

NATIONAL TALENT SEARCH EXAMINATION, 2014-15

राष्ट्रीय प्रज्ञा शोध परीक्षा, २०१४-१५

CENTRE CODE केंद्र संकेतांक 3 9

SEAT NO. आसन क्रमांक 2 3 9 1 5 1 2 4

STATE LEVEL EXAMINATION — QUESTION BOOKLET

राज्यस्तरीय परीक्षा—प्रश्नपुस्तिका

GENERAL MENTAL ABILITY TEST

सामान्य बौद्धिक क्षमता चाचणी

CLASS X / इयत्ता १०वी

MEDIUM :- ENGLISH/इंग्रजी

ENGLISH VERSION PAGE 2-32

इंग्रजी माध्यम पृष्ठ 2-32

DATE : 2 NOVEMBER 2014, DAY : SUNDAY

दिनांक : २ नोव्हेंबर २०१४, वार : रविवार

[Time : 10.30 A.M. to 11.15 A.M.]

[वेळ : १०.३० ते ११.१५]

Maximum Marks : 50

एकूण गुण : ५०

Time : 45 Minutes

वेळ : ४५ मिनिटे

Total Pages : 32

एकूण पाने : ३२

NTS-MS-GMAT-SL X G5 1 of 32

P.T.O.

INSTRUCTIONS TO CANDIDATES

Read the following instructions carefully before you answer the questions. Answers are to be given on the answer-sheet, which combines both the tests :

- (1) Please write your Centre Code and Seat No. very clearly (only one digit in one block). Before writing your Seat No. get it ascertained from the Centre Conductor. Please see that no block is left unfilled and even zeros appearing in the Centre Code and Seat No. are correctly transferred to the appropriate blocks on the booklet and on the answer-sheet.

Example :

CENTRE CODE	केंद्र संकेतांक	3	9				
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SEAT NO.	आसन क्रमांक	2	3	9	1	5						
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For all subsequent purposes your Centre Code and Seat No. shall remain the same. Centre once allotted will not be changed.

- (2) All questions carry **one** mark each.
- (3) Since all questions are compulsory do not try to read through the whole question paper before beginning to answer it.
- (4) Begin with the first question and keep on trying one question after another till you finish.
- (5) If you do not know the answer to any question, do not spend much time on it and pass on to the next one. Time permitting you can come back to the questions which you have left in the first instance and try them again.
- (6) Since the time allotted is very short you should make best use of it. The rough work is to be done in the box given under each page.
- (7) Remember you have to mark on your answers in "**General Mental Ability Test**" section of the answer-sheet only.
- (8) Answer to each question is to be indicated in the answer-sheet by encircling with black pen in the appropriate number of alternative in the answer-sheet from amongst the ones given for the corresponding question in the test booklet.
- (9) Do not write anything except Centre Code, Seat No. and rough work anywhere in this booklet.
- (10) Now turn to the next page and start answering the questions.

GENERAL MENTAL ABILITY TEST

Q. 1 to 4. → *Directions* :— In each of the following questions there is a specific relationship between the first and second term. The same relationship exists between the third and fourth term which will replace the question mark (?). Select the correct term from the alternatives given :

1. ¹⁵ 23 : 8 :: 25 : ? ^{+15 =}
- (1) 32 (2) 9
(3) 64 (4) 22
2. 531 : 99 :: ? : ?
- (1) 451 : 55 (2) 321 : 44
(3) 642 : 66 (4) 212 : 11

SPACE FOR ROUGH WORK

$$\frac{23}{8} = \frac{25}{x} = x = \frac{25 \times 8}{23}$$
$$\frac{531}{99} =$$

3. BYCW : LOKQ :: ? : JQIS

(1) FUEW

(2) DWFU

✓(3) DWEU

(4) DVFU

4. ACG : ZXT :: HJN : ?

(1) SQM ✓

(2) TRN ✗

✓(3) SQN ✓

(4) SOM ✗

M N O P Q R S T U V W X Y Z

13

SPACE FOR ROUGH WORK

Q. 5 to 8. → **Directions :-** Write which number or alphabet in

sequence replaces the question mark (?).

5. $7, 15, 32, 67, 138, ?$
 $\times 2 + 1 \quad \times 2 + 2 \quad \times 2 + 3 \quad \times 2 + 4 \quad \times 2 + 5$

- (1) 193
- (2) 209
- (3) 278

$$\begin{array}{r} 138 \\ \times 2 \\ \hline 276 + 5 \\ \hline 281 \end{array}$$

6. $3, 14, 54, 159, 314, ?$
 $\times 4 + 2 \quad \times 4 + 2$

- (1) 309
- (2) 372
- (3) 391
- (4) 398

$$\begin{array}{r} 14 \\ \times 4 \\ \hline 56 \end{array}$$

$$\begin{array}{r} 54 \\ \times 4 \\ \hline 216 \end{array}$$

$$\begin{array}{r} 314 \\ \times 4 \\ \hline 1256 \end{array}$$

SPACE FOR ROUGH WORK

P Q R S T U V W X Y
7. AYC, DVF, GSI, ?

