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## LOGICAL REASONING

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**Directions for questions 1 to 5 :** Answer the following questions based on the information below.

1. Puja is the mother-in-law of Sunita who is wife of Rohit. Rohit whose father is Gajanan, is the father of Rupali. Dhanashree is the daughter of Puja.

Find how Puja is related to Rupali?

- (1) Grandson                      (2) Grandmother                      (3) Granddaughter                      (4) Aunt                      (5) Mother -in-law

2. In a class, Samiksha ranks 12th from the top. Divya is 12 ranks ahead of Medha and 5 ranks behind Samiksha. Reshma who is 7th from the bottom is 29 ranks behind Medha.

How many students are there in the class?

- (1) 61                      (2) 57                      (3) 66                      (4) 63                      (5) 64

3. There are 80 students admitted to a Music School. Some students can play only violin and some can play only harmonium. 20 children can play both violin and harmonium. If the number of students who can play violin is 30, then how many students can play harmonium? Also, how many can play only harmonium and how many can play only violin

- (1) 70, 50 and 10 respectively                      (2) 60, 45 and 12 respectively                      (3) 65, 50 and 15 respectively  
(4) 68, 48 and 10 respectively                      (5) 72, 45 and 11 respectively

4. Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).

Assertion (A): Sound travels slower in gases than in solids

Reason (R): Gases have a lower density than solids.

In light of the above statements, choose the correct answer from the options given below.

- (1) Both (A) and (R) are true and (R) is the correct explanation of (A).  
(2) Both (A) and (R) are true but (R) is NOT the correct explanation of (A).  
(3) (A) is true but (R) is false.  
(4) (A) is false but (R) is true.  
(5) Both(A) and (R) are false.

5. Given below is a statement and two assumptions. These assumptions may or may not be implicit in the statement.

**Statement:** The travel organizer has abandoned the hill trip.

Assumption I: Trip wasn't profitable for the travel organizer.

Assumption II: unsatisfactory climate lead to the abandonment of this trip.

Choose the correct option from below:

- (1) Only Assumption I follows  
(2) Only Assumption II follows  
(3) Neither Assumption I nor Assumption II follows  
(4) Either Assumption I or Assumption II follows  
(5) Both Assumption I and Assumption II follow

6. If all the letters of the word 'ALLITERATION' are arranged in the alphabetical order, then the position of how many letters will remain unchanged?

- (1) None                      (2) One                      (3) Three                      (4) Two                      (5) More than three

7. In a certain coding system, 'rbm std bro pus' means "the puppy is beautiful", 'tnh pus dim std' means 'the sparrow is red', 'pus dim bro pus cus' means 'the sparrow has the puppy'. What is the code for 'has'?

- (1) dim                      (2) pus                      (3) bro                      (4) std                      (5) cus

8. If INSTITUTE is coded as 9510292325, then the GOVERNMENT is coded as  
 (1) 5672985143 (2) 5532432892 (3) 5432876852 (4) 7645954552 (5) 75387127590
9. Rajesh is two years older than Riyansh, who is twice as old as Kailash. If the total of the ages of Rajesh, Riyansh and Kailash are 37, then how old is Riyansh?  
 (1) 12 (2) 11 (3) 14 (4) 20 (5) 16
10. In the following series, find which of the given numbers is wrong and does not follow the pattern:  
 21 105 525 2615 13125 65625  
 (1) 13125 (2) 525 (3) 65625 (4) 2615 (5) 105
11. In a certain code language, INSTITUTE is written as EOTUJUVUI.  
 How will MEDICOVER be written in that code language?  
 (1) RFEDJJOEM (2) REOJDEJFM (3) MFEJDODR (4) ROJDEFMS (5) RFEJDWFM
12. In the following question, a set of words has been given out of which four are similar and one different. Choose out the odd one.  
 A) Phi B) Gamma C) Delta D) Peso E) Beta  
 (1) A (2) B (3) C (4) D (5) E
13. N is to the East of E, G is to the South of E and L is to the West of G. N is in which direction with respect to L?  
 (1) South West (2) North West (3) South East (4) North East (5) South

**Directions for questions 14 to 18:** Answer the following questions based on the information below.

These questions are based on the following information, read the comprehension carefully to answer the given questions.  
 In a classroom, there are two rows of chairs. There are 6 seats in each row of 5 people. In row-1, Ramesh, Sunil, Rajesh, Rohit and Sandip are facing south, while in row-2, Suresh, Aman, Yash, Omkar and Raj are facing north but not necessarily in the same order.

Ramesh is sitting second to the right of Rajesh while Sunil is sitting at corner. One of the two vacant seats is in one of the corners. Rohit is sitting immediately right to Sandip. Ramesh and Omkar are related in the same manner as Aman and Rohit are related. Sunil is sitting in front of Raj. Suresh is not sitting with Aman. The person who is sitting in front of Aman, is immediately left to the Sunil. Sandip is sitting diagonally opposite to Raj.

14. Who is sitting immediately next to Suresh?  
 (1) Aman (2) Yash (3) Both Yash and Aman (4) Raj (5) Sunil
15. Who among the following is sitting immediately next to one of the vacant seats?  
 (1) Ramesh (2) Omkar (3) Rajesh (4) All Ramesh and Rajesh (5) Sandip
16. Select the pair which sits in front of vacant seats.  
 (1) Yash – Rajesh (2) Suresh -Sandip (3) Sandip -Yash (4) Raj – Sandip (5) Yash - Rohit
17. Who sits immediately next to Rajesh?  
 (1) Yash (2) Ramesh (3) Rohit (4) Sandip (5) Suresh
18. Which of the following pair/pairs sits/sit opposite each other?  
 (1) Ramesh - Aman, Rohit – Omkar (2) Sunil – Yash (3) Sunil - Yash, Sandip - Raj  
 (4) Sandip – Raj (5) Rohit Suresh, Sunil - Omkar

19. If '+' means '-', '-' means '+', 'x' means 'x' and 'x' means '+', then  $10+5\div 3-2\times 9$  is equal to  
 (1) 6 (2) 8 (3) 7 (4) 10 (5) 5
20. Look carefully for the pattern, and then choose which number comes next.  
 20, 110, 210, 320,  
 (1) 454 (2) 452 (3) 440 (4) 461 (5) 425
21. When a word and number arrangement machine is given an input line of words and numbers, it arranges them following a particular rule. The following is an illustration of input and the rearrangement.  
 INPUT-3846 9231 7283 4731 8152 3285  
 STEP I-3468 1239 2378 1347 1258 2358  
 STEP II - 1239 1258 1347 2358 2378 3468  
 STEP III-23 25 34 35 37 46  
 STEP IV - 5 7 7 8 10 10  
 Step IV is the last step of the rearrangement. As per the rules followed in the above steps, find out in each of the following questions the appropriate steps for the given input  
**Input:** 7925 4758 2538 5628 8561 7426 3625 6245 What will the addition of the numbers which is second, forth, sixth and eight from the left end in step IV?  
 (1) 32 (2) 23 (3) 38 (4) 40 (5) 28
22. Ram walks 5 km toward south and then turns to the right. After walking 6 km he turns to the left and walks 4 km. Now in which direction is he from the starting place?  
 (1) West (2) South (3) North-East (4) South-West (5) North
23. Look carefully for the pattern, and then choose which pair of numbers comes next.  
 12 16 78 22 26 78 32  
 (1) 36 78 (2) 38 75 (3) 35 77 (4) 36 75 (5) 37 79
24. Sushil is taller than Aniket and Rahil is taller than Chaitanya but shorter than vishal. Sushil is shorter than Chaitanya, so who is the tallest among them?  
 (1) Chaitanya (2) Sushil (3) Vishal (4) Aniket (5) Rahil
25. If Neetu says, "priya's father Omkar is the only son of my father-in-law Chandrakant", then how is Ruhi, who is the sister of Priya, related to Chandrakant?  
 (1) Niece (2) Daughter (3) Wife (4) Daughter-in-law (5) Granddaughter

**Directions for questions 26 to 30:** Study the following information carefully and answer the questions given below.

Eight cars viz. H1, H2, H3, H4, H5, H6, H7 and H8 are parked in two parallel rows namely Yellow line and Blue line facing towards north such that the car standing in the Blue line faces the back side of the car standing in front of it in Yellow line. Equal number of cars stand in both the rows.

H3 stands second to the left of H4, which does not stand at any extreme end. H1 and H4 stand in different rows. H5 is third to the right of H2. H8 does not stand at any of the extreme ends. H7, which stands in Blue line is opposite to H1.

26. Four of the following five are alike in a certain way and thus form a group.

Which of the following does not belong to the group?

- (1) H2 (2) H3 (3) H6 (4) H8 (5) H5

27. Which of the following cars is parked opposite to H4?

- (1) H3                      (2) H8                      (3) H5                      (4) H1                      (5) H2

28. Which of the following cars are not parked in yellow line?

- (1) H6                      (2) H2                      (3) H1                      (4) H5                      (5) H8

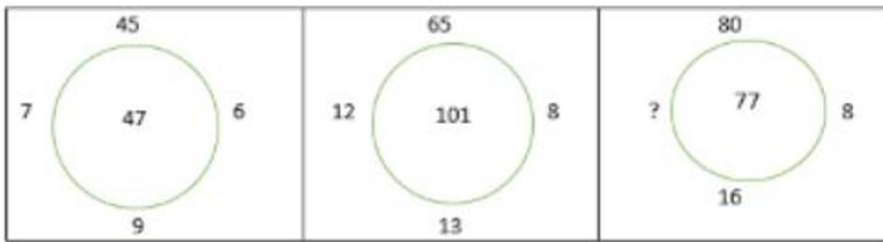
29. What is the position of H4 with respect to H3?

