

## Logical Reasoning

Test 1: 35 Ques 25 mins

Test 2: 35 Ques 50 mins

| Score ≤ 15  | Score 16-25 | Score 26+  |
|-------------|-------------|------------|
| Study Books | Weak area   | Mocks Only |

|            | I  | II | III |
|------------|----|----|-----|
| Black 2020 | 35 | 0  | 15  |
| Pro 2021   | 0  | 35 | 20  |

1. Select the option in which the numbers are related in the same way as are the numbers of the following set. (24, 10, 392)

- (26, 12, 369)
- (27, 15, 480)
- (29, 18, 242)
- (21, 18, 242)
- (29, 18, 234)

2. Four letter-clusters have been given, out of which three are alike in some manner and one is different. Select the letter-cluster that is different. 1. NPSV 2. QTWZ 3. XADG 4. BEHK 5. MDHE

3. Select the letter-cluster from among the given options that can replace the question mark (?) in the following series.

BOARD, BOARW, BOAIW, ?, BLZIW, YLZIW

- BOZIW
- BOAIW
- BLZRW
- BOZRW
- BOZSW

4. In a certain code language, 'AND' is written as 'C-LP-F' and 'NOR' is coded as 'P-MQ-T'. How will 'BUT' be written in that language?

- D-SW-U
- C-SU-V
- D-SW-V
- C-TV-W
- D-SW-W

5. Select the option that is related to the third word in the same way as the second word is related to the first word.

Awful : Nice :: Nomadic : ?

- Homeless
- Careless
- Nocturnal
- Settled
- Traveler

6. Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary.

1. Success 2. Surreal 3. Succumb 4. Suction 5.

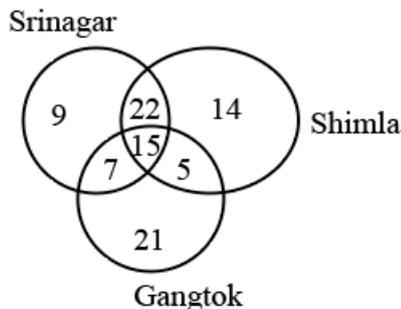
Surrogate 6. Surprise

- 1, 4, 3, 6, 2, 5
- 1, 3, 6, 4, 2, 5
- 1, 3, 4, 6, 5, 2
- 1, 3, 4, 6, 2, 5
- 3, 1, 4, 6, 2, 5

7. In a certain code language, 'SAFETY' is coded as '80' and 'EXPAND' is coded as '68'. How will 'GATHER' be coded in that language?

- 68
- 60
- 66
- 64
- 63

8. The following Venn diagram shows the number of families who have visited three different places (Srinagar, Shimla, Gangtok). What is the number of families who have visited at least two of the places out of Srinagar, Shimla and Gangtok?



- 46
- 47
- 48
- 49
- 50

9. In a certain code language 'Indian banks are associates' is written as 'za pn ka sh', 'SBI has associates banks' is written as 'pn za bi ti', 'national and Indian institute' is written as 'na ha sh sn' and 'national has international banks' is written as 'bi na mn pn'.

Find the code for Indian National Bank

- sh na pn
- sh ha sn
- sh za ka
- ti pn na
- na pn bi

10. Pointing to the photograph of a girl, Raghav said, "She is my father's mother's daughter's only brother's daughter". How is Raghav's father related to that girl's mother?

- Father
- Maternal uncle
- Son
- Husband
- None of these

11. Study the following information and answer the given questions.

- D is daughter of N. E is wife of N.
- G is sister of D. C is married to G.
- N has no son. K is mother of E.
- Q is only daughter of C.

How N is related to K?

- Brother-in-law
- Cousin
- Son in law
- Sister
- Brother

12. When number X multiplied to its next number, the product 1260 is obtained. When Number X is added to Number Y, a total of 106 is obtained. Find the value of Number Y. (Assume numbers to be positive)

- 77
- 61
- 87
- 71
- None of these

13. Select the combination of letters that when sequentially placed in the blanks of the given series

will complete the series. b \_ c e \_ k b \_ c \_ f k b b \_ e f  
\_ b b c \_ f k

1. b, f, b, e, c, e, k
2. b, e, b, f, c, k, e
3. b, f, b, e, c, k, e
4. b, f, b, c, e, k, e
5. None of these

14. Following are the conditions for selecting a candidate in an organization.

The candidate must –

- (i) have passed class 12 exam with at least 60% marks.
- (ii) have passed graduation degree in any discipline with at least 55% marks.
- (iii) be not less than 21 years and not more than 30 years of age as on 1.7.2016.
- (iv) possess a certificate/diploma/degree course in Computer Science.