A Y C
D V F
G S I

(1) KOM ✓

(2) JRH ✗

~~(3) JPL ✗~~ KL

(4) IQK ✓

8. ABY, DCX, EFU, HGT, IJQ, ?

A B Y^{1 2}
D C X^{3 4}
E F U^{5 6}
H G T^{7 8}
I J Q^{9 10}
P

✓ (1) LKP ✓

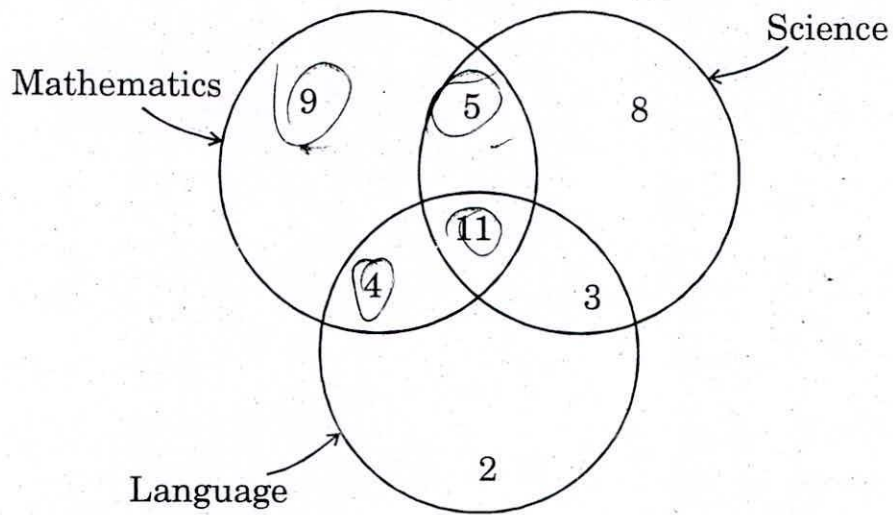
(2) KLO

(3) LOP ✓

(4) MLO

SPACE FOR ROUGH WORK

Q. 9 and 10. → *Directions* :— In the following Venn Diagram the number of students who likes Science, Mathematics and Language is given. Observe the figure and answer the following questions :



9. Find the number of students who likes Mathematics but not Language.

(1) 15

(2) 14

(3) 11

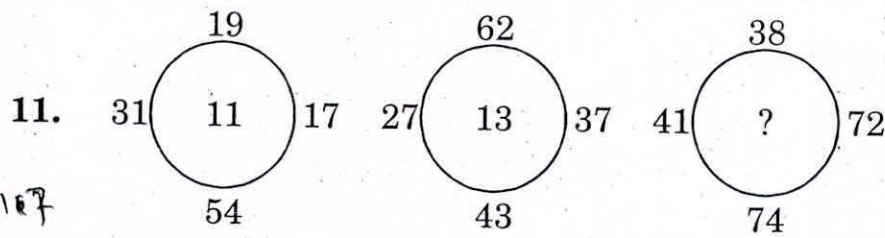
(4) 10

SPACE FOR ROUGH WORK

10. How many students, who like Science and Mathematics do not like Language ?

- (1) 4
- (2) 8
- (3) 11
- (4) 5

Q. 11 and 12. → **Directions :-** Find the correct alternative which will replace the question mark (?).



- (1) 12
- (2) 14
- (3) 15
- (4) 16

$$\begin{array}{r} 27 \\ +37 \\ +62 \\ +43 \\ \hline 169 \end{array}$$

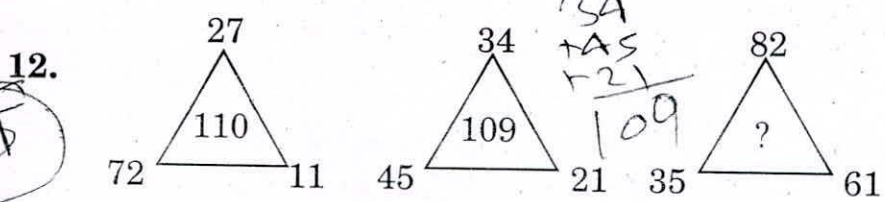
$$\times 13$$

$$\times 41$$

$$\begin{array}{r} 72 \\ +72 \\ +74 \\ +38 \\ \hline 225 \end{array}$$

$$\times 15$$

- (1) 89
- (2) 97
- (3) 132
- (4) 178



$$\begin{array}{r} 34 \\ +45 \\ +21 \\ \hline 109 \end{array}$$

$$\begin{array}{r} 89 \\ +21 \\ \hline 110 \end{array}$$

$$31 + 17 = 48$$

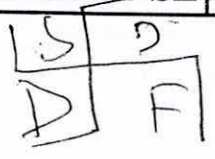
$$\begin{array}{r} 54 \\ +19 \\ \hline 73 \end{array}$$

