1. What will be next term in the following series?

A B B D C F D H E J

(1) N   (2) O   (3) K   (4) F   (5) None of these

2. How many such digits are there in the number 3246759, each of which will occupy the same position when rearranged in ascending order as in the number?

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

3. Shyam walked 6 metres facing towards East, then took a right turn and walked a distance of 9 metres. He then took a left turn and walked a distance of 6 metres. How far is he from the starting point?

(1) 15 metres   (2) 21 metres   (3) 18 metres
(4) Cannot be determined   (5) None of these

4. If the positions of the first and the sixth letters in the word CONTAGIOUS are interchanged, similarly the positions of the second and the seventh letters are interchanged and so on. Which letter will be the second to the right of the fifth letter from the right?

(1) O   (2) N   (3) I   (4) T   (5) None of these

5. How many such pairs of letters are there in the word RECRUIT, each of which has as many letters between them in the word as they have in the English alphabet?

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

Qs. 6-10. In each of the questions below are given four statements followed by three conclusions numbered I, II and III. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Statements:

6. All clouds are storms.
Some storms are cyclones.
All cyclones are thunders.
Some thunders are lightening.

Conclusions:

I. Some lightening are cyclones.
II. No lightening is cyclone.
III. Some cyclones are clouds.

(1) Only I follows   (2) Only II follows
(3) Only III follows   (4) Only either I or II follows
(5) None of these

Statements:

7. Some pins are needles.
Some needles are handles.
Some handles are locks.
Some locks are keys.

Conclusions:

I. Some keys are handles.
II. Some handles are pins.
III. Some pins are keys.

(1) None follows   (2) Only I and II follow
(3) Only II and III follow   (4) Only I and III follow
(5) All follow

Statements:

8. All hills are mountains.
All mountains are dams.
Some dams are rivers.
All rivers are lakes.

Conclusions:

I. Some hills are lakes.
II. Some dams are lakes.
III. Some dams are hills.

(1) Only I and II follow   (2) Only II and III follow
(3) Only I and III follow   (4) All follow
(5) None of these

Statements:

9. Some receipts are challans.
Some challans are papers.
Some papers are books.
All books are files.

Conclusions:

I. Some papers are files.
II. Some books are receipts.
III. No book is receipt.

(1) Only I follows   (2) Only I and II follow
(3) Only I and either II or III follow
(4) Only I and III follow   (5) None of these

Statements:

10. All bottles are jars.
All jars are containers.
All containers are lids.
All lids are caps.

Conclusions:

I. All bottles are lids.
II. All containers are jars.
III. Some lids are jars.

(1) Only I and II follow   (2) Only II and III follow
(3) Only I and III follow   (4) None follows
(5) All follow

Qs. 11-15. Each of the questions below consists of a question and three statements numbered I, II and III given below it. You have to decide the data provided in which of the statements are sufficient to answer the question. Choose your answer accordingly.

11. Among P, T, J, F and L who scored the highest?
I. P scored less than J and F.
II. T scored more than F but less than L.
III. J has not scored the highest.
(1) Only I and II (2) Only I and III
(3) Only II and either I or III
(4) Only I and either II or III
(5) All I, II and III

12. Pillar 'P' is in which direction with respect to pillar 'Q'?
I. Pillar 'M' is to the East of pillar 'T' which is to the South of pillar 'Q'.
II. Pillar 'P' is to the North of pillar 'M'.
III. Pillar 'R' is to the North of pillar 'P' and to the East of pillar 'Q'.
(1) Only I and II (2) Only I and III
(3) Only II and either I or III
(4) Only III (5) All I, II and III

13. What is the code for 'adequate' in a code language?
I. In the code language, 'rainfall is adequate' is written as 'vo al ji'.
II. In the code language, 'food is adequate' is written as 'vo ji fa'.
III. In the code language, 'food is delicious' is written as 'fa vo re'.
(1) Only I and II (2) Only II and III
(3) Only I and III (4) All I, II and III
(5) None of these