- (1) Immediate left                      (2) Second to the left                      (3) Second to the right  
(4) Immediate right                      (5) Both are in different rows

30. Which of the following cars stands opposite to H6?

- (1) H1                      (2) H5                      (3) H7                      (4) H4                      (5) H2

31. Find the alternative which will replace the question mark.



- (1) 12                      (2) 14                      (3) 5                      (4) 9                      (5) 3

32. If North is replaced by south-east then East will be replaced by which of the following direction?

- (1) North-east                      (2) South-east                      (3) South-west                      (4) North-west                      (5) South

33. Find the odd one from the given data.

APS, EBT, IRP, OTQ, PST

- (1) APS                      (2) EBT                      (3) IRP                      (4) OTQ                      (5) PST

34. Find the odd one out.

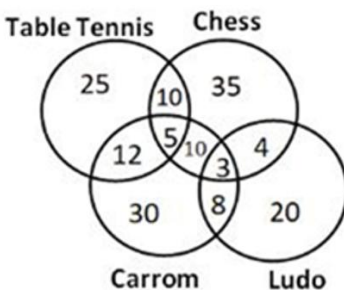
Kohima, Imphal, Indore, Ranchi, Jaipur

- (1) Indore                      (2) Jaipur                      (3) Kohima                      (4) Ranchi                      (5) Imphal

35. Ally: Foe:: Admit: ?

- (1) Repudiate                      (2) Pliant                      (3) Humorous                      (4) Indiscreet                      (5) Tedious

36. The following diagram shows the number of people who play table tennis, Chess, Carrom and Ludo. If the total number of people is 600, then what is the number of people who play Chess and Ludo but not Carrom?



- (1) 3 (2) 4 (3) 10 (4) 8 (5) 5

37. How many odd digits are there in the following series of digits, each of which is immediately preceded by an even digit, but not immediately followed by an odd digit?  
728913457589691824926

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

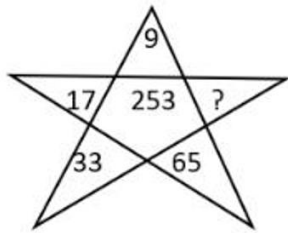
38. If 'P+Q' means P is brother of Q, 'P\*Q' means P is sister of Q, 'P-Q' means P is mother of Q and 'P@Q' means P is father of Q then which of the following is correct about E+F@G\*H?

- (1) G is mother of H (2) G is daughter of F (3) F is brother of E  
(4) E is sister of H (5) F is sister of E

39. In a certain code, "SHRIJEET" is written as "QFPGHCCR". How is "INTEREST" written in that code?

- (1) GLRCPQQR (2) BWKXUAA (3) GYQQGML (4) SHXXHLH (5) GWPPNCV

40. Find the correct alternative with will replace the question mark?



- (1) 103 (2) 129 (3) 156 (4) 98 (5) 132

**Directions for questions 41 to 45:** Study the information carefully and answer the questions given below.

Seven boxes are placed one above other, but not necessarily in the same order. Each of them is containing different food items. Box F does not contain biscuits. Box L is not placed above box G. The box which contains Chocolate is placed immediately below box F. There are two boxes placed between box G and the box which contains Chocolate. Box G is not placed above the box which contains chocolates. The box which contains burgers is placed below box G. Three boxes are placed between box M and the box which contains burgers. The box which contains Laddus is placed immediately below box M. The box which contains Samosa is placed immediately below box H. Only one box is placed between box L and box P. Neither box L nor box F contains Momos. Box P does not contain Samosa. Box H contains neither Momos nor dry fruits. The box which contains biscuits is not placed at the top. Box I does not contain Biscuit

41. Which of the following box is placed just below the box which contains Dryfruits?

- (1) P (2) H (3) G (4) L (5) I

42. How many boxes are placed between H and I?

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

43. Which of the following box contains Laddus?

- (1) H (2) G (3) L (4) P (5) I

44. Which of the following box is placed juts below the box which contains Momos?

- (1) The box which contains burgers (2) M (3) The box which contains biscuits  
(4) G (5) I

45. Which of the following box contains burgers?

- (1) M (2) I (3) G (4) H (5) F

46. How many pairs of letters (both forward and backward direction) are there in the word "STRENGTHEN" each of which have as many letters between them in the word as they have between them in the English alphabetical series?
- (1) 1                                      (2) 2                                      (3) 3                                      (4) 4                                      (5) 5
47. If all the vowels of the word "TREATMENT" are replaced by its succeeding letter according to the English alphabet and all the consonant are replaced with their previous letter according to the English alphabet and then all the letters are arranged in the alphabetical order, then how many letter are there between the third letter from the left and fourth letter from the right in the English alphabetic series?
- (1) 6                                      (2) 12                                      (3) 9                                      (4) 10                                      (5) 11
48. If in the number 546839271, 1 is added to first, third, fifth, seventh and ninth digit and 1 is subtracted from the second, fourth, sixth and eighth digits, then all digits are arranged in descending order from left to right. Which of the following digit is 4th from the right end?
- (1) 7                                      (2) 6                                      (3) 3                                      (4) 4                                      (5) 5
49. Choose the word that best completes the comparison.  
particular: fussy::\_\_\_\_\_: subservient
- (1) meek                                      (2) above                                      (3) cranky                                      (4) upright                                      (5) clever
50. If laptop is called fan, basket is called laptop, lift is called basket, fan is called book and book is called lift. Which of the following is used to go on the upper floor of the building?
- (1) Laptop                                      (2) Basket                                      (3) Book                                      (4) Fan                                      (5) Lift
51. Look carefully for the pattern, and then choose which pair of numbers comes next.  
47 26 10 13 20 16
- (1) 14 4                                      (2) 14 17                                      (3) 18 14                                      (4) 19 13                                      (5) 19 14
52. Which word does NOT belong with the others?
1. Ignore
  2. Shrug off
  3. Spurn
  4. Disregard
  5. Bloom
- (1) 1                                      (2) 2                                      (3) 3                                      (4) 4                                      (5) 5
53. Find the word that names a necessary part of the underlined word.  
Vibration
1. Motion
  2. Electricity
  3. Science
  4. Sound
  5. Electron
- (1) 1                                      (2) 2                                      (3) 3                                      (4) 4                                      (5) 5
54. Find out which of the answer choice completes the same relationship.  
Yard is to inch as quart is to
1. Gallon.
  2. Ounce.
  3. Milk.
  4. Liquid.

5. Solid

(1) 1

(2) 2

(3) 3

(4) 4

(5) 5

55. Find the word that completes the bottom row of words.

rule

command

dictate

doze

sleep

(1) snore

(2) govern

(3) awaken

(4) hibernate

(5) stringent

56. Here are some words translated from an artificial language.

tamceno means sky blue

cenorax means blue cheese

aplmrtl means star bright

Which word could mean "bright sky"?

(1) cenotam

(2) mitltam

(3) raxmitl

(4) aplceno

(5) oaplexr

57. Erratic Behavior occurs when an individual acts in a manner that lacks consistency, regularity, and uniformity. Which situation below is the best example of Erratic Behavior?

1. Fatima cannot contain her anger whenever the subject of local politics is discussed.

2. Viraj has just been told that he is being laid off. Before leaving his supervisor's office, he punches a hole in the door.

3. Rugved has visited the dealership several times, but she still cannot decide which car to buy.

4. In the past month, Sagar, who has been a model employee for three years, has repeatedly called in sick, forgotten important meetings, and been verbally abusive to colleagues.

5. Shreya cannot control her emotions whenever students discuss about Indian army.

(1) 1

(2) 2

(3) 3

(4) 4

(5) 5

58. There are 23 steps to reach a temple. On descending from the temple, Ram takes two steps in the same time Shyam ascends one step. If they start to work simultaneously, at which step will they meet each other from the bottom?

(1) 8<sup>TH</sup>

(2) 10<sup>TH</sup>

(3) 9<sup>TH</sup>

(4) 11<sup>TH</sup>

(5) 15<sup>TH</sup>

59. The film director Raturaj wants an actress for the lead role of Rosy who perfectly fits the description that appears in the original screenplay. He is not willing to consider actresses who do not resemble the character as she is described in the screenplay, no matter how talented they are. The screenplay describes Rosy as an average-sized, forty-something redhead, with deep brown eyes, very fair skin, and a brilliant smile. The casting agent has four actresses in mind.

1- Veena is a stunning red-haired beauty who is 5'9" and in her mid- twenties. Her eyes are brown and she has an olive complexion.

2- Rajani has red hair, big brown eyes, and a fair complexion. She is in her mid-forties and is 5'5".

3- Puja is 5'4" and of medium build. She has red hair, brown eyes, and is in her early forties.

4- Sulbha is a blue-eyed redhead in her early thirties. She's of very slight build and stands at 5'.

Which two actresses should the casting agent send to meet the director?

(1) Veena, Rajani

(2) Rajani, Puja

(3) Veena, Sulbha

(4) Rajani, Sulbha

(5) Puja, Sulbha

60. Statement I: Arun has four vehicles.

Statement II: Two of the vehicles are red.

Statement III: One of the vehicles is a minivan. If the first three statements are facts, which of the following statements must also be a fact?

I. Arun has a red minivan.

- II. Arun has three cars.  
 III. Arun's favorite color is red.

- (1) I only                                      (2) II only                                      (3) II and III only  
 (4) III only                                      (5) None of the statements is a known fact.

61. Four defensive football players are chasing the opposing wide receiver who has the ball. Amol is directly behind the ball carrier. Jeet and Niraj are side by side behind Amol. Nikhil is behind Jeet and Niraj. Amol tries for the tackle but misses and falls. Niraj trips. Which defensive player tackles the receiver?

- (1) Niraj                                      (2) Nikhil                                      (3) Jeet                                      (4) Amol                                      (5) Rohit

62. At the football game, Hemant was sitting in seat 253. Manoj was sitting to the right of Hemant in seat 254. In the seat to the left of Hemant was Gopal. Iqbal was sitting to the left of Gopal. Which seat is Iqbal sitting in?

- (1) 251                                      (2) 257                                      (3) 256                                      (4) 255                                      (5) 252

63. Read the information carefully and answer the questions below.

A weekly television show routinely stars six actors, Jeevan, Karan, Lalit, Manish, Nishant, and Omkar. Since the show has been on the air for a long time, some of the actors are good friends and some do not get along at all. In an effort to keep peace, the director sees to it that friends work together and enemies do not. Also, as the actors have become more popular, some of them need time off to do other projects. To keep the schedule working, the director has a few things she must be aware of:

1. Jeevan will only work on episodes on which Manish is working.
2. Nishant will not work with Karan under any circumstances.
3. Manish can only work every other week, in order to be free to film a movie
4. At least three of the actors must appear in every weekly episode.

In a show about Lalit getting a job at the same company Jeevan already works for and Karan used to work for, all three actors will appear.

Which of the following is true about the other actors who may appear?

- (1) Manish, Nishant, and Omkar must all appear.                                      (2) Manish may appear and Nishant must appear.  
 (3) Manish must appear and Omkar may appear.                                      (4) Omkar may appear and Nishant may appear.  
 (5) Only Omkar may appear

64. Next week, the show involves Nishant's new car and Omkar's new refrigerator. Which of the following is true about the other actors who may appear?