$$\begin{array}{r} 73 \\ +79 \\ \hline 152 \end{array}$$

$$\begin{array}{r} 27 \\ +72 \\ +11 \\ \hline 110 \end{array}$$

SPACE FOR ROUGH WORK

$$\begin{array}{r} 82 \\ +61 \\ +35 \\ \hline 178 \end{array}$$



Q. 13 and 14. → **Directions :-** The information about the students wearing T-shirts having numbers 7, 8, 9 and 10 is given below. Read the given information and answer the following questions.

- (i) The players having number 7 and 9 play Football as well as Cricket.
- (ii) The fat player having number 8 participates in all the games except Kho-Kho and Football.
- (iii) The player carrying number 9 is very short. He is expert in Kabaddi. The player having number 10 is very slim. He participates in all the games except Football.
- (iv) The player having number 7 is very tall.

13. Which game can be played by one and only one player ?

- (1) Kabaddi
- (2) Kho-Kho
- (3) Cricket
- (4) Football

SPACE FOR ROUGH WORK

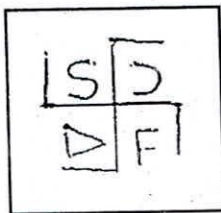
7 Football / C Tall
8 Fat every ~~Kho-Kho and Football~~
9 Football / C / Short / Kabaddi
10 Slim All except Football

14. Name the game, which is played by the slim player but *cannot* be played by the fat player ?

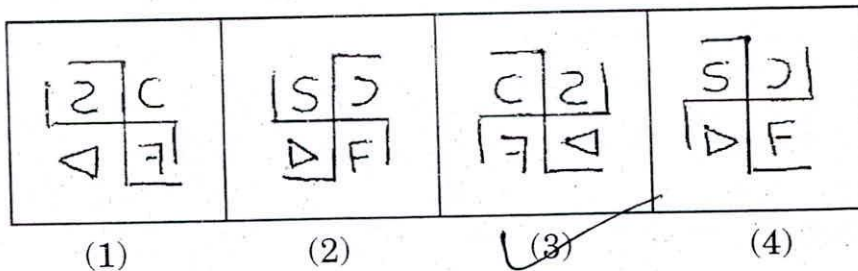
- (1) Cricket (2) Football
 (3) Kho-Kho (4) Kabaddi

15. **Directions**—Choose the mirror image of the ‘Question Figure’ from the given alternatives.

Question Figure :



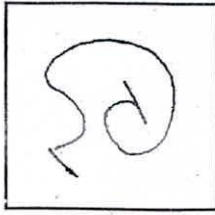
Answer Figures :



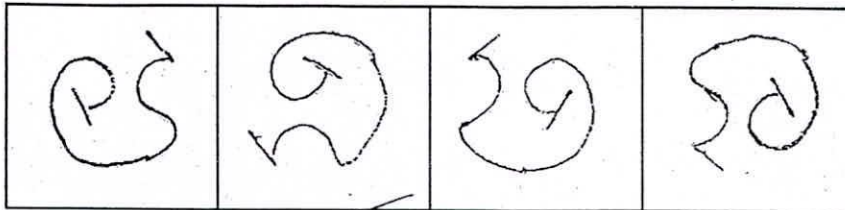
SPACE FOR ROUGH WORK

16. *Directions*—Choose the water image of the ‘Question Figure’ from the given alternatives.

Question Figure :



Answer Figures :



(1)

(2)

(3)

(4)

17. *Directions*—The number given in the bracket has specific relationship with the numbers outside the bracket. Find the relationship and replace the question mark from the alternatives given below.

45 (13) 72

32 (11) 56

63 (?) 28

(1) 10

(2) 12

(3) 13

(4) 14

SPACE FOR ROUGH WORK

$$\begin{array}{r}
 45 + 72 = 117 \\
 \hline
 13
 \end{array}
 \qquad
 \begin{array}{r}
 32 + 56 = 88 \\
 \hline
 13
 \end{array}$$

18. *Directions*—In the following table replace the question mark (?) from the alternatives given below :

$7 + 2 + 53 = 62$
 $45 + 6 + 3 = 54$
 $15 + 7 = 22$

7	2	53
3	6	45
5	4	?

