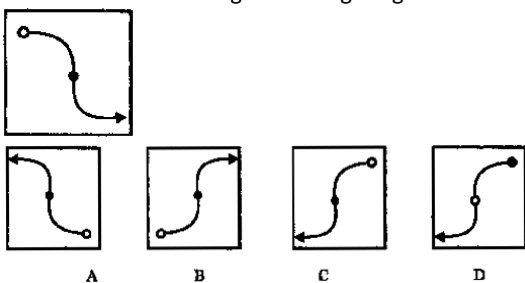
In each of the questions (86-88), there is a big figure at the top having a vacant chamber. Identify one figure from the given choices which will fit into the vacant chamber.

86. 

87. 

88. 

89. Choose the mirror image of the figure given at the top from amongst the four alternatives.



90. How many triangles are there in the following figure?

- (A) 9
- (B) 13
- (C) 16
- (D) 18