- (1) Manish, Jeevan, Lalit, and Karan all may appear.  
 (2) Jeevan, Lalit, and Karan must appear.  
 (3) Only Karan may appear.  
 (4) Only Lalit may appear  
 (5) Lalit and Karan must appear.

**Directions for questions 65 to 67:** Read the information carefully and answer the questions below.

At a small company, parking spaces are reserved for the top executives: CEO, president, vice president, secretary, and treasurer-with the spaces lined up in that order. The parking lot guard can tell at a glance if the cars are parked correctly by looking at the colour of the cars. The cars are yellow, green, purple, red, and blue, and the executives' names are Ajay, Bipin, Chetan, Damodar, and Erik.

- The car in the first space is red.
- A blue car is parked between the red car and the green car.
- The car in the last space is purple.
- The secretary drives a yellow car.
- Ajay's car is parked next to Damodar's.



- I Erik drives a green car.
- Bipin's car is parked between Chetan's and Erik's.
- Damodar's car is parked in the last space.

65. What colour is the vice president's car?

- (1) green                      (2) yellow                      (3) blue                      (4) purple                      (5) red

66. Who is the CEO?

- (1) Ajay                      (2) Bipin                      (3) Chetan                      (4) Damodar                      (5) Erik

67. Who is the secretary?

- (1) Erik                      (2) Damodar                      (3) Chetan                      (4) Bipin                      (5) Ajay

**Directions for questions 68 to :** Answer the following questions based on the information below.

Five roommates-Ranjita, Sanjana, Teena, Ujwala, and Vijita-each do one housekeeping task- mopping, sweeping, laundry, vacuuming, or dusting-one day a week, Monday through Friday.

- Vijita does not vacuum and does not do her task on Tuesday.
- Sanjana does the dusting, and does not do it on Monday or Friday.
- The mopping is done on Thursday.
- Teena does her task, which is not vacuuming, on Wednesday.
- The laundry is done on Friday, and not by Ujwala.
- Ranjita does her task on Monday

68. Where does Sanjana do the dusting?

- (1) Friday                      (2) Monday                      (3) Tuesday                      (4) Wednesday                      (5) Thursday

69. What task does Teena do on Wednesday?

- (1) vacuuming                      (2) dusting                      (3) mopping                      (4) sweeping                      (5) laundry

70. What day is the vacuuming done?

- (1) Friday                      (2) Monday                      (3) Tuesday                      (4) Wednesday                      (5) Thursday

71. What task does Vijita do?

- (1) vacuuming                      (2) dusting                      (3) mopping                      (4) sweeping                      (5) laundry

72. What day does Ujwala do her task?

- (1) Monday                      (2) Tuesday                      (3) Wednesday                      (4) Thursday                      (5) Friday

73. How many meaningful words can be formed using the 3<sup>rd</sup>, 4<sup>th</sup> 6<sup>th</sup> and 7<sup>th</sup> alphabet of the word "PUBLICATIONS"?

- (1) One                      (2) Two                      (3) None                      (4) More than three                      (5) Three

74. Given below are two statements, one is labelled as Assertion (A) and other one labelled as Reason (R).

Assertion (A): Steel is used in the construction of buildings and bridges.

Reason (R): Steel is more elastic and its elastic limit is high.

In light of the above statements, choose the most appropriate answer from the options given below.

- (1) Both (A) and (R) are correct and (R) is the correct explanation of (A).  
 (2) Both (A) and (R) are correct but (R) is the NOT the correct explanation of (A).  
 (3) (A) is correct but (R) is incorrect.  
 (4) (A) is incorrect but (R) is correct.  
 (5) Both A and R are not correct

75. Forest fires feed on decades-long accumulations of debris and leap from the tops of young trees into the branches of mature trees. Fires that jump from treetop to treetop can be devastating. In old-growth forests, however, the shade of mature trees keeps thickets of small trees from sprouting, and the lower branches of mature trees are too high to catch the flames.

This paragraph best supports the statement that

1. forest fire damage is reduced in old-growth forests.
2. small trees should be cut down to prevent forest fires.
3. mature trees should be thinned out to prevent forest fires.
4. forest fires do the most damage in old growth forests.
5. old-growth forests have a larger accumulation of forest debris.

(1) 1

(2) 2

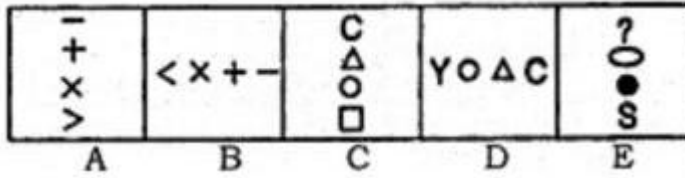
(3) 3

(4) 4

(5) 5

# ABSTRACT REASONING

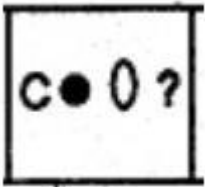
1. Which shape comes next in the sequence?



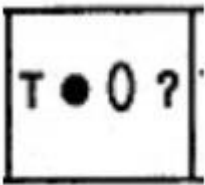
(1)



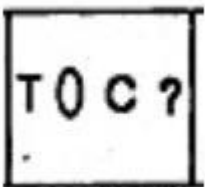
(2)



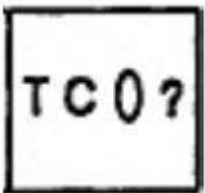
(3)



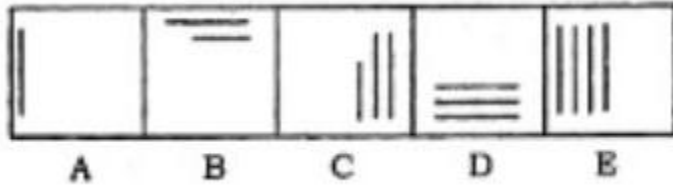
(4)



(5)



2. Which shape comes next in the sequence?



(1)



(2)



(3)



(4)



(5)



3. Find the number of triangles in following figure



(1) 27

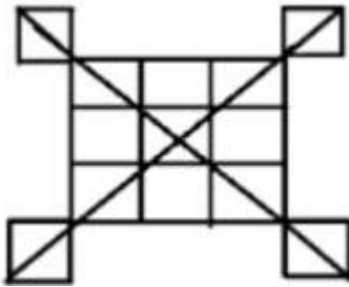
(2) 25

(3) 23

(4) 21

(5) 29

4. Find the number of triangles from the figure



(1) 20

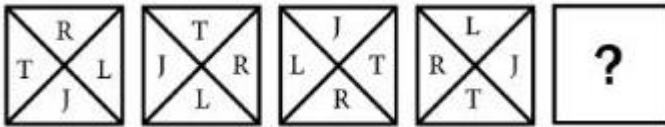
(2) 24

(3) 28

(4) 29

(5) 32

5. Select the figure that will come next in the following series.



(1)



(2)



(3)

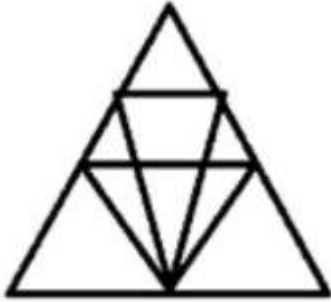


(4)



(5) Cannot be determined

6. Find the number of triangle in the given figure.



(1) 12

(2) 18

(3) 22

(4) 26

(5) 28

7. Select the correct mirror image of the given figure when the mirror is placed to the right of the figure.

64 EKPC92

(1)

29 EKPC64

(2)

29 EKPC64

(3)

29 EKPC64

(4)

29 EKPC64

(5) Cannot be determined

8. From the following, choose the alternative that correctly represents the water image of the word **NUCLEAR**

(1)

RAELCUN

(2)

RAELCUN

(3)

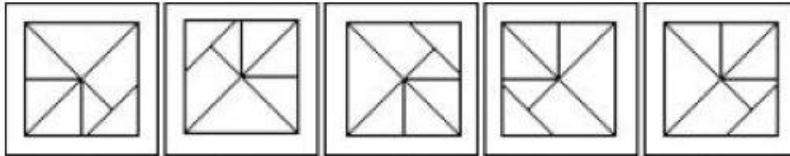
ИУСГ ЭАЪ

(4)

ИУСГ ЕАЪ

(5) No one from the above

9. Which figure is the odd one out?



A

B

C

D

E

(1) A

(2) B

(3) C

(4) D

(5) E

10. Which figure is the odd one out?



(1)

(2)

(3)

(4)

(5)

(1) 1

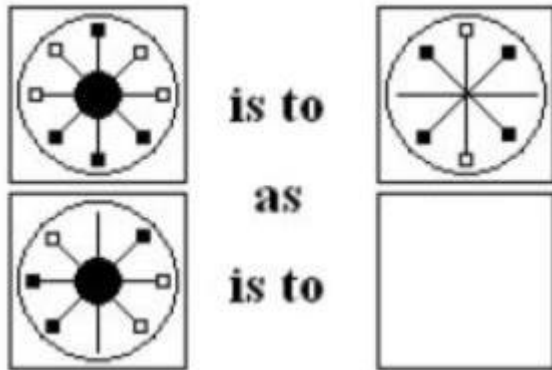
(2) 2

(3) 3

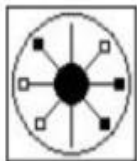
(4) 4

(5) 5

11. Which figure completes the statement?

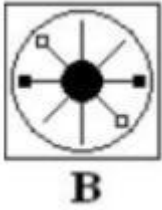


(1)

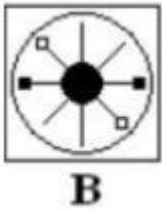


A

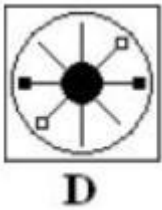
(2)



(3)

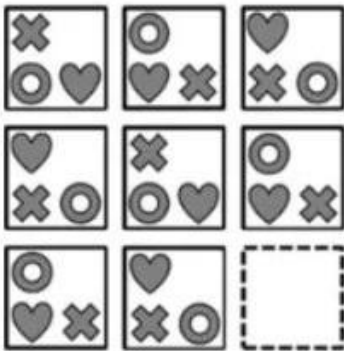


(4)



(5) Not any of the above

12. Choosing from options given which figure completes the series below?



(1)





(2)



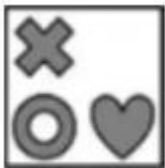
(3)



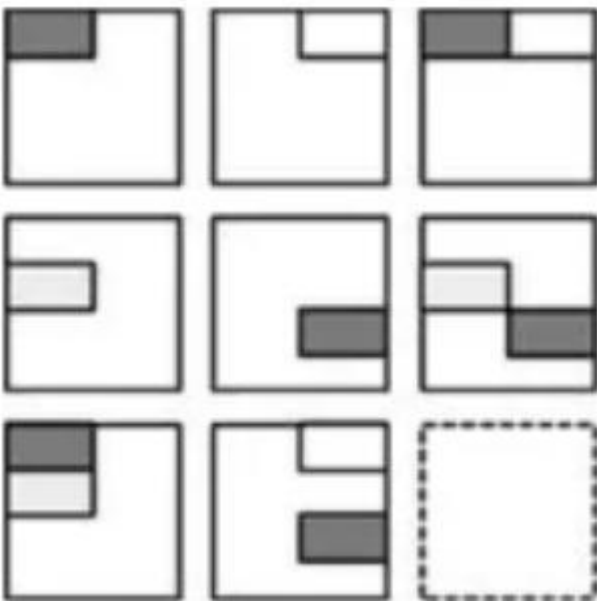
(4)



(5)



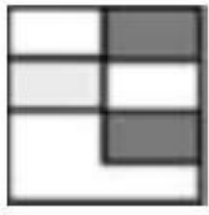
13. Choosing from options given which figure completes the series below?