53
 -45

(1) 39

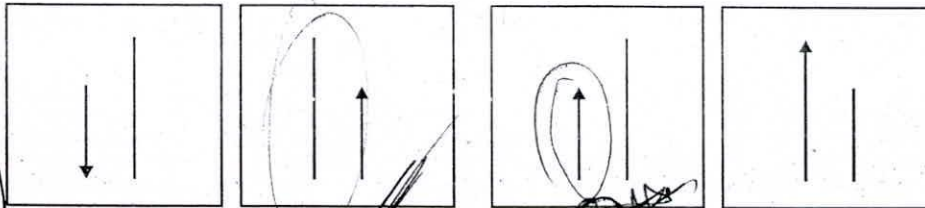
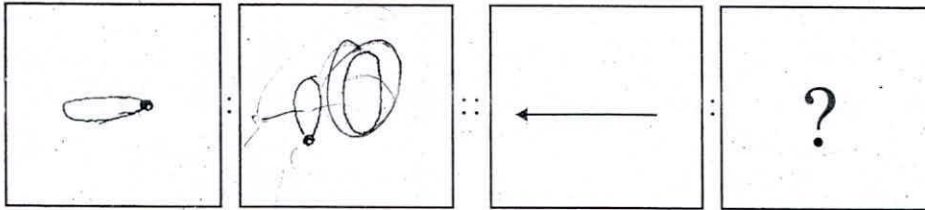
(2) 41

(3) 51

(4) 63

Q. 19 and 20. → *Directions* :— In each of the following questions there is a specific relationship between the first and second figure. The same relationship exists between the third and fourth figure which will replace the question mark (?). Select the correct figure from the alternatives given.

19.



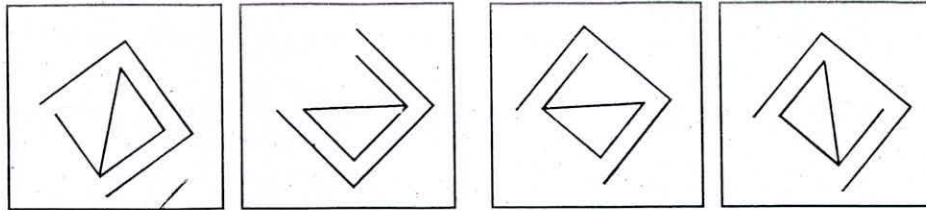
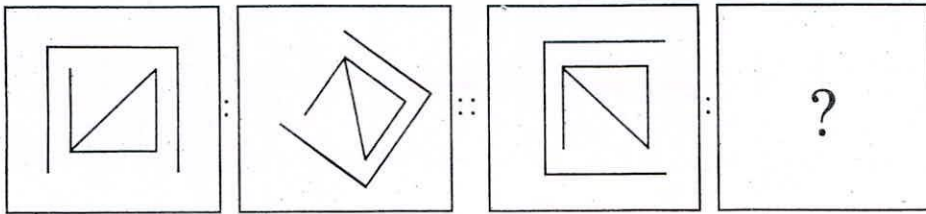
(1)

(2)

(4)

SPACE FOR ROUGH WORK

20.



(1)

(2)

(3)

(4)

Q. 21 and 22. → **Directions :- Find the odd term out.**

21. (1) 336

(2) 508

(3) 504

(4) 720

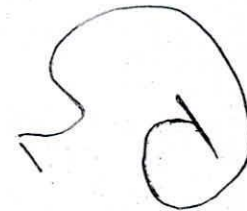
22. (1) 431

(2) 621

(3) 981

(4) 241

SPACE FOR ROUGH WORK



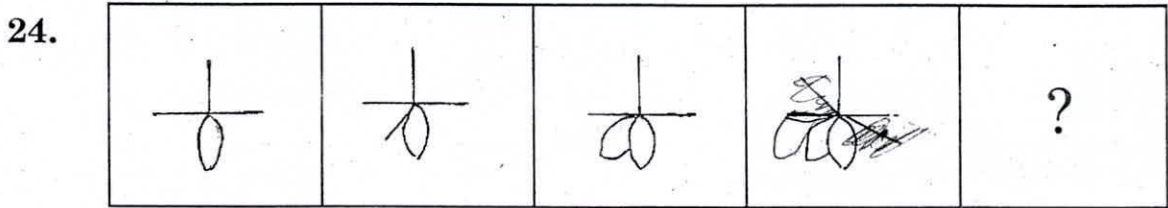
23. *Directions*—In the following questions a specific group is given. From the given alternatives, find out the right term which matches the given group.

$$7 + 11 + 18 = 18 + 18$$

FKR, KPW, DIP.

