

MENTAL ABILITY AND LANGUAGE COMPREHENSION TEST

Part – I

(FOR Students of Class X)

Time : 90 Minutes

Max. Marks : 100

Instructions to Candidates

Read the following instructions carefully before you open the question booklet.

1. Answers are to be given on the same OMR Answer Sheet provided for Part – I.
2. There are **100** questions in this test. All are compulsory.
3. This test consists of **two** sections.
Mental Ability test for **50** marks.
Language Comprehension Test (English) For **50** Marks.
4. Choose the correct answer from the options given for each question and darken the corresponding circle with black ball point pen in the OMR answer Sheet.
5. Since the time allotted for this Question Paper is very limited you should make the best use of it by not spending too much time on any one question.
6. If you do not know the answer to any question, do not waste time on it and pass on to the next one. If time permits, you can come back to the questions, which you have left in the first instance and attempt them.
7. Rough work can be done anywhere in the Question Booklet but **not** on the OMR Sheet/loose paper.
8. Every correct answer will be awarded one mark.
9. Please return the **OMR Answer Sheet only to the invigilator after completion of the test. You can retain the Question Booklets.**
10. English version of the Question paper will be considered as final in case of any dispute arising out of variation in translated version.
11. Quote your seven digit Roll number without fail for any future correspondence.

PLEASE TURN OVER THE PAGE AND START ANSWERING.

Name of the Candidate :

Enrollment Number :

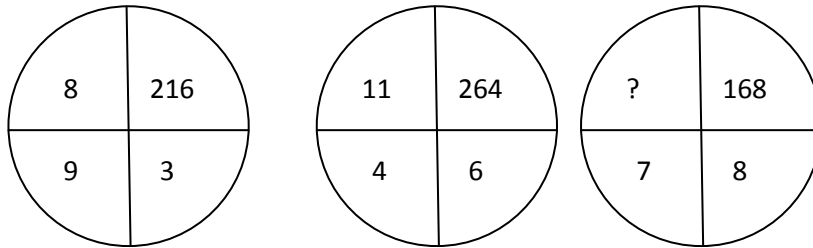
MENTAL ABILITY TEST

DIRECTION: (question number 1 to 5)

In each of the following questions, the numbers/letters are arranged based on some pattern or principle. Choose the correct answer for the terms marked by the symbol (?)

1. 37, 511, 713, _____?
 (A) 474 (B) 985 (C) 1117 (D) 132
2. 6, 13, _____, 33.
 (A) 11 (B) 20 (C) 22 (D) 14
3. _____, 7, 26, 63
 (A) 1 (B) 0 (C) 2 (D) 3
4. 4, 6, 8, 9, _____.
 (A) 11 (B) 12 (C) 13 (D) 10
5. 12, _____, 56, 78.
 (A) 34 (B) 35 (C) 23 (D) 13
6. If JACK = 25 and QUEEN = 62, what is KING =?
 (A) 37 (B) 41 (C) 81 (D) 87

7.



- (A) 4 (B) 3 (C) 42 (D) 21

8. If A = +, B = ÷, C = X and D = -, then what is the value of $\frac{1}{5}C2B\frac{1}{5}A\frac{1}{5}D\frac{1}{10}$ =?
 (A) 2.1 (B) 1.3 (C) 0.9 (D) 0.5
9. The value of $\frac{1}{(216)^{-2/3}} + \frac{1}{(256)^{-3/4}} + \frac{1}{(32)^{-1/5}}$ is:
 (A) 102 (B) 105 (C) 107 (D) 109
10. $\sqrt[3]{0.000064} =$
 (A) 0.02 (B) 0.2 (C) 2.1 (D) 3.0


11. The value of $\frac{1}{3 + \frac{1}{1 - \frac{1}{6}}}$ is _____.

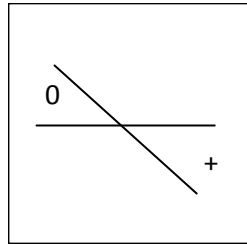
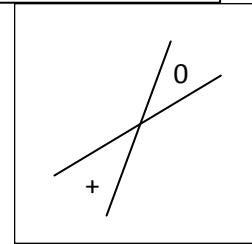
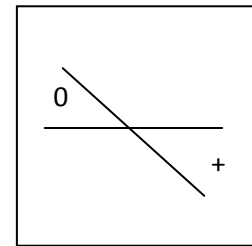
- (A) $\frac{5}{21}$ (B) $\frac{21}{5}$ (C) $\frac{9}{5}$ (D) $\frac{5}{9}$