(1)



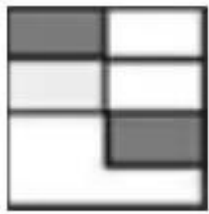
(2)



(3)



(4)



(5)



14. Choose the figure that follows from the following pattern?



(1)



(2)



(3)



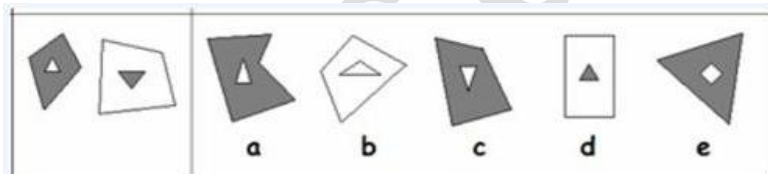
(4)



(5)



15. Which shape or pattern on the right belongs with the two on the left?



(1) a

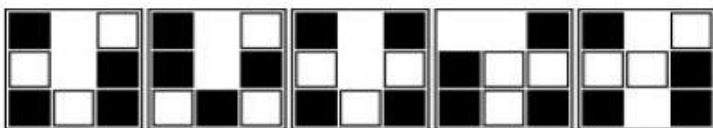
(2) b

(3) c

(4) d

(5) e

16. Which figure is the odd one out?



A

B

C

D

E

(1) E

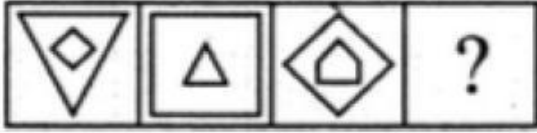
(2) A

(3) B

(4) D

(5) C

17.



(1)



(2)



(3)



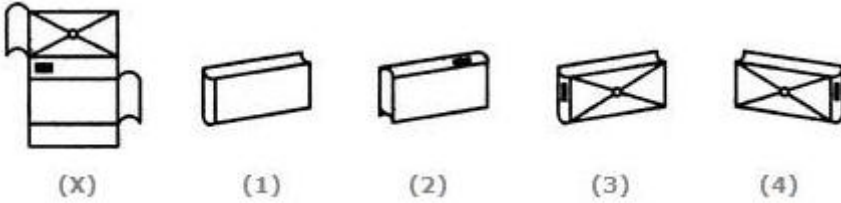
(4)



(5)

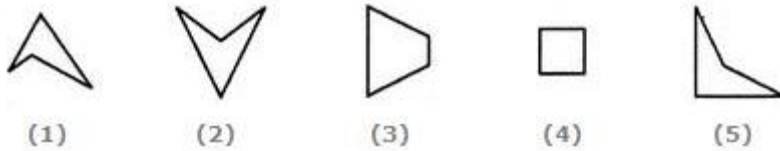


18. Which of the following finished patterns can be obtained from the piece of cardboard (X) shown below?



- (1) 1      (2) 2      (3) 3      (4) 4      (5) Not any of the above

19. Select the alternative which represents three out of the five alternative figures which when fitted into each other would form a complete square.



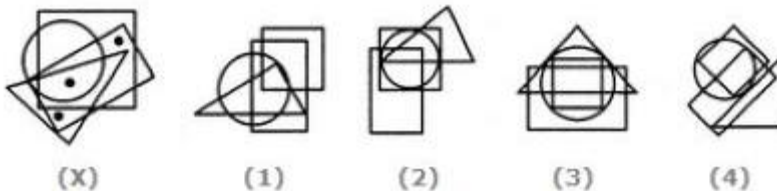
- (1) 1, 2, 4      (2) 3, 4, 5      (3) 1, 2, 3      (4) 1, 3, 5      (5) 5, 2, 4

20. Select the alternative which represents three out of the five alternative figures which when fitted into each other would form an equilateral triangle.



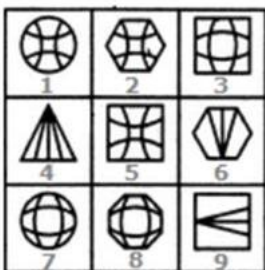
- (1) 4, 3, 2      (2) 2, 4, 5      (3) 1, 3, 4      (4) 3, 4, 5      (5) 2, 4, 5

21. Select the figure which satisfies the same conditions of placement of the dots as in Figure-X.



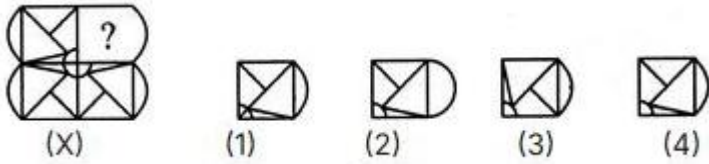
- (1) 1      (2) 2      (3) 3      (4) 4      (5) not any of the above

22. Group the given figures into three classes using each figure only once.



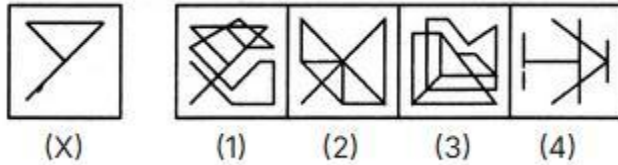
- (1) 1,2,5 3,7,8; 4,6,9      (2) 1,7,2; 3,9,6; 4,5,8      (3) 2,3,8; 4,6,9; 1,5,7  
(4) 5,6,9 3,4,1 2,7,8      (5) 4,5,8; 2,3,1 9,7,8

23. Identify the figure that completes the pattern.



- (1) 1                      (2) 2                      (3) 3                      (4) 4                      (5) All correct

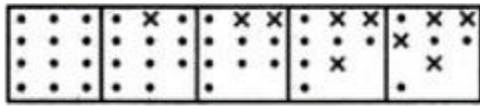
24. Find out the alternative figure which contains figure (X) as its part.



- (1) 1                      (2) 2                      (3) 3                      (4) 4                      (5) Not any of the above

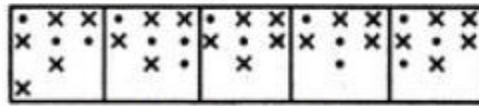
25. Select a figure from among the Answer figures which will continue the same series as established by the five Problem Figures.

Problem Figures:



(A)    (B)    (C)    (D)    (E)

Answer Figures:



(1)    (2)    (3)    (4)    (5)

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

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**QUANTITATIVE APTITUDE**


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1. Two trains P and Q start simultaneously in the opposite direction from two points A and B and arrive at their destinations 25 and 16 hours respectively after their meeting each other. At what speed does the second train Q travel if the first train travels at 100 km/h?  
 (1) 100 km/hr      (2) 125 km/hr      (3) 120 km/hr      (4) 140 km/hr      (5) 115 km/hr
2. The sum of present ages of Anish, Ajay and Anvit is 75 years. If 5 years ago the ratio of their ages was 3:4: 5, What is the present age of Ajay?  
 (1) 65 years      (2) 28 years      (3) 32 years      (4) 44 years      (5) 25 years
3. Amit cycled from his house to the garden at speed of 12 km/hr and came back to his house at the speed of 6 km/hr. if the total time taken by Amit to complete the journey was 6 hours, then find the distance between Amit's House and garden?  
 (1) 32 km      (2) 28 km      (3) 24 km      (4) 36 km      (5) 40 km
4. What is the probability of getting a red numbered card greater than 6 from a well shuffled deck of 52 cards?  
 (1)  $\frac{4}{13}$       (2)  $\frac{2}{13}$       (3)  $\frac{5}{13}$       (4)  $\frac{3}{13}$       (5)  $\frac{6}{13}$
5. A bag contains 10 black balls, 5 red balls and 5 white balls and a ball is drawn randomly from it. What is the probability of getting either a red or a white ball?  
 (1)  $\frac{1}{4}$       (2)  $\frac{1}{2}$       (3)  $\frac{3}{4}$       (4) 1      (5)  $\frac{4}{5}$
6. In how many ways can the word 'ESPECIALLY' be arranged such that the vowels always come together?  
 (1) 42600      (2) 25200      (3) 10080      (4) 30240      (5) 29242
7. The market value of a share is 35% of the face value and 30% less than the selling price. Find the profit or loss percentage.  
 (1) 50% loss      (2) 50% profit      (3) 49% profit      (4) 48% loss      (5) 45% profit
8. It was Sunday on 12 February 1882. What was the day on 12 February 1885?  
 (1) Wednesday      (2) Thursday      (3) Friday      (4) Saturday      (5) Sunday
9. The outer rolling surfaces of 8 similar small rollers, each having a radius of 9 cm and length as 12 cm are to be painted at a rate of Rs.15/cm<sup>2</sup>. What will be the total cost of painting (in Rs.)?  
 (1) 80788.7      (2) 80488.7      (3) 81280.5      (4) 81388.8      (5) 82487.2
10. A courtyard is 30 meters long and 20 meters broad and is to be paved with bricks of dimensions 15 cm by 10 cm. What will be the number of bricks required?  
 (1) 25000      (2) 30000      (3) 40000      (4) 35000      (5) 42000
11. A man invested x rupees for y years at a rate of 3.25% per annum simple interest. If he received 3.25x after y years, find the value of y.  
 (1) 68.22      (2) 67.32      (3) 65.33      (4) 69.23      (5) 71.32
12. A mixture containing 43% of acid is mixed with another mixture containing 82% acid in the ratio 10: 9. Find the percentage of acid in the mixture formed.  
 (1) 60.45%      (2) 61.25%      (3) 64.25%      (4) 63.20%      (5) 61.47%