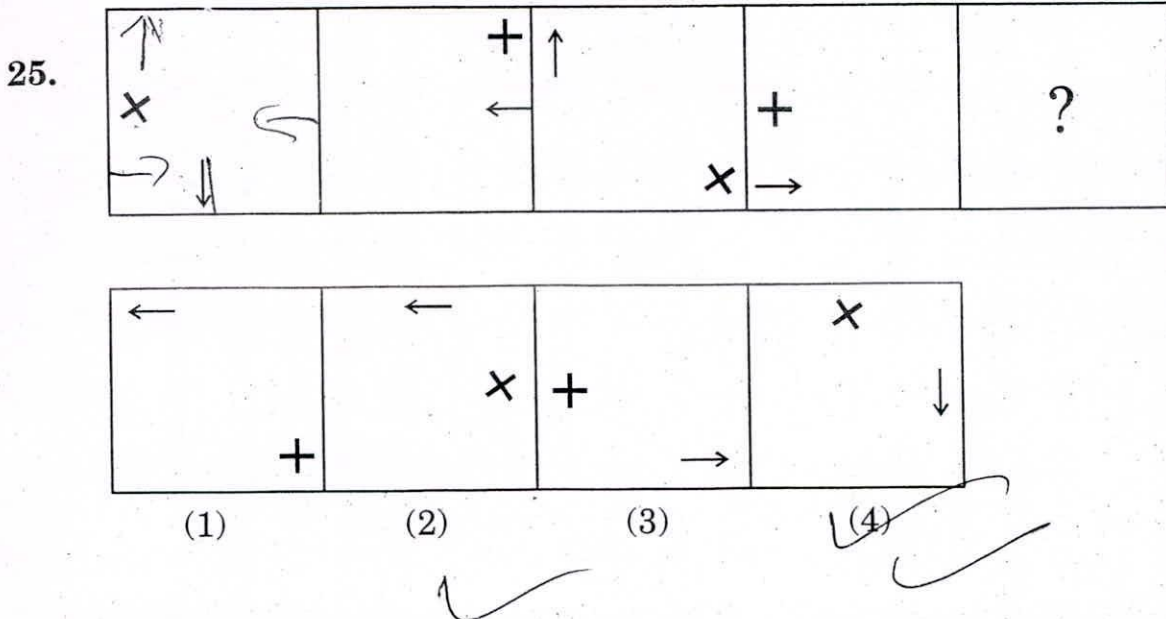
- (1) JNU ~~X~~ (2) CHO ~~X~~
 (3) BGM ✓ (4) GMU ✓

Q. 24 and 25. → *Directions* :— In each of the following question figures change in a particular order. Find out the correct figure from the alternatives which will replace the question mark (?).



- (1) ~~X~~ (2) ✓
 (3) (4) ~~X~~

SPACE FOR ROUGH WORK



Q. 26 and 27. → **Directions :-** If the sentence **KEEP AWAY FROM EXPLOSIVE** is written in the code language as **ICCN YUYW DPMK CVNJMQGTC**, then in the same code how will you write the words given in the following questions.

26. DANGER = ?

- (1) CZMFDQ
- (2) EBOHFS
- (3) BYLECP
- (4) FCPIGT

SPACE FOR ROUGH WORK

27. FLAME = ?

(1) DJYKC

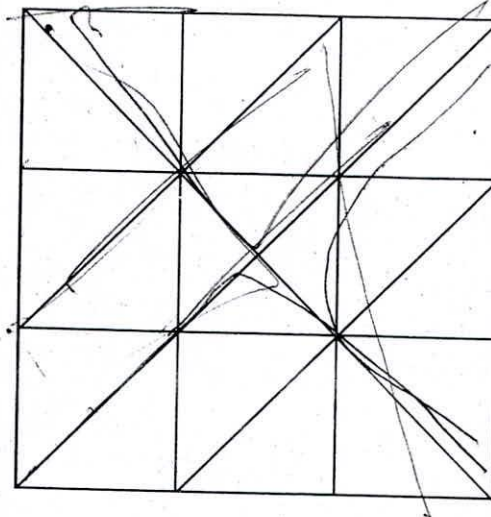
(2) EKZLD

(3) GMBNF

(4) HNCOG

Q. 28 and 29.

→ *Directions* :— Observe the following figure and answer the following questions by choosing the correct alternative given below.



28. Find the number of equilateral triangles in the given figure.

(1) 32

(2) 18

(3) 5

(4) 0

SPACE FOR ROUGH WORK

29. Find the number of parallelograms which are not rectangles from the given figure.

(1) 4

(2) 6

(3) 8

(4) 10

30. 'Environment Day' falls on Thursday, then on which day 'Children's Day' will fall in the same year ?