In the case of candidate who fulfills all conditions except –

- (a) at (ii) above but is a post-graduate, case may be referred to the Executive Director (ED).
- (b) at (iv) above but has studied Computer Science as one of subjects in graduation, case may be referred to the Vice President (VP).

In question below, details of a candidate are provided followed by a question and 5 courses of action. Select the course of action that applies to the person's candidature. All these cases are given to you as on 1.11.2016.

Lakshay is a Commerce graduate with 57% marks. He had secured 73% marks class 12 examination. He has studied Computer Science as one of the subjects in class 12. His date of birth is 22.9.1990.

- A) if the case is to be referred to Executive Head.
- B) if the case is to be referred to Vice President.
- C) if the candidate is to be selected.
- D) if the information is inadequate to take a decision.
- E) if the candidate is not to be selected.

15. Select the option that is related to the third number in the same way as the second number is related to the first number. 21 : 445 :: 24 : ?

1. 495 2. 505 3. 523 4. 580 5. 555

16. Statements:

All dancers are talented.  
Some girls are dancers.

Conclusions:

- I. Some girls are talented.
- II. All talented are girls is a possibility
- III. All girls can be talented

1. Only conclusion III follows
2. Both conclusions I and II follow
3. Only conclusion II follows
4. Only conclusion I follows
5. All follows

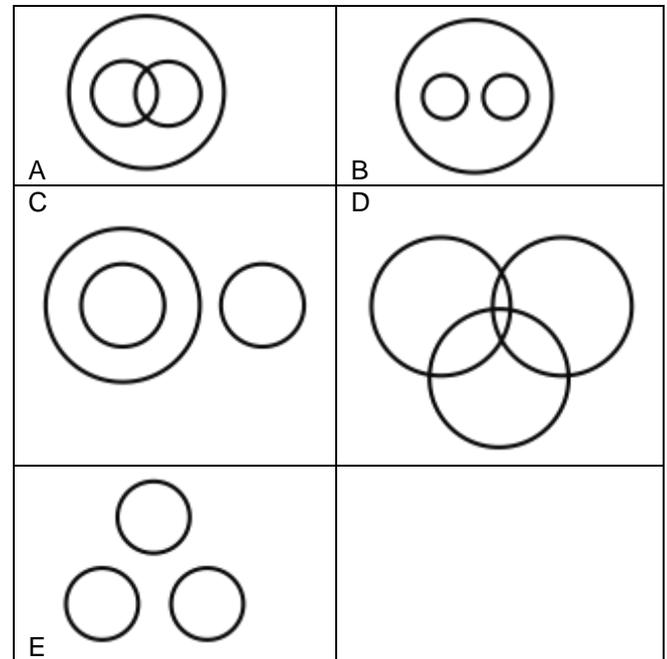
17. Four number-pairs have been given, out of which three are alike in some manner and one is different.

Select the number-pair that is different.

1. 5237 : 4003 2. 4327 : 2003
3. 3527 : 2293 4. 2347 : 1113
5. All pairs are same

Options for Ques 16 – 18 is given below

A.



18. Which of the following diagrams best depicts the relationship among Doctors, Lawyers and Professionals?

19. Which of the following diagrams best depicts the relationship among Water, Atmosphere and Hydrogen?

20. Which of the following diagrams best depicts the relationship among Book, Dictionary and Printer?

21. Statements:

Some bowls are plates.  
No plate is a glass.

Conclusions:

- I. Some glasses are not bowl.
- II. All glasses being bowl is a possibility.

1. Either conclusion I or II follows
2. Both conclusions I and II follow
3. Only conclusion II follows
4. Only conclusion I follows
5. None follows

G is the mother of F, who is the spouse of D. M is the daughter of D, who is the only brother of C. E is the son of G, who is married to H. A is the niece of C, who has no sister and is unmarried. T is the father of D and has no daughter. V is the sister-in-law of F. G has only two children. M is the granddaughter of O.

22. How is V related to M?

- A Paternal aunt
- B Maternal aunt
- C Sister
- D Either A or B

E None of these

23. How many female members are there in the family?

A 7 B 4 C 5 D 6 E Can't be determined

24. Find the odd one out?

A V B D C C D F E A

25. How is F's mother-in-law related to T?

A Sister B Father  
C Wife D Brother  
E None of these

26. Who among the following is the sibling of F?

A G B H C V D E E None of these

27. Statements:

All flowers are plants.  
No plant is an stem.  
All stems are fruits.