13. Two trains cross each other at a speed of 70 kmph and 50 kmph, respectively. If the total length of both the trains is 1500m, find the time in which they will cross each other. The trains were moving in the opposite direction.  
(1) 43 seconds      (2) 41seconds      (3) 45 seconds      (4) 49 seconds      (5) 42 seconds
14. The speed of the stream is 25 kmph. The speed of the boat downstream is 15 m/s. Find the speed of the boat in still water.  
(1) 8.06 m/s      (2) 6.05m/s      (3) 5.23 m/s      (4) 7.05 m/s      (5) 8.56 m/s
15. The speeds of a, b and c are 15 m/s, 67 kmph and 1020 m/minute. If they start running in the same direction, find the maximum difference between any two of them after 8 hours, 30 minutes and 39 seconds.  
(1) 111.399 km      (2) 112. 289 km      (3) 109.243 km      (4) 108.221 km      (5) 110.606 km
16. 5 men or 7 women can do a piece of work in 28 days. Find the time required by 7 men and 5 women to complete the task.  
(1) 9 days      (2) 13 days      (3) 11 days      (4) 12 days      (5) 10 days
17. 2 pipes can fill a tank in 10 minutes together. If the efficiency of the first pipe is 8 times the efficiency of the second pipe, find the time required to fill the tank using the second pipe alone.  
(1) 88 minutes      (2) 87 minutes      (3) 89 minutes      (4) 90 minutes      (5) 93 minutes
18. Find the ratio of investment of Ajay to Vijay if Ajay invests after 6 months of Vijay's investment and Vijay invests after 3 months of commencement of business. It is known that their profit-sharing ratio after 1 year of commencement of business is 2:3.  
(1) 2:1      (2) 1:3      (3) 3:1      (4) 1:2      (5) 4:1
19. A mixture contains milk and water in a ratio of 7: 11. When 7 liters of water is added, the ratio changes to 7: 13. Find the quantity of milk in the initial mixture.  
(1) 23.5 liters      (2) 24.8 liters      (3) 22.4 liters      (4) 24.5 liters      (5) 25.3 litres
20. The cost price of an article is twice the discount. If the discount is 40% of the selling price, find the profit or loss percent.  
(1) 25% loss      (2) 25% profit      (3) 20% loss      (4) 20% profit      (5) 30% profit
21. There are 1450 cars in the factory. The factory produces 8 cars hourly. If the sales of the factory are 80 cars per day, what will be the sale percentage to the total cars held by the factory after 7 days. It is known that the factory runs 8 hours daily.  
(1) 28.60%      (2) 27.50%      (3) 29.50%      (4) 24.54%      (5) 26.74%
22. There are two children named p and q. If it is known that the ages of p and q are in a ratio of 4:20, and the sum of their ages is 10 years and 6 months. Find the age of q.  
(1) 5 years      (2) 8 years      (3) 4 years      (4) 7 years      (5) 6 years
23. The average runs scored by 3 players is 160 per match. Their runs are in a ratio 4:6:2. What will be the average if the player who scored the minimum runs hits a century in the next match and the other two play with the same runs?  
(1) 160.50      (2) 166.66      (3) 162.50      (4) 168.50      (5) 164.50
24. One-third of the sum of all prime numbers greater than 2 but less than 20, is the square of which number?  
(1) 5      (2) 6      (3) 7      (4) 8      (5) 9
25. Village P has a population of 78000, which is decreasing at the rate of 1800 per year. Village Q has a population of 54000, which is increasing at the rate of 600 per year. In how many years will the population of the two villages be equal?



- (1) 14                      (2) 15                      (3) 10                      (4) 12                      (5) 13
26. What is the value of  $[26 + \{42(23-20) + 2 - (2(5 \cdot 80 - 100)) + 16 - 4\}]$ ?
- (1) -434                      (2) 434                      (3) -443                      (4) -453                      (5) 435
27. Find the value of  $2a^3 - [3a^3 + 4a^2 - (2a^3 - 7a^3) + 5a^3 - 7a^2]$ .
- (1)  $-11a^3 + 3a^2$                       (2)  $7a^2 + 3a^3$                       (3)  $11a^3 - 3a^2$                       (4)  $-11a^3 - 3a^2$                       (5)  $11a^3 - 2a^2$
28. A drum of kerosene is  $\frac{3}{4}$  full. When 50 liters of kerosene is drawn from it, it remains  $\frac{11}{16}$  full. What is the capacity of the drum?
- (1) 900 liters                      (2) 750 liters                      (3) 800 liters                      (4) 850 liters                      (5) 875 liters
29. Sujit and Suraj each have some money. If Sujit gives Rs.10 to Suraj, then Suraj will have twice the money left with Sujit. But, if Suraj gives Rs.10 to Sujit, then they both have an equal amount of money. How much money does Sujit have?
- (1) Rs.70                      (2) Rs.80                      (3) Rs.60                      (4) Rs.50                      (5) Rs.40
30. Find the value of  $0.081^3 + 0.009^3 + 0.002187 \times 0.09$ .
- (1) 0.000729                      (2) 0.00729                      (3) 0.0000729                      (4) 0.0729                      (5) 0.729
31. A sum of Rs. 8.75 is made up of 105 coins, which are either 10 paise or 5 paise. How many 5 paise coins are there?
- (1) 40                      (2) 38                      (3) 37                      (4) 39                      (5) 35
32. Find the HCF of 405, 585, 765 and 900.
- (1) 45                      (2) 90                      (3) 35                      (4) 15                      (5) 50
33. Akshay has completely put each of three liquids, 558 liters of petrol, 682 liters of diesel and 589 liters of kerosene in bottles of equal size without mixing with any of the above three types of liquids such that each bottle is completely filled. What is the least possible number of bottles required?
- (1) 56                      (2) 59                      (3) 63                      (4) 66                      (5) 60
34. Three runners, Harshad, Aniket, and Rajesh, running around a circular track can complete one revolution in 12, 18 and 24 minutes respectively. After how many minutes will they meet at the starting point?
- (1) 70                      (2) 73                      (3) 75                      (4) 72                      (5) 76
35. Three wheels can complete 25, 21 and 16 revolutions per minute respectively. There is a red spot on each wheel that touches the ground at time zero. After how much time, all these spots will simultaneously touch the ground again?
- (1) 58 seconds                      (2) 60 seconds                      (3) 62 seconds                      (4) 59 seconds                      (5) 61 seconds
36. If X, Y and Z are three numbers, such that LCM of X and Y is X and LCM of Y and Z is Y, then find the HCF of X, Y and Z.
- (1) X                      (2) Y                      (3) Z                      (4) XY                      (5) YZ
37. How many prime numbers are less than 100?
- (1) 20                      (2) 22                      (3) 24                      (4) 25                      (5) 23
38. Find the sum of first 100 even natural numbers.
- (1) 10100                      (2) 11020                      (3) 10080                      (4) 10050                      (5) 10070
39. In how many ways the number 3234 can be written as the product of two numbers which are co-prime to each other?
- (1) 7                      (2) 9                      (3) 8                      (4) 10                      (5) 11

40. Given that,  $1^2+3^2+5^2+7^2+9^2=165$ , then what is the value of  $3^2+9^2+15^2+21^2+27^2$ ?
- (1) 1485                      (2) 1385                      (3) 990                      (4) 495                      (5) 995
41. Find the square root of  $4a^2+ 9b^2+ c^2+ 12ab - 6bc - 4ac$ .
- (1)  $2a + b - 3c$                       (2)  $2a - 3b - c$                       (3)  $2a - 3b + c$                       (4)  $2a + 3b - c$                       (5)  $2a + b - 2c$
42. If  $x + y + z = 0$ , then what is the value of  $(x + y)(y + z)(z + x)$ ?
- (1)  $x^2 + y^2 + z^2$                       (2)  $(x + y + z)^2$                       (3)  $-xyz$                       (4)  $xyz$                       (5)  $(x + y + z)^3$
43. How many numbers are there in between 55 and 3815, which are multiples of 5 and divisible by 3?
- (1) 249                      (2) 250                      (3) 251                      (4) 252                      (5) 238
44. The sum of 3 numbers in AP is 48. The sum of their squares is 800. Find the smallest number among the three numbers.
- (1) 10                      (2) 12                      (3) 11                      (4) 9                      (5) 13
45. Find the product of 968427 and 3493.
- (1) 3382715511                      (2) 3382715523                      (3) 3382756879                      (4) 3382778965                      (5) 3357729673
46. On dividing 30879 by a certain number, the quotient is 67 and the remainder is 327. Find the divisor.
- (1) 476                      (2) 456                      (3) 466                      (4) 444                      (5) 457
47. Find the remainder when  $354176-346176$  is divided by 700.
- (1) 5                      (2) 0                      (3) 2                      (4) 4                      (5) 3
48. How many factors of  $19!$  are there, whose unit digit is 5?
- (1) 1298                      (2) 1296                      (3) 1295                      (4) 1297                      (5) 1291
49. What number will replace A, if  $3313A$  is divisible by 33?
- (1) 4                      (2) 5                      (3) 2                      (4) 6                      (5) 8
50. Which of the following divides  $3^{45}+3^{46}+3^{47}+3^{48}+3^{49}$ ?
- (1) 3                      (2) 5                      (3) 2                      (4) 11                      (5) 4

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**VERBAL ABILITY**


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1. In this question, four words are given in bold. One of these words given in bold may be wrongly spelt or inappropriate. In the context of the sentence. Find out the word that is inappropriately or wrongly spelt, if any. That word is your answer. If all the words given in bold are correctly spelt or appropriate in the context of the sentence, then mark 'All correct' as your answer.

The book is **full** of **updated** and **contemporary commentary**.

- (1) full                      (2) updated                      (3) contemporary                      (4) commentary                      (5) All correct

2. In this question, four words are given in bold. One of these words given in bold may be wrongly spelt or inappropriate. In the context of the sentence. Find out the word that is inappropriately or wrongly spelt, if any. That word is your answer. If all the words given in bold are correctly spelt or appropriate in the context of the sentence, then mark 'All correct' as your answer.

We are now facing **stiff competing** from foreign companies **manufacturing similar** products.