(1) Friday

(2) Saturday

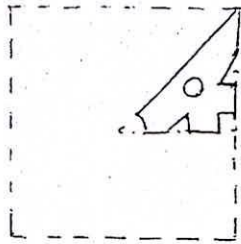
(3) Sunday

(4) Monday

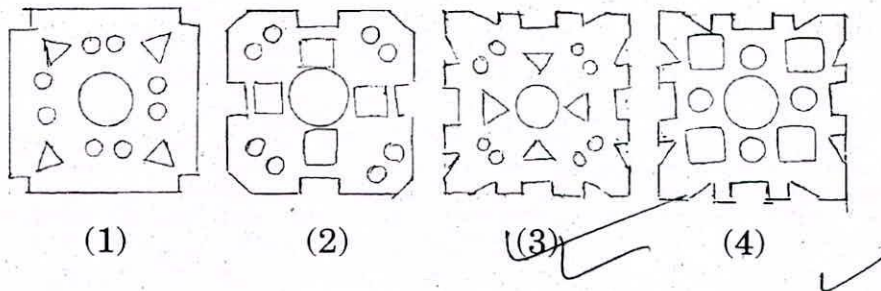
SPACE FOR ROUGH WORK

31. **Directions**—A square piece of paper is folded and cut at specific spots as shown in the figure. The paper when unfolded will look as shown in one of the alternatives. Select the correct alternative.

Question Figure :



Answer Figures :



SPACE FOR ROUGH WORK

Q. 32 and 33.

→ Directions :- Find the odd term out.

32. (1) EMI

(2) BJF

(3) DLH

(4) GOJ

Full Form

33. (1) ABXY

(2) FGTU

(3) IJQR

(4) CDWX

SPACE FOR ROUGH WORK

34. Yash starts moving towards South and walks for 12 m. Then he takes the left turn and walks for 8 m. Again he takes a right turn and walks for 24 m. Now he takes a turn to North-east direction and walks 25 m. From that he takes a turn towards North and walks 20 m. Find the distance between the start point and the finishing point of his movement.

(1) 12 m

(2) 15 m

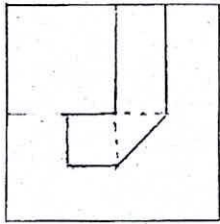
(3) 17 m

(4) 25 m

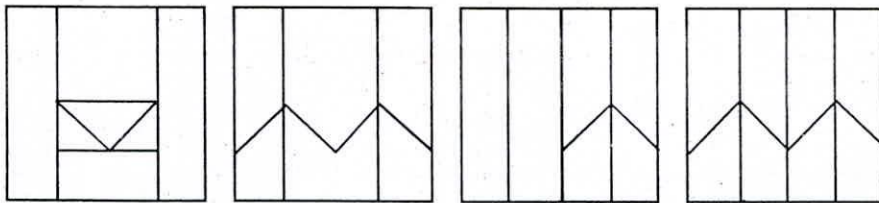
SPACE FOR ROUGH WORK

35. *Directions*—A folded piece of square paper is shown as question figure. The paper is unfolded. How will it look is shown in the alternatives. Select the correct alternative.

Question Figure :



Answer Figures :



(1) ✓

(2)

(3)

(4)

SPACE FOR ROUGH WORK

Q. 36 and 37.

→ *Directions* :— Six friends A, B, C, D, E, F are sitting around a round table. F is sitting in between A and D. C is sitting in between E and B. E is not sitting between D and C. D is at second position to the left of C. Answer the following questions.

36. Who is sitting in between A and C ?

(1) B

(2) E

(3) D

(4) Cannot be said

37. What is the position of D ?

(1) Second position to the right of A

(2) The next to the right of B

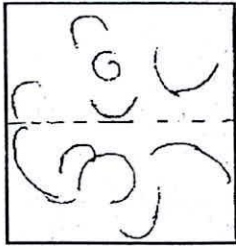
(3) Third position to the left of B

(4) Fourth position to the right of A

SPACE FOR ROUGH WORK

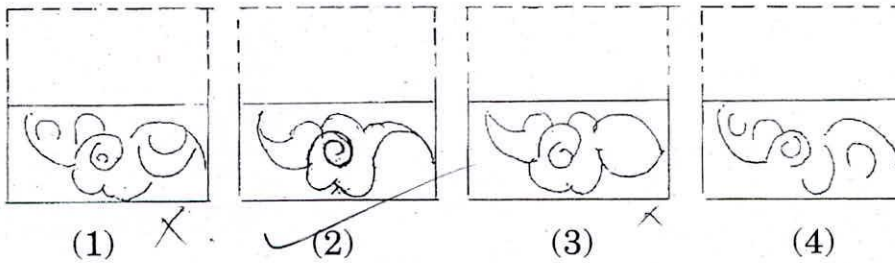
38. A square transparent sheet of paper is folded on the dotted line as shown in the question figure. Choose the correct alternative from the answer figure as how the paper will look when folded.