12. If 'n' is a positive integer greater than 3, then $(1 - \frac{1}{3})(1 - \frac{1}{4})(1 - \frac{1}{5}) \dots (1 - \frac{1}{n})$ is

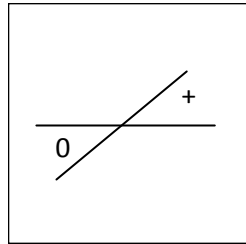
- (A) $\frac{1}{n}$ (B) $\frac{2}{n}$ (C) $\frac{n-1}{2}$ (D) $\frac{2}{n(n+1)}$

13. A figure is followed by its four mirror images. Select the correct mirror image from the given choices, when a mirror AB is kept above the figure:

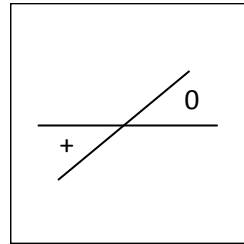
A  B



(A)



(B)



(C)

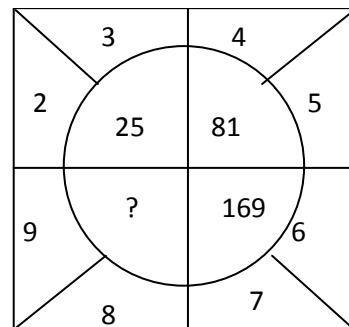
14. Find the missing letter:

- (A) J (B) V
(C) H (D) M

G	Q	W
?	I	S
U	O	K

15. Insert the missing number:

- (A) 122 (B) 289
(C) 92 (D) 242



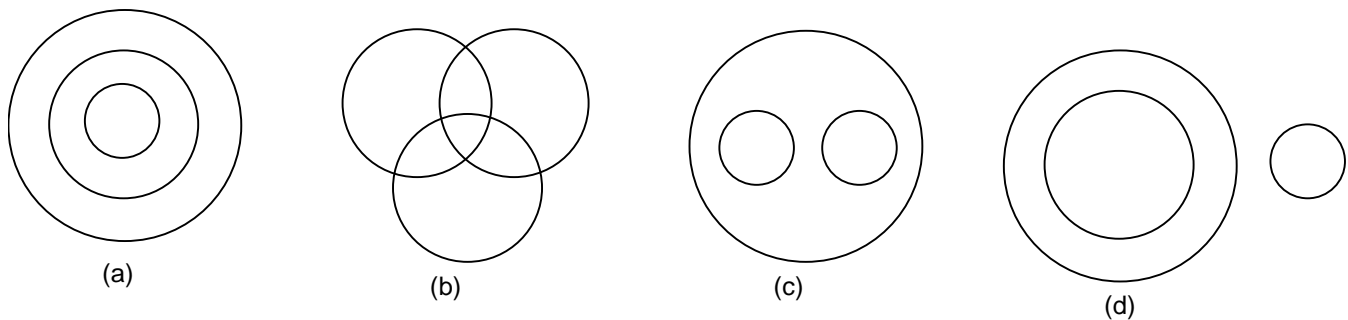
Direction: (Question number 16 to 18)

The first two terms are connected by some relationship. The same relationship is applicable for the next two terms, in which one is a blank space. Identify term from the given four alternatives for the blank space.

16. Stag: Fawn :: kangaroo : _____
 (A) Cygnet (B) Joey (C) Infant (D) Foal
17. Whale : School :: Snake : _____
 (A) Stack (B) Knot (C) Swarm (D) Sheaf
18. Pathology : Diseases :: Arachnology : _____
 (A) Beetles (B) Spiders (C) Bees (D) Teddy bear

Direction: (Question number 19 to 22)