- (1) stiff                      (2) competing                      (3) manufacturing                      (4) similar                      (5) All correct

3. In this question, four words are given in bold. One of these words given in bold may be wrongly spelt or inappropriate. In the context of the sentence. Find out the word that is inappropriately or wrongly spelt, if any. That word is your answer. If all the words given in bold are correctly spelt or appropriate in the context of the sentence, then mark 'All correct' as your answer.

Small **industries** in India are **facing huge presure**.

- (1) industries                      (2) facing                      (3) huge                      (4) presure                      (5) All correct

4. In this question, four words are given in bold. One of these words given in bold may be wrongly spelt or inappropriate. In the context of the sentence. Find out the word that is inappropriately or wrongly spelt, if any. That word is your answer. If all the words given in bold are correctly spelt or appropriate in the context of the sentence, then mark 'All correct' as your answer.

Another **benefit** is that **technology** can be quickly **adapted** to client's **needs**.

- (1) benefit                      (2) Technology                      (3) adapted                      (4) needs                      (5) All correct

5. In this question, four words are given in bold. One of these words given in bold may be wrongly spelt or inappropriate. In the context of the sentence. Find out the word that is inappropriately or wrongly spelt, if any. That word is your answer. If all the words given in bold are correctly spelt or appropriate in the context of the sentence, then mark 'All correct' as your answer.

**Traditionlly** sales get a **boost** in the **festival season**.

- (1) Traditionlly                      (2) boost                      (3) festival                      (4) season                      (5) all correct

**Directions for questions 6 to 10** Read the following passage carefully and answer the questions that follow.

There is now no denying that the new government takes office amid a clear economic slowdown. The first macro data set released showed an under-performing economy with GDP growth falling to 5.8% in the fourth quarter of 2018-19 and pulling down the overall growth for the fiscal to a five-year low of 6.8%. Growth in gross value added (GVA), which is GDP minus taxes and subsidies, fell to 6.6% in 2018-19, pointing to a serious slowdown. If further confirmation were needed, the growth in core sector output - a set of eight major industrial sectors - fell to 2.6% in April, compared to 4.7% in the same month last year. And finally, unemployment data, controversially suppressed by the Union government so far, showed that joblessness was at a 45-year high of 6.1% in 2017-18. These numbers highlight the challenges ahead in drafting the Budget for 2019-20. The economy is beset by a consumption slowdown as reflected in the falling sales of everything from automobiles to consumer durables, even fast-moving consumer goods. Private investment is not taking off, while government spending, which kept the economy afloat during the last NDA government, was cut back in the last quarter of

2018-19 to meet the fiscal deficit target of 3.4%. The good news is that inflation is undershooting the target and oil prices are on the retreat again. But the rural economy remains in distress, as seen by the 2.9% growth in agriculture last fiscal; the sector needs a good monsoon this year to bounce back. Overall economic growth in the first quarter of this fiscal is likely to remain subdued, and any improvement is unlikely until the late second quarter or the early third. There are not too many options before the new Finance Minister. In the near term, she has to boost consumption, which means putting more money in the hands of people. That, in turn, means cutting taxes, which is not easy given the commitment to rein in the fiscal deficit. In the medium term, Ms. Sitharaman has to take measures to boost private investment even as she opens up public spending again. These call for major reforms, starting with land acquisition and labour, corporate taxes by reducing exemptions and dropping rates, and nursing banks back to health. On the table will be options such as further recapitalisation of the ailing banks, and consolidation. The question, though, is where the money will come from. With tax revenues likely to be subdued owing to the slowdown, the Centre will have to look at alternative sources such as disinvestment. There may be little choice but to go big on privatisation. A rate cut by the Reserve Bank of India, widely expected this week, would certainly help boost sentiment. But it is the Budget that will really set the tone for the economy.

6. Which of the following is the closest in meaning to the word beset?
- (1) Besiege                      (2) Terminate                      (3) Filter                      (4) Tiny                      (5) Huge
7. Which of the following is/are true as per the passage?
- I. There is going to be a definite rate cut by the RBI in the coming week.  
 II. The rural economy is in better shape than the urban economy.  
 III. Government spending has increased in the last quarter of 2018-19.
- (1) Only II                      (2) Only I and II                      (3) Only I and III  
 (4) Only II and III                      (5) Not any of the above
8. Which of the following, as per the passage, indicates a slowdown in the Indian economy?
- I. Fall in sale levels of consumer durables  
 II. Negative growth in the core sector output  
 III. Fall in inflations levels
- (1) Only I                      (2) Only III                      (3) Only II                      (4) Only I and II                      (5) All I, II and III
9. As per the passage, which of the following would lead to 'putting more money in the hands of people'?
- I. Decrease in tax rates.  
 II. Increase in inflation  
 III. Increase in private investment
- (1) Only I                      (2) Only III                      (3) Only I and II                      (4) Only I and III                      (5) Only II
10. As per the passage, which of the following reforms has NOT been mentioned in the passage to improve the investment climate?
- (1) Land acquisition  
 (2) Privatization of banks  
 (3) Adjustment in the prevailing Corporate Tax Rates  
 (4) Recapitalization of banks  
 (5) All are correct
11. Which of the following sentences does not contribute to the main idea of the paragraph?
1. There is evidence that digital platforms of education are badly hurting less proficient students who need expert classroom teachers.  
 2. In the fully digital mode, students are never in the same room with their teacher, which leaves them to depend on self-study mode more.  
 3. A study showed that students on digital algebra courses learned much less than those who worked with a teacher in the classroom.

4. Digital courses have often been seen to give students an easy passing grade without teaching them important things which affect them in the long run.
  5. Digital platforms are beneficial to high achievers by providing advanced courses for knowledge enhancement.
- (1) 1                      (2) 2                      (3) 3                      (4) 4                      (5) 5

12. Which of the following sentences does not contribute to the main idea of the paragraph?

1. A new survey shows that Amazon Prime has grown much more beneficial than traditional television.
  2. The streaming of television shows and the freedom of users to choose their own shows has taken off with people.
  3. Amazon Prime provides a constantly improving content library which consists of many original series, films and comedy shows that keeps it in demand.
  4. Amazon Prime provides a facility for people to personize their own favorites and pause live TV.
  5. Despite the success of Amazon Prime, most investors are unaware of this company.
- (1) 1                      (2) 2                      (3) 3                      (4) 4                      (5) 5

13. Which of the following sentences does not contribute to the main idea of the paragraph?

1. Climate change is threatening biodiversity.
  2. Animals may struggle to survive as their habitats are disrupted.
  3. Climate change is beneficial for species adaptation.
  4. Rising temperatures are affecting ecosystems and habitats.
  5. Species extinction is a risk due to climate change.
- (1) 1                      (2) 2                      (3) 3                      (4) 4                      (5) 5

14. Which of the following sentences does not contribute to the main idea of the paragraph?

1. Social media changes how people interact with others.
  2. People use social media to share experiences and ideas.
  3. Social media has only positive effects on mental health.
  4. Comparison on social media can lead to feelings of loneliness and anxiety.
  5. Balancing online and real-life connections is important.
- (1) 1                      (2) 2                      (3) 3                      (4) 4                      (5) 5

15. Which of the following sentences does not contribute to the main idea of the paragraph?

1. Early childhood education contributes to academic and social success.
  2. Quality preschool programs help develop communication and problem-solving skills.
  3. Early education has little impact on a child's later success.
  4. Foundational skills learned early are important for future success.
  5. Early childhood education is vital for long-term academic achievement.
- (1) 1                      (2) 2                      (3) 3                      (4) 4                      (5) 5

**Directions for question 16:** Read the following passage carefully and answer the following question.

The world population is living, working, vacationing, increasingly conglomerating along the coasts, and standing on the front row of the greatest, most unprecedented, plastic waste tide ever faced. Washed out on our coasts in obvious and clearly visible form, the plastic pollution spectacle blatantly unveiling on our beaches is only the prelude of the greater story that unfolded further away in the world's oceans, yet mostly originating from where we stand: the land. For more than 50 years, global production and consumption of plastics have continued to rise. An estimated 299 million tons of plastics were produced in 2013, representing a 4 percent increase over 2012, and confirming an upward trend over the past years. In 2008, our global plastic consumption worldwide has been estimated at 260 million tons, and, according to a 2012 report by Global Industry Analysts, plastic consumption is to reach 297.5 million tons by the end of 2015. Plastic is versatile, lightweight, flexible, moisture resistant, strong, and relatively inexpensive. Those are the attractive qualities that lead us, around the world, to such a voracious appetite and over-consumption of plastic goods. However, durable and very slow to degrade, plastic materials that are used in the production of so many products all, ultimately, become waste with staying

power. Our tremendous attraction to plastic, coupled with an undeniable behavioural propensity of increasingly over-consuming, discarding, littering and thus polluting, has become a combination of lethal nature. A simple walk on any beach, anywhere, and the plastic waste spectacle is present. All over the world, the statistics are ever growing, staggeringly. Tons of plastic debris (which by definition are waste that can vary in size from large containers, fishing nets to microscopic plastic pellets or even particles) is discarded every year, everywhere, polluting lands, rivers, coasts, beaches, and oceans. Published in the journal Science in February 2015, a study conducted by a scientific working group at UC Santa Barbara's National Center for Ecological Analysis and Synthesis (NCEAS), quantified the input of plastic waste from land into the ocean. The results: every year, 8 million metric tons of plastic end up in our oceans. It's equivalent to five grocery bags filled with plastic for every foot of coastline in the world. In 2025, the annual input is estimated to be about twice greater, or 10 bags full of plastic per foot of coastline. So the cumulative input for 2025 would be nearly 20 times the 8 million metric tons estimate - 100 bags of plastic per foot of coastline in the world!

16. As per the passage, which of the following statements are true?

1. Most of the plastic present in the ocean today has originated from the land.
2. In recent years, the production of plastics has declined.
3. Plastic pollution is present on almost every beach.