Conclusions:

I. All flowers being fruits is a possibility.  
II. All stems being flower is a possibility.

1. Either conclusion I or II follows
2. Both conclusions I and II follow
3. Only conclusion II follows
4. Only conclusion I follows
5. None follows

28. Statements:

Some pens are keys  
Some keys are locks  
All locks are cards  
No card is a paper

Conclusions:

I. No lock is paper.  
II. Some cards are keys  
III. Some keys are not paper.

1. Either conclusion I or II follows
2. Both conclusions I and II follow
3. Only conclusion III follows
4. Only conclusion I follows
5. All follows

29. Statements:

Some apartments are flats.  
Some flats are buildings.  
All buildings are bungalows.  
All bungalows are garden

Conclusions:

I. All apartments being building is possibility.  
II. All bungalows are not buildings.  
III. No flat is garden.

1. Either conclusion I or II follows
2. Both conclusions I and II follow
3. Only conclusion III follows
4. Only conclusion I follows
5. All follows

Virat goes to Supermarket store to buy fruits. He enters the market, turns to his right, walks 7m and takes oranges. Then, he turns to his left, walks 3m and takes Peach. Again, he turns to his left, which is towards west, walks 7m and takes Papayas. Again, he turns to his right and looks at guavas, which 8m away from him. He takes guavas and moves to his right, walks 7m and stops at the counter for billing.

30. In which direction does Virat move for billing?  
A North B East C West  
D Can't be determined  
E None of these

31. In which direction is the Papaya stall located with respect to the Orange stall?  
A North B South C Northwest D Southeast E None of these

32. What is the shortest distance between the Orange stall and the Billing Counter?  
A 11 m B 10 m C 12 m D 7 m E None of these

33. How far is the Papaya stall from the starting point?  
A 3 m B 7 m C 8 m D 6 m E None of these

34. In a certain code language, 6219 means 'Sachin is a cricketer' and 2646 means 'He played from Mumbai'. Which of the following is the code for 'Mumbai is very famous'?

1. 7945 2. 6246 3. 6285 4. 2458 5. 5482

35. Select the option in which the words share the same relationship as that shared by the given pair of words.

Dentist : Hospital

1. Engineer : Design
2. Criminal : Police Station
3. Professor : University
4. Doctor : Treatment
5. None of these is correct

1. the correct answer is "Option 3".

The logic followed here is:

$$(1st\ number - 2nd\ number)^2 \times 2 = 3rd\ number$$

For (24, 10, 392):

$$(24 - 10)^2 \times 2 = 14^2 \times 2 = 196 \times 2 = 392$$

Option 1: (26, 12, 369)

$$(26 - 12)^2 \times 2 = 14^2 \times 2 = 196 \times 2 = 392 \neq 369$$

Option 2: (27, 15, 480)

$$(27 - 15)^2 \times 2 = 12^2 \times 2 = 144 \times 2 = 288 \neq 480$$

Option 3: (29, 18, 242)

$$(29 - 18)^2 \times 2 = 11^2 \times 2 = 121 \times 2 = 242$$

Option 4: (21, 18, 234)

$$(21 - 18)^2 \times 2 = 3^2 \times 2 = 9 \times 2 = 18 \neq 234$$

Hence, the correct answer is "Option 3".

2. the correct answer is "Option 1".

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

By checking options,

(1) NPSV



(2) QTWZ



(3) XADG



(4) BEHK



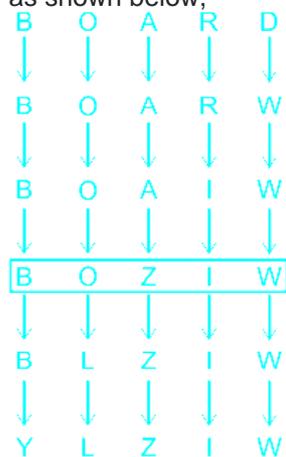
Hence, NPSV is the odd one.

3. the correct answer is "Option 1".

Given: BOARD, BOARW, BOAIW, ?, BLZIW, YLZIW

The logic followed here is:

- one letter starting from the last letter of the word BOARD is changed to its opposite letter in each step as shown below,

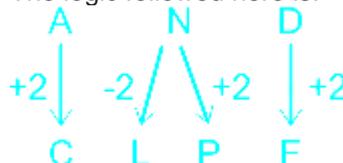


Hence, BOZIW is the correct answer.

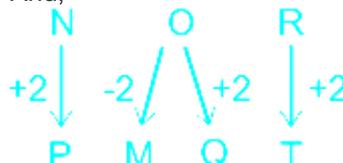
4. the correct answer is "Option 3".

Given: 'AND' is written as 'C-LP-F' and 'NOR' is coded as 'P-MQ-T'.