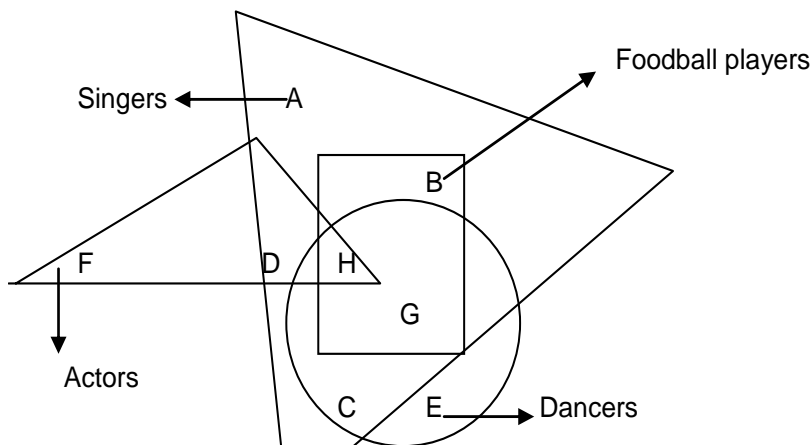
The following diagrams show some relationship among 3 times. For each group of elements, there corresponds one diagram (a), (b), (c) or (d). Select the suitable diagram



19. Rectangle, Parallelogram, Quadrilateral:
 (A) (a) (B) (b) (C) (c) (D) (d)
20. Triangle, Polygon, Circle:
 (A) (a) (B) (b) (C) (c) (D) (d)
21. Vegetables, Fruits, Eatables:
 (A) (a) (B) (b) (C) (c) (D) (d)
22. Natural numbers, whole numbers, integers:
 (A) (a) (B) (b) (C) (c) (D) (d)
23. In a certain code, LOTUS is written as ULSTO. What will MANGO be written in the code?
 (A) MOANG (B) GMONA (C) GMAON (D) MGOAN

Direction: (Question number 24 to 28)

The following diagram consisting of four overlapping figures, represent four segments of population. The large triangle represent singers, the circle dancers, the rectangle football players and small triangle actors. Study the diagram and answer the questions.



24. Actors and singers but not dancers:
 (A) F and D (B) F, D and H (C) D and H (D) F and H
25. Danvers who are not football players:
 (A) C and E (B) C, E and H (C) C, H and G (D) E Only
26. Singers who are not dancers:
 (A) A and D (B) A and B (C) A only (D) A, D and B
27. Football players who are not singers:
 (A) B only (B) H only (C) Nil (D) G only
28. Name the segment of population which represent all the categories.
 (A) D only (B) C only (C) B only (D) H only

Direction: (Question number 29 to 32)

Read the content and answer the given question.

A is shorter than B but taller than C. D is taller than B. E is taller than B but not as tall as D.

29. Who is the tallest of all?
 (A) A (B) D (C) B (D) E
30. Who is the second tallest?
 (A) E (B) B (C) D (D) C
31. Who comes middle in the height?
 (A) C (B) E (C) B (D) A
32. Who is the shortest?
 (A) A (B) B (C) C (D) D

Direction: (Question number 33 and 34)

Choose the word which is least like the other words

33. (A) Fungus (B) Medium (C) Strata (D) Terminus

34. (A) Hen (B) Falcon (C) Bull (D) Jenny

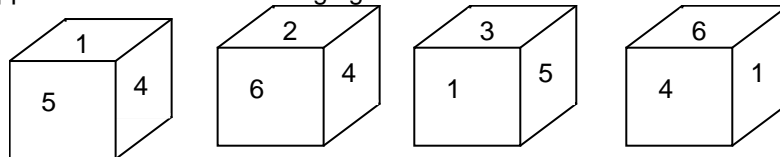
35. The unit digit of the number $(986)^{205}$ is:
 (A) 6 (B) 0 (C) 8 (D) 9

36. Find out the word that can be formed by using the letters of the word 'czechoslovakia' using once.
 (A) kiosk (B) zeal (C) cheap (D) larva