(1) Only 1                      (2) Only 2                      (3) None of 1, 2 and 3                      (4) All 1, 2 and 3                      (5) Only 1 and 3

**Directions for questions 17 and 18:** Read the following passage carefully and answer the following questions.

India is considering inviting expressions of interest to sell Air India Ltd by the end of next month as the government aims to complete the transaction this year, people with knowledge of the matter said. "The government will conduct roadshows, as well as, be open to meet prospective buyers even before the expressions of interest are sought," the people said, declining to be identified as the discussions are private. "The process will likely allow the bidders to look at the accounts of the airline except for some portions that are confidential and also see the share purchase agreement," they said without providing details. "The potential bidders will have the option to make suggestions for changes in the sale terms during the process of expressing their interest in the deal," the people said. The government is looking to sell its entire stake in the carrier, they said. DS Malik, a spokesman of the Ministry of Finance, did not immediately answer two calls made to his mobile phone. Dhananjay Kumar, a spokesman of Air India, declined to comment. The plan is being prepared after the government's attempt to partially exit the carrier failed to attract any bidder last year. In her budget presentation for the current financial year, Finance Minister Nirmala Sitharaman said that the government will revive plans to sell Air India and the divestment would be part of the government's efforts to raise Rs 1,05,000 crore (\$15.3 billion) selling stakes in state-run companies. Air India, which is surviving on a Rs 30,000 crore taxpayer-funded bailout, has failed to maintain its market dominance as a slew of carriers including InterGlobe Aviation Ltd and SpiceJet Ltd started to offer ultra- cheap, on-time flights more than a decade ago. The state-run airline has total debts of \$8.4 billion and posted losses of more than Rs 7,600 crore last year, according to provisional estimates.

17. Which among the following has been shown as the main reason for the present situation of Air India in the passage?

- (1) Air India does not have enough money to survive in the long run though it is trying to find out.
- (2) Air India has lost all the deposits it had received from the government last year.
- (3) Air India is in the process of earning deposits from the depositors and investors so that they are worried about the stake sale.
- (4) Air India has got competition from other airlines and it has simply failed to live up to the same.
- (5) Not any of the above

18. Which among the following is OPPOSITE in meaning to the word Dominance as used in the passage?

- (1) Inferiority                      (2) Powerlessness                      (3) Submission                      (4) Ascendancy                      (5) Not any of the above

**Directions for questions 19 and 20:** Read the following passage carefully and answer the questions given below.

The second-largest colony of emperor penguins in the world appears to be collapsing, after rough seas drowned all of its babies three winters in a row. The Halley Bay colony once accounted for 5 to 9% of the global emperor penguin population, according to the British Antarctic Survey (BAC), which reported the catastrophe. That amounted to about 15,000 to 24,000

adult breeding pairs. But in 2016, the sea-ice platform on which the colony was raising its babies collapsed during rough weather, throwing infant penguins unable to swim into the frigid water. In 2017 and 2018, the rough weather pattern repeated itself. The birds arrive at the site from their summer sea jaunts each April to breed; for the resulting chicks to survive, the site has to remain stable throughout the Southern Hemisphere's winter, which lasts until December. By 2018, a handful of adults a "few hundred," or about 2 percent of the original population- turned up at the Halley Bay site, the researchers reported. The remaining colony appeared in disarray, with adults moving closer to the ice edge than is typical, and was difficult to count scattered among the roughened chunks of ice. The good news is that at least some of the colony appears to have moved, rather than died out. The Dawson[1]Lambton Glacier colony 34 miles (55 kilometers) to the south has significantly swelled in numbers since the devastation of Halley Bay, the BAC reported. That colony, which had hit a low of just 1,280 pairs in the 2015 season, swelled in each succeeding year. In 2016, it reached 5,315 pairs. In 2017, there were 11,117 pairs. And by 2018, a full 14,612 pairs set up camp at the site.

**19.** Which of the following is an antonym of "frigid" in the context of passage?

- (1) Flexible                      (2) Soft                              (3) Lukewarm                      (4) Rigid                              (5) Hot

**20.** Which of the following is false in the context of the passage?

- I. The Dawson-Lambton Glacier colony died due to collapse of rough sea.  
 II. The penguin birds breed during April every year.  
 III. Halley Bay colony reached 5315 pairs in 2016.

- (1) Only I                      (2) Only II                              (3) Only I and III                      (4) Only II and III                      (5) All I, II and III

**Directions for questions 21 to 25:** Read the passage and answer the questions that follow:

Once upon a time, there lived a farmer who had a little land. His name was Tuan, and he was a very kind and good-natured person. He lived in a hut on his land with his wife and children and earned by selling whatever crops he could produce on his small land. Tuan loved to help others. Whenever someone fell ill or needed something badly, Tuan was there to help that person. If someone died in the village, Tuan assisted the family members of the deceased person in whichever way he could. If anyone fell ill at night, Tuan was right beside the village doctor to help him prepare the medicines and tend to the sick. There seemed to be none who hated this man. He appeared to be loved by one and all. But there was one person who hated Tuan with all his heart. He was Juan, a neighbour of Tuan, who lived in the land next to him. A lazy person by nature, Juan hardly put in as much effort to cultivate his land as Tuan did to produce crops in his own. So, when the harvest season arrived every year, Juan found that he had very few crops to sell. Tuan, on the other hand, earned a handsome profit through the selling of his produces. One year, Juan could no longer contain his jealousy. Just days before Tuan was to reap his harvest, Juan set fire to his crops at night. Tuan was asleep at this time, and it was only the alertness of one of his other neighbors that saved much of his crops from being perished in the deadly flames of the fire that Juan had lighted. When the flames were doused, Tuan saw which direction the fire had started from. Juan's animosity towards him was unknown to Tuan. But he let the matters rest and decided to take action only if he saw Juan repeating his dastardly act once again. That year, Tuan managed to sell the rest of his crops at a good price, but he could not make much profit for a good part of his produces had been burnt. He had a heavy heart, but he did not like to tell anyone about it. Only days later, Tuan was awakened by the sound of lamentations. He went out to find a crowd beside Juan's hut. He rushed to find that Juan's son had fallen ill. He found that the village doctor was unable to provide a cure to his illness. Tuan knew what he had to do. He untied his own horse and rode it. Then he rushed to the town that was ten miles away and fetched a more experienced doctor who lived there. This doctor was able to guess the disease correctly and provided an exact cure for it. Within hours, the boy was found to sleep soundly and Tuan went with the doctor to take him back to the town. A day later, Juan went to Tuan's hut and began to weep bitterly. He confessed to his sins but was surprised when Tuan told him that he knew about it all. "You knew that I had set fire to your crops? And still you fetched the doctor for my son?" asked the astonished Juan. Tuan nodded and said, "I did what I knew was right. Could I do wrong just because you had done so?" Juan stood up and embraced Tuan. Both men were in tears and so were the others who stood by them. From that day, Juan changed himself. Within a year, he could produce much crops in his land through his hard work. When the others asked him how he had changed so much, he only replied, "It was the goodness and love of Tuan that transformed me."

**21.** Which of the following is/are true about Tuan?

- I. He was a doctor along with being a farmer.

II. He was a good-natured and kind person.

III. He was a wealthy farmer who gave away his wealth to the needy.

- (1) Only I                      (2) Only II                      (3) Only I and III                      (4) Only II and III                      (5) All I, II and III

22. Which of the following is/are a/some ways in which Juan transformed himself?

I. He began to work hard on his crops.

II. He became more helpful towards people.

III. He started a small charity in Tuan's name.

- (1) Only I                      (2) Only III                      (3) Only I and II                      (4) Only II and III                      (5) All I, II and III

23. What did Tuan do when he discovered Juan's son was ill?

(1) He called the village doctor who lived a few houses away.

(2) He went back to his house thinking Juan deserved what he got.

(3) He rode out to the nearest hospital along with Juan's son to get him treated.

(4) He went back to his house to get some medicines which could help Juan's son

(5) He rode to the nearest town to get a better doctor.

24. Which among the following is opposite in meaning to the word doused as used in the passage?

- (1) Saturated                      (2) Deluged                      (3) Wet                      (4) Lighted                      (5) All correct

25. Which of the following gave Tuan clues that Juan had set fire to his crops?

(1) Juan had dropped a lighter with his initials in the fields.

(2) Tuan had seen Juan carry kerosene earlier that evening.

(3) A neighbour saw Juan sneak out at night and set fire to the crops.

(4) The direction from which the fire had started.

(5) Both 3 and 4

26. Choose the correct preposition to complete the sentence:

What did you make..... the lecture?

- (1) in                      (2) about                      (3) on                      (4) at                      (5) of

27. Fill in the blank with the appropriate word.

I'll help him if he.....

- (1) ask                      (2) asked                      (3) will ask                      (4) asks                      (5) Not any of the above

28. Find if there is any grammatical error in any part of the sentence below and mark that part as your answer. If there is no error, mark 5 as your answer.

He loosened his temper/ whenever he knows/ things do not take place/ as per his planning.

- (1) He loosened his temper                      (2) whenever he knows                      (3) things do not take place  
(4) as per his planning                      (5) No error

29. Find if there is any grammatical error in any part of the sentence below and mark that part as your answer. If there is no error mark 5 as your answer So longer as/you are honest/and forthright, they will/support you in this task.

- (1) So longer as                      (2) you are honest                      (3) and forthright, they will  
(4) support you in this task                      (5) No error



30. Find if there is any grammatical error in any part of the sentence below and mark that part as your answer. If there is no error mark 5 as your answer.

One of the party/ members were dismissed/ for speaking against/ the leader.

- (1) One of the party                      (2) members were dismissed                      (3) for speaking against  
(4) the leader                                      (5) No error

31. Find if there is any grammatical error in any part of the sentence below and mark that part as your answer. If there is no error mark 5 as your answer.

His father promised to/ give him anything what he/ wants if he/ passes in the examination.

- (1) His father promised to                      (2) give him anything what he                      (3) wants if he  
(4) passes in the examination.                      (5) No error

32. Find if there is any grammatical error in any part of the sentence below and mark that part as your answer. If there is no error mark 5 as your answer.

Mahatma Gandhi did not solve/ all the problems of the future/ but he did solve/ problems of his own age.

- (1) Mahatma Gandhi did not solve                      (2) all the problems of the future                      (3) but he did solve  
(4) problems of his own age                      (5) No error

33. Find the correctly spelt word.

- 1) quentiscence  
2) quintecence  
3) quintissense  
4) quintecsence  
5) quintessence

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

34. The five sentences labelled (1, 2, 3, 4, 5) given in this question, when properly sequenced, form a coherent paragraph. Each sentence is labelled with a number. Decide on the proper order for the sentences and key in this sequence of five numbers as your answer.

1. Scientists have for the first time managed to edit genes in a human embryo to repair a genetic mutation, fueling hopes that such procedures may one day be available outside laboratory conditions.
2. The cardiac disease causes sudden death in otherwise healthy young athletes and affects about one in 500 people overall.
3. Correcting the mutation in the gene would not only ensure that the child is healthy but also prevents transmission of the mutation to future generations.
4. It is caused by a mutation in a particular gene and a child will suffer from the condition even if it inherits only one copy of the mutated gene.
5. In results announced in Nature this week, scientists fixed a mutation that thickens the heart muscle, a condition called hypertrophic cardiomyopathy.