The logic followed here is:



And,



Similarly,



Hence, D-SW-V is the correct answer.

5. the correct answer is "Option 4".

Awful : Nice :: Nomadic : Settled

1. Success 2. Surreal 3. Succumb 4. Suction 5.

Surrogate 6. Surprise

6. Option 4 is the correct order: 1, 3, 4, 6, 2, 5

7. the correct answer is "Option 5".

Given: 'SAFETY' is coded as '80' and 'EXPAND' is coded as '68'.

The logic followed here is:

- Sum of positional values + no. of consonants in the word

|                          |                               |   |   |   |    |    |
|--------------------------|-------------------------------|---|---|---|----|----|
| Letters                  | S                             | A | F | E | T  | Y  |
| Positional Values        | 19                            | 1 | 6 | 5 | 20 | 25 |
| Sum of Positional Values | 19 + 1 + 6 + 5 + 20 + 25 = 76 |   |   |   |    |    |

Number of consonants = 4

Now, 76 + 4 = 80

|                          |                               |    |    |   |    |   |
|--------------------------|-------------------------------|----|----|---|----|---|
| Letters                  | E                             | X  | P  | A | N  | D |
| Positional Values        | 5                             | 24 | 16 | 1 | 14 | 4 |
| Sum of Positional Values | 5 + 24 + 16 + 1 + 14 + 4 = 64 |    |    |   |    |   |

Number of consonants = 4

Now, 64 + 4 = 68

Similarly,

|                          |                              |   |    |   |   |    |
|--------------------------|------------------------------|---|----|---|---|----|
| Letters                  | G                            | A | T  | H | E | R  |
| Positional Values        | 7                            | 1 | 20 | 8 | 5 | 18 |
| Sum of Positional Values | 7 + 1 + 20 + 8 + 5 + 18 = 59 |   |    |   |   |    |

# Logical Reasoning MBA CET Mahayagya



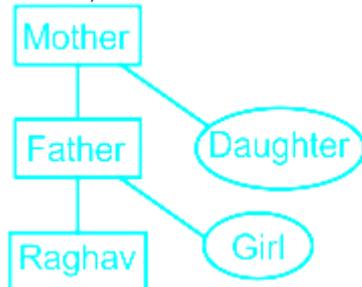
Number of consonants = 4  
 Now,  $59 + 4 = 63$   
 Hence, 63 is the correct answer.

8. Option 4 is correct  
 Atleast two means two or there. So all middle values  
 $22 + 15 + 7 + 5 = 49$

9. Correct is a. sh na pn.

S1: Indian banks are associates  
 C1: za pn ka sh  
 S2: SBI has associates banks  
 C2: pn za bi ti  
 S3: national and Indian institute  
 C3: na ha sh sn  
 S4: national has international banks  
 C4: bi na mn pn

10. Option 4 is correct  
 She (girl) is my (Raghav) father's mother's daughter's only brother's daughter, implies Raghav's father is the father of that girl. Therefore, the final family tree is as follows,



Hence, Raghav's father is the husband of the mother of girl.

11. Correct option is 3. Son in law

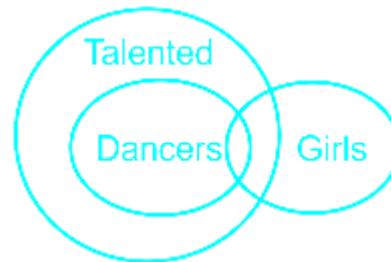
12. Correct option is 4.  
 According to the question,  $X \times (X + 1) = 1260$   
 $X^2 + X - 1260 = 0$  By solving the above equation we get,  $X = 35$   
 and  $-36 \Rightarrow X = 35$  (as X is a positive number) And,  $X + Y = 106 \Rightarrow Y = 106 - X$   
 $Y = 106 - 35 = 71$  Hence, 71 is the correct answer.

13. Option 3 : b, f, b, e, c, k, e  
 Given: b \_ c e \_ k b \_ c \_ f k b b \_ e f \_ b b c \_ f k  
 By checking options, (1) b, f, b, e, c, e, k  $\rightarrow$  b b c e f k - b b c e f k - b b c e f e - b b c k f k (2) b, e, b, f, c, k, e  $\rightarrow$  b b c e e k - b b c f f k - b b c e f k - b b c e f k (3) b, f, b, e, c, k, e  $\rightarrow$  b b c e f k - b b c e f k - b b c e f k - b b c e f k Here, 'bbcef k' is repeated (4) b, f, b, c, e, k, e  $\rightarrow$  b b c e f k - b b c c f k - b b e e f k - b b c e f k Only options (3) b, f, b, e, c, k, e forms pattern when substituted. Hence, b, f, b, e, c, k, e is the correct answer.