37. If $2*5=4110$, $3*7=9121$, $5*2=25110$ then $4*8=?$
 (A) 32116 (B) 12132 (C) 64112 (D) 16132

38. The unmatched element of the series is 4, 21, 56, 101, 201.
 (A) 4 (B) 101 (C) 56 (D) 21

39. The number opposite to 6 for the following figures is:

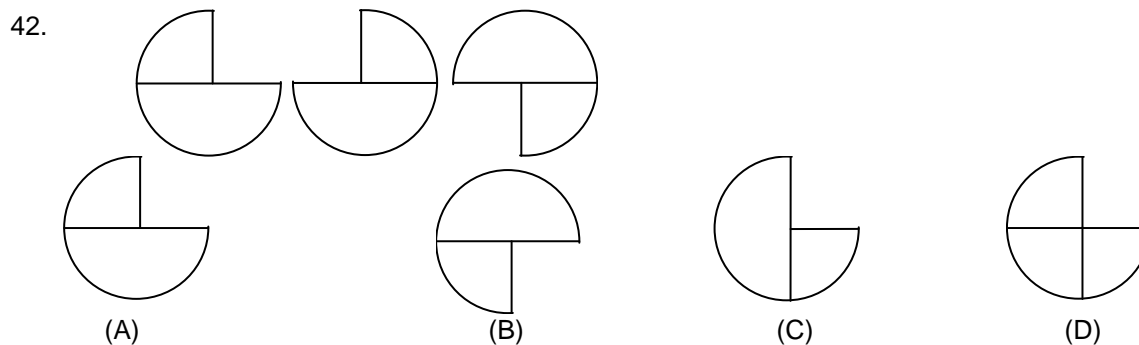
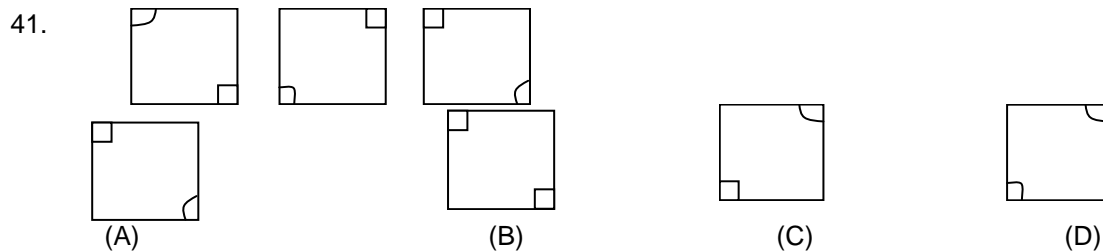


(A) 5 (B) 4 (C) 3 (D) 2

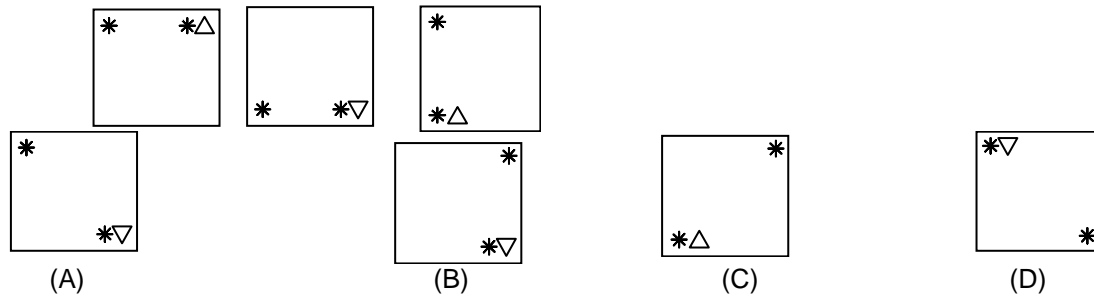
40. Reena is Sunil's sister. Janaki is Sunil's mother. Sankar is Janaki's father. Savithri is Janaki's mother. Vijaya is Sankar's mother. How is Reena related to Vijiaya?
 (A) Daughter (B) Grandmother (C) Granddaughter (D) Great granddaughter

Direction: (Question number 41 to 43)

The next figure in the following sequence of figure is:



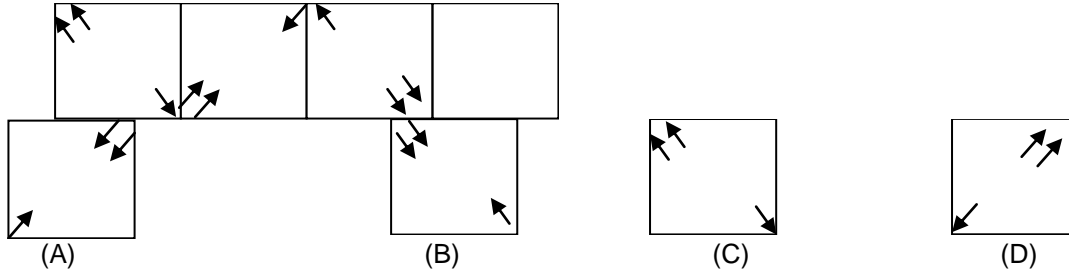
43.