- (1) 1,4,3,2,5                      (2) 1,5,3,4,2                      (3) 1,4,5,2,3                      (4) 1,3,2,5,4                      (5) 1,5,2,4,3

35. The five sentences labelled (1, 2, 3, 4, 5) given in this question, when properly sequenced, form a coherent paragraph. Each sentence is labelled with a number. Decide on the proper order for the sentences and key in this sequence of five numbers as your answer.

1. Like a driver changing tire in the middle of the highway, they hope an oncoming vehicle will not hit them before their work is done.
2. Some business executives have adapted a veil and see attitude.
3. Others are too busy bailing themselves out of trouble caused by the changes that have taken place around them to have any time to reflect on the future.
4. Like deer caught in the headlight of an oncoming truck, they risk being turn over.

5. Discussion with several executives in both situation shows that they recognize the danger is not applying them to understanding the shape of future.
- (1) 4,5,1,3,2                      (2) 5,1,4,3,2                      (3) 2,5,1,3,4                      (4) 3,4,5,2,1                      (5) 2,4,3,1,5
36. The five sentences labelled (1, 2, 3, 4, 5) given in this question, when properly sequenced, form a coherent paragraph. Each sentence is labelled with a number. Decide on the proper order for the sentences and key in this sequence of five numbers as your answer.
1. We have paid a terrible price for our education such as it.
  2. Wonder is marvellous but is also cruel, cruel, cruel.
  3. We have educated ourselves into world from which wonder has been banished.
  4. Of course wonder is costly because it is antithesis of the anxiously worshiped security.
  5. The magician world view in so far as it exists, has taken flight into science.
- (1) 2,1,5,3,4                      (2) 1,5,4,3,2                      (3) 2,1,3,4,5                      (4) 3,1,4,5,2                      (5) 4,2,1,3,5
37. The five sentences labelled (1, 2, 3, 4, 5) given in this question, when properly sequenced, form a coherent paragraph. Each sentence is labelled with a number. Decide on the proper order for the sentences and key in this sequence of five numbers as your answer.
1. People started fearing a famine.
  2. The monsoon failed and water tanks became almost empty
  3. Monsoon turned out to be unusually abundant and the danger was averted.
  4. So, no grain could be sown by the farmers in their fields.
  5. Farmers look anxiously for the next monsoon.
- (1) 5,4,1,3,2                      (2) 3,4,5,1,2                      (3) 4,2,3,5,1                      (4) 2,3,4,5,1                      (5) 2,4,1,5,3
38. Fill in the blank with the proper words given below.  
No, Rama is not at home, he..... just..... for shopping.
- (1) is/ gone                      (2) was /going                      (3) had/ gone                      (4) will have/be going                      (5) has/ gone
39. Identify the correct indirect speech form of the following sentence The old woman said to the boy, 'Please help me till he returns.'
- (1) The old woman told the boy, Please help me till he returns.'
  - (2) The old woman said that she may please help till he returns.
  - (3) The old women asked that a boy may help her till he returns.
  - (4) The old woman ordered the boy to help him till he returned.
  - (5) The old woman requested to the boy to help her till he returned.
40. Choose the correct alternative to replace the bold phrase in the following sentence.  
I cannot force her **to playing**.
- (1) In playing                      (2) For play                      (3) Over the play                      (4) With play                      (5) To play
41. Select the most appropriate meaning of the underlined idiom in the given sentence. Srilanka's problem boils down to just one thing - lack of infrastructure for agriculture.
- (1) heats up to                      (2) adapts to something                      (3) as a result                      (4) fulfills something                      (5) sums up to
42. Pick the correct grammatical sentence.
1. The bouquet of flowers were beautiful.
  2. The bouquet of flowers was beautiful.
  3. The bouquet of flowers are beautiful.
  4. The bouquet of flowers is beautifuller.
  5. The bouquet of flowers am beautifuller.

(1) 1

(2) 2

(3) 3

(4) 4

(5) 5

43. Find the most appropriate meaning of the given idiom. "Work against the clock"

- (1) work late in the night      (2) work in great hurry      (3) work against all problems  
(4) work with concentration      (5) work with dedication

**Directions for question 44:** Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in a proper sequence to form a meaningful paragraph. Then answer the question that follows.

- A. They had gone fishing in a creek deep inside the forest.  
B. A tiger killed two fishermen in the Sunderbans last Monday.  
C. But there was no trace of the missing fishermen.  
D. At last the party decided to search the creeks, where they discovered their mauled halfeaten bodies.  
E. The search party combed the regular fishing areas for two days.  
F. When they didn't return home in the evening, a search party was formed by the villagers.

44. Which of the following should be the FIFTH statement after rearrangement

- (1) A                      (2) B                      (3) C                      (4) D                      (5) E

**Directions for question 45:** Read the following passage carefully and answer the question that follows.

For generations, companies have been selling fair skin to young Indian women, promising better marriage and employment prospects. However, over the last few years, men have become a favoured target audience. This followed the realisation that the Indian alpha male, denied a choice in malespecific grooming products, had been using women's fairness creams all along. Until the mid-2000s, deodorants and shaving creams were the only grooming products advertised for men. But India's largest consumer goods companies sensed an opportunity, and launched a slew of fairness products for male consumers. In India, as in other parts of the world, light skin is the culturally accepted and endorsed form of beauty, and children absorb this message at a young age. According to a 2015 research report by Nielsen, urban Indian men believe that fair skin can improve professional prospects. The cultural pressure to look fair, argues Kiran Khalap, branding expert and founder at communications consultancy Chlorophyll, is something inherent in our society, not manufactured by companies. "And it is certainly not restricted to India: China and Japan have had skin-whitening products for centuries, well before they met Western 'white' people," he said. However, there is a growing awareness among consumers that companies are exploiting their insecurities, and critics have taken some of the biggest fairness brands, and the celebrities who endorse them, to task for their casual discrimination.

Earlier this month, Bollywood actor Abhay Deol took to Facebook to trounce his fellow actors who earn millions from endorsing fairness creams. This comes a few years after actress Nandita Das launched the "Dark is Beautiful" campaign to encourage Indians to embrace a wider definition of beauty. These efforts are slowly making a difference, increasing awareness and encouraging consumers to take pride in their natural skin tones. That means Indian companies will eventually have to change their approach. "My sense is that brands will wake up to the new reality, and you will see propositions reworked around clearer skin (and) glow, rather than pure fairness," Leo Burnett's Sinha said.

Rajesh Krishnamurthy, business head for the consumer product division at The Himalaya Drug Company, believes that over time the men's grooming category will evolve to include a wider range of products, including those for normal skin, just like in the women's skin care category. "Companies are increasingly realising that you cannot continue to bullshit consumers anymore; these are educated young men who will question what you sell to them," said Shantanu Deshpande, co-founder and CEO of the male-grooming startup Bombay Shaving Company.

45. What is the central idea of the passage?

- A. Though people endorsed skin fairness products, they are now realising that they are being taken for a ride by such products.  
B. Only men ardently use whitening creams to boost their personality.  
C. The brand marketing of fairness product companies are evolving to appease the target audience of India.  
D. Brands are frivolous when it comes to campaigning of their beauty products.  
E. Not any of the above

(1) A

(2) B

(3) C

(4) D

(5) E

**Directions for question 46:** Read the following passage carefully and answer the question that follows.

**46.** What were the findings of the 2015 research report by Nielsen?

- A. Indian urban men presumed that being fair enhanced their professional opportunities.
- B. Indian urban men believed that being fair would give them better marriage and employment contracts.
- C. Indian urban men would eventually question the logic behind male- grooming product advertisements.
- D. Indian urban men do not endorse the concept of fairness helping them in their personal and professional life.
- E. Not any of the above

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

**47.** With reference to the passage, why exactly was "Dark is beautiful" campaign initiated?

- A. To motivate Indians to ditch their liking for the fair skin and accept their inherent beauty.
- B. To throw light on the sinister intentions of fairness brands.
- C. To make sure that Indians do not fall prey to misleading beauty product advertisements.
- D. To encourage Indians to be sympathetic towards people with other skin tones.
- E. Not any of the above

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

**48.** Which of the following statements is not true with respect to the passage?

- A. Since the inception of beauty products, men have been its most targeted audience.
- B. Light skin is a culturally endorsed notion worldwide.
- C. Skin whitening products existed for centuries in China and Japan.
- D. Deodorants and shaving creams were the only grooming products advertised for men till the mid-2000s.
- E. Not any of the above

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

**49.** Choose a similar word in meaning to the word "trounce"

- A. Vacillation
- B. Temerity
- C. Lambaste
- D. Nefarious
- E. Not any of the above

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

**Directions for question 50:** Read the passage carefully and answer the question that follows.

Emotions often trump reason. The Cauvery water dispute is turning out to be less about water and irrigation and more about linguistic chauvinism and regional identity. Nothing else can explain the mindless violence in Karnataka and Tamil Nadu over the Supreme Court order asking the former to release water to the latter, keeping in view the distress situation in both States in a season of deficit rainfall. Many of the acts of violence have been perpetuated in the two states by chauvinistic, fringe organizations that have little to do with the farming community or its interests. It is clear that there is insufficient water in Karnataka's reservoirs to meet the full irrigation needs of both states. The point of the Supreme Court order was to make the States share their distress and not to magically fulfil the needs of farmers on both sides. But political parties and some media houses, especially regional language television channels, have sought to portray the issue as one that pits the people of one State against that of the other. Indeed, the two major national parties, the Congress and the Bharatiya Janata Party, have taken different stands in the two States on this issue. No party or State government appears to believe it can afford to be seen as taking even so much as a conciliatory step toward defusing the crisis. On some previous occasions when Karnataka released water in a distress year the State government did so quietly so as to not give chauvinistic elements any opportunity to inflame passions. Cauvery is an inter-State dispute, but this is no reason to turn the issue into a raging controversy that draws the peoples of the two States into confrontation!

50. What was the purpose behind the Supreme Court's order regarding Cauvery water?

- A. To solve the irrigation needs faced by the farmers of Tamil Nadu.
- B. That the two states share their distress due to shortage of water.
- C. To fulfil the needs of the farmers in both states.
- D. To solve the irrigation needs faced by the farmers of Karnataka. E. Not any of the above

(1) A

(2) B

(3) C

(4) D

(5) E

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