Question Figure :



Answer Figures :

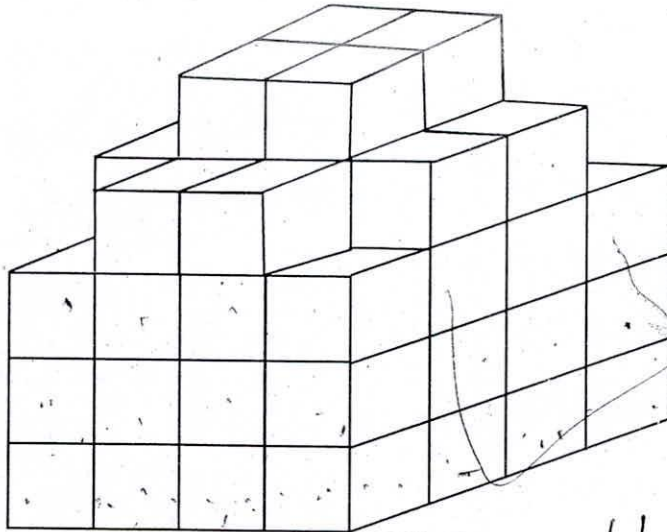
5 min



SPACE FOR ROUGH WORK

Q. 39 and 40.

→ Directions :— 64 cubes of same size are arranged according to the figure given below. These cubes are painted from outside. Observe the figure and answer the following questions.



36

12x2x2
= 24

~~16x16x6~~ x 16
~~15x3~~

~~36~~
~~12~~
3

39. How many cubes have two sides coloured ?

(1) 4

(2) 8

(3) 12

(4) 24

SPACE FOR ROUGH WORK

40. How many cubes have no side painted ?

(1) 0

(2) 4

(3) 8

(4) 12

41. In a certain code language if BUSH is written as 58, MARK is written as 65, then in the same code how will you write the word PERL ?

(1) 48

(2) 51

(3) 54

(4) 57

SPACE FOR ROUGH WORK

193
 42. In a certain code language if SMASH = 30 and DRIVE = 29, then

POINT = ?

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Q	R	S	T	U	V	W	X	Y	Z						
17	18	19	20	21	22	23	24	25	26						

(1) 37

(2) 38

(3) 39

✓ (4) 41

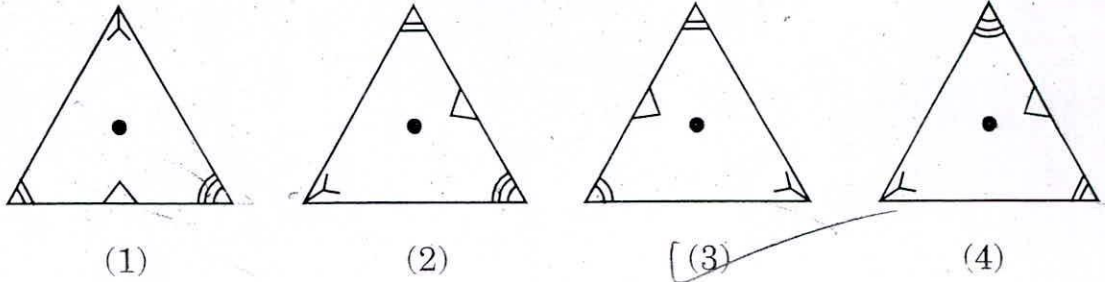
Q. 43 and 44. → **Directions :- Find the odd term out.**

43.

(1)	(2)	(3)	✓ (4)

SPACE FOR ROUGH WORK

44.



45. In a certain code language if $44 \times 44 = 4444$ and $34 \times 52 = \underline{5423}$,

then find the value of 81×46 in the same code language.

(1) 1648

(2) 8461

(3) 8164

✓(4) 4168

SPACE FOR ROUGH WORK

46. In a certain code language if $3 \times 3 = 9$, $6 - 3 = 2$, $4 \times 3 = 1$,
 $3 \div 2 = 5$, then find $24 \times 6 \div 8 - 2 + 3 = ?$