14. Option B. (iv) condition is not specified. So move to (b). But this is also not fulfilled so he will not be selected for any job

15. Option 4 is correct :  
 Given:  $21 : 445 :: 24 : ?$  The logic followed here is:  $21 : 445 \rightarrow 21 \times 21 + 4 = 441 + 4 = 445$  Similarly,  $24 : ? \rightarrow 24 \times 24 + 4 = 576 + 4 = 580$  Hence, 580 is the correct answer.

16. Option 5. All conclusions follow.



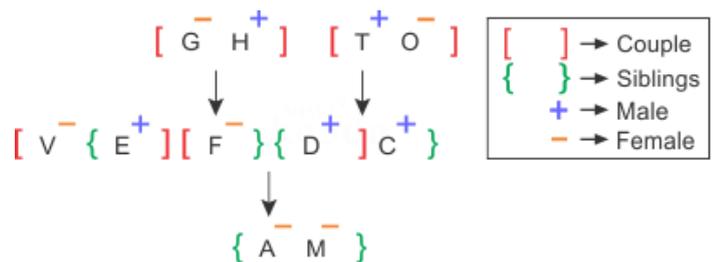
17. Option 2 is odd man out  
 The pattern followed here is: The difference between the numbers in each pair is 1234. Let's check each option:  
 $5237 : 4003 \rightarrow 5237 - 4003 = 1234$   
 $4327 : 2003 \rightarrow 4327 - 2003 = 2324$   
 $3527 : 2293 \rightarrow 3527 - 2293 = 1234$   
 $2347 : 1113 \rightarrow 2347 - 1113 = 1234$   
 Hence, 4327 : 2003 is the odd one.

18. Correct Option: A. Doctors and lawyers can be common. But, both are Professionals.  
 19. Correct Option: D. Hydrogen is a constituent of both Water and Atmosphere. Water is present in Atmosphere.  
 20. Correct Option: C. Dictionary is also a type of Book . But printer has a separate identity

21. Correct Option: B Venn Diagram Method:

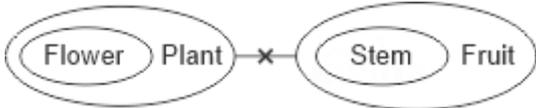


22. Correct answer B  
 23. Correct answer D  
 24. Correct answer E  
 25. Correct answer C  
 26. Correct answer D



27. Correct Option: D Venn Diagram Method:

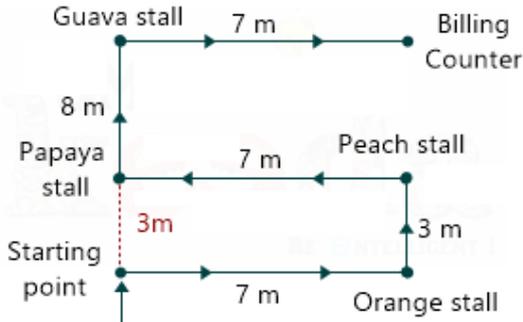
35. Correct answer 3  
Dentist : Hospital is same as Professor : University



28. Correct Option: E Venn Diagram Method:

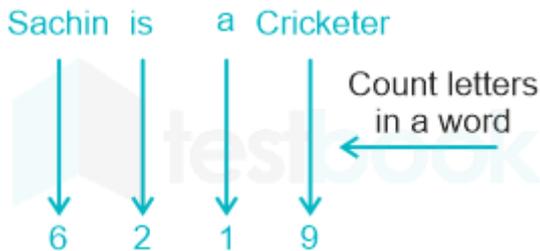


29. Correct Option: D Venn Diagram Method:



- 30. Correct answer B
- 31. Correct answer C
- 32. Correct answer A
- 33. Correct answer A

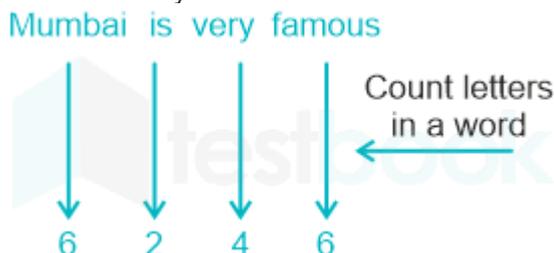
34. Correct Option: B 6219 means 'Sachin is a cricketer'



And,  
2646 means 'He played from Mumbai'



Similarly,  
'Mumbai is very famous' means ?



Hence, the correct answer is "6246".