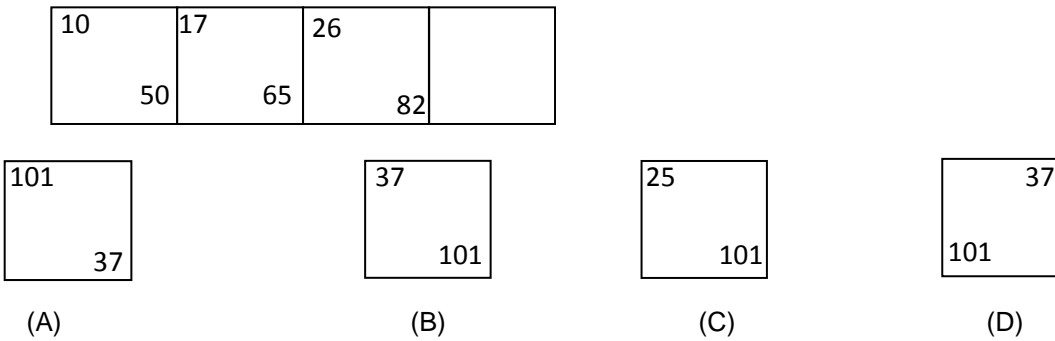
Direction: (Question number 44 to 46)

Choose the missing figure.

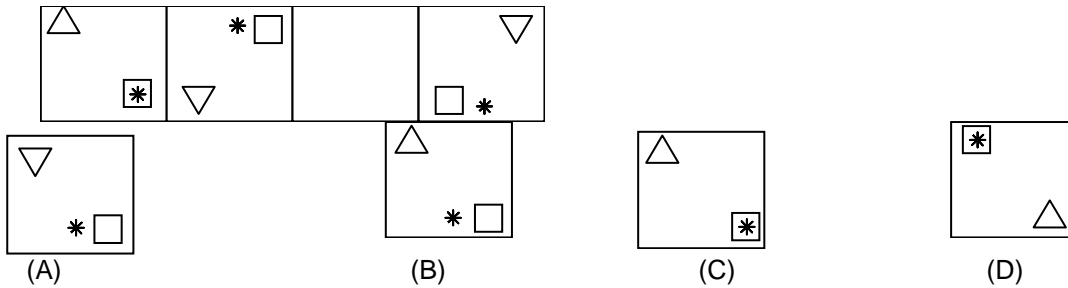
44.



45.



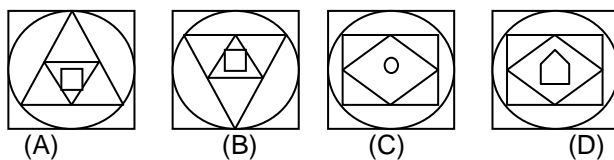
46.



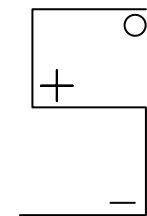
Direction: Question number 47 to 49)

Choose the figure which is different from others.

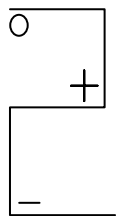
47.



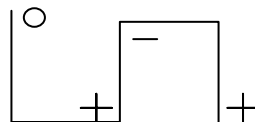
48.



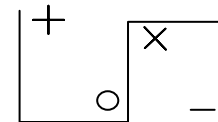
(A)



(B)

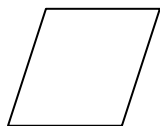


(C)

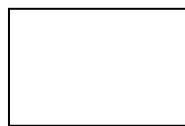


(D)

48.



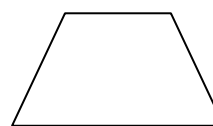
(A)



(B)



(C)



(D)

50.

ABC is an equilateral triangle. D, E and F are the midpoints of AB, BC and CA respectively. Then, the number of equilateral triangles in the diagram:

- (A) 5
- (C) 8

- (B) 4
- (D) 6