(1) 33

(2) 30

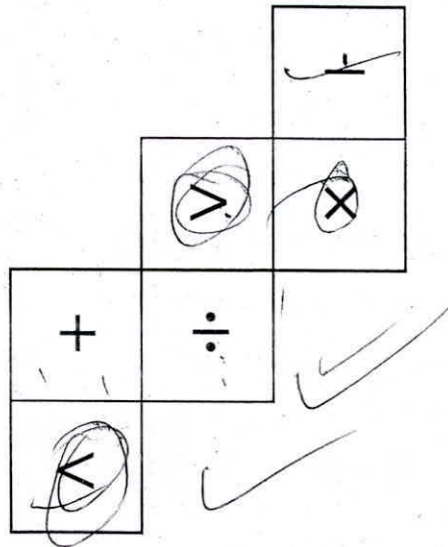
(3) 28

✓ (4) 06

$= \times \div \times$
 $4 \times 12 + 6 = 18$
 24

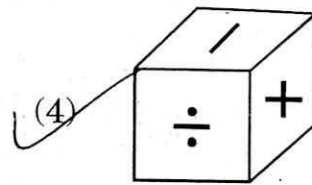
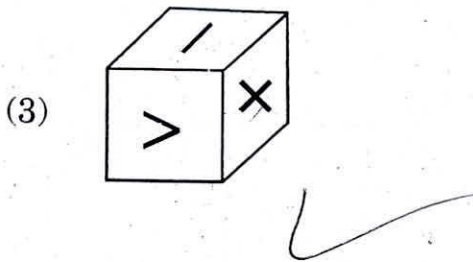
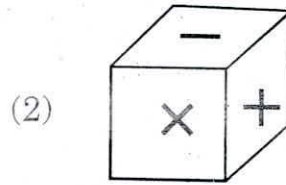
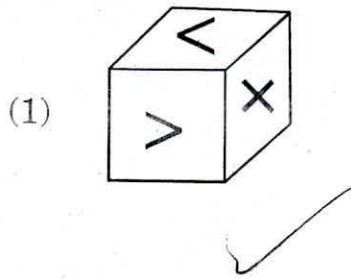
Q. 47 and 48.

→ **Directions** :— The figure given below is folded to form a cube. Observe the figure and answer the questions given ahead.



SPACE FOR ROUGH WORK

47. Of the following cube figures, find the most relevant figure.



48. Which sign will be there on the opposite surface of the sign '>' ?

(1) -

(2) +

(3) x

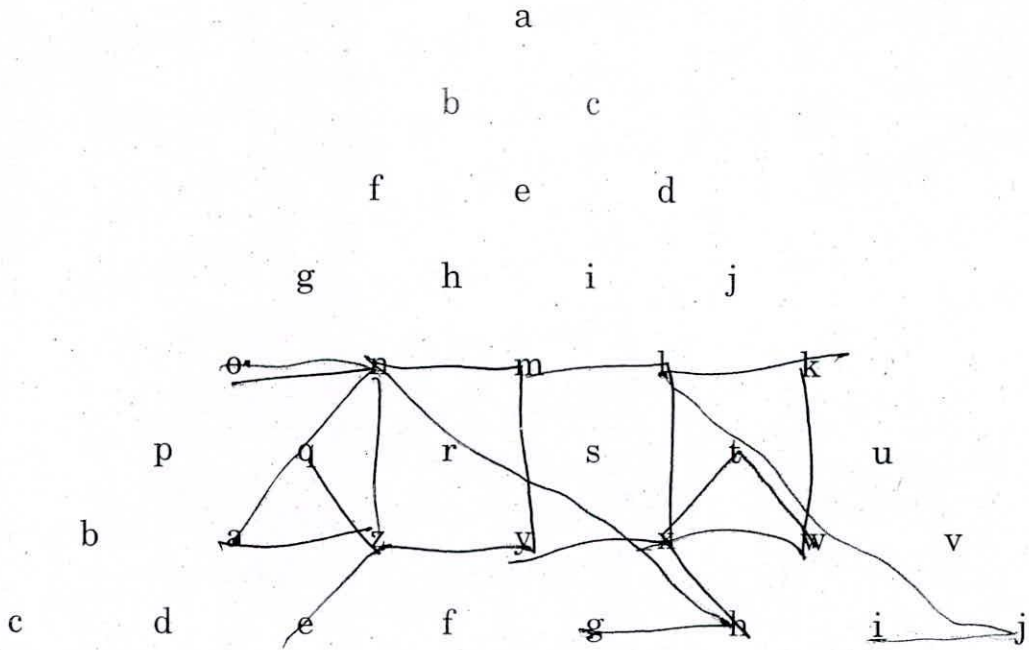
(4) <

SPACE FOR ROUGH WORK

Q. 49 and 50.

→ Directions :- Observe the following pyramid of

alphabets and answer the following questions.



49. onza, nmyz, mlxy, ?

(1) nmst

(2) hilm

(3) abcd

(4) lkwx

SPACE FOR ROUGH WORK

50. aqze : wtxh :: ghno : ?

(1) abce

(2) qrfe

(3) jilk

(4) ijlh

SPACE FOR ROUGH WORK