14. How is Sanjeev related to Radha?
I. Sanjeev is son of Radha's grandfather's only daughter.
II. Sanjeev has no siblings
III. Radha has only one brother.
(1) Only I and II (2) Only I and III
(3) Only II and III (4) Only I and either II or III
(5) None of these

15. How many children are there in the class?
I. Saurabh is fifth from the top if arranged in descending order of marks.
II. Sulabha who is ten ranks below Saurabh is 25th from the bottom.
III. Jatin is four ranks above Sulabha.
(1) Only I and III (2) Only II and III
(3) Only I and II (4) Any two of three
(5) None of these

Qs. 16-20. In a certain instruction system the different computation processes are written as follows:
(i) x @ y # z means x is multiplied by the sum of y and z.
(ii) x © y % z means y is divided by z and the resultant is added to square of x.
(iii) x $ y ★ z means z is subtracted from the product of x and y.
(iv) x • y ē z means z is subtracted from y and the resultant is added to x.

In each of the following questions, a set of instruction sequence is given. You are required to find out the outcome which should come in place of the question mark (?) in each of the given sets of sequence.

16. 13 @ 4 # 3 = p
p $ 5 ★ 55 = ?
(1) 45 (2) 75 (3) 340 (4) 400 (5) None of these

17. 5 © 49 % 7 = a
a • 87 ē 29 = ?
(1) 118 (2) 108 (3) 98 (4) 80 (5) None of these

18. 17 $ 4 ★ 8 = t
7 © t % 15 = ?
(1) 11 (2) 53 (3) 13 (4) 51 (5) None of these

19. m • 78 ē 56 = 50
m @ 7 # 13 = ?
(1) 560 (2) 56 (3) 280
(4) Cannot be determined (5) None of these

20. b $ 15 ★ 18 = 42
b © 36 % 9 = ?
(1) 12 (2) 16 (3) 20 (4) 18 (5) None of these

Qs. 21-25. In each of the following questions, a group of letters is to be coded by number/symbol codes as per the codes given below and the conditions that follow. In each question, a group of letters is given followed by groups of number/symbol code numbered (1), (2), (3) and (4). The correct combination of codes is your answer. If none of the four combinations is correct, your answer is (5), *i.e.* None of these.

Letter : P D A F L H M R K T B E U
Number/
Symbol Code : 3 6 # 8 $ 4 2 7 @ 9 5 1 %

Conditions: (i) If the first letter is a vowel and the last letter is a consonant, both are to be coded as '0'.
(ii) If the first letter is a consonant and the last letter is a vowel, both are to be coded as '©'.
(iii) If the first as well as the last letter are vowels, both are to be coded as the code for first letter.

21. KEDURT
(1) @16%7@ (2) 916%7@ (3) 916%79
(4) @16$79 (5) None of these

22. EDRTMP
(1) 167923 (2) 167921 (3) 067920
(4) 067923 (5) None of these

23. FHRAMU
(1) 847#28 (2) %47#28 (3) 847#2%
(4) ©47#2© (5) None of these

24. ULTPHE
(1) %$934% (2) 1$9341 (3) %$9341
(4) 1$934% (5) None of these

25. HKEDLB
(1) 5@16$4 (2) 4@16$5 (3) ©@16$4
(4) 0@16$5 (5) None of these

Qs. 26-30. Study the following information carefully and answer the questions given below:

A private bank deputed eight of its managers P, T, D, E, J, Q, M and R to different cities Bangalore, Delhi, Chennai, Hyderabad, Jaipur, Cochin, Pune and Ahmedabad for marketing of three different products X, Y and Z. The order of managers, cities and products is not necessarily the same. Each product is marketed in not less than two cities and not more than three cities.

T goes to Delhi for marketing of product Y. J goes to Hyderabad for marketing of product Z. E does not go to Bangalore or Jaipur and markets the same product as M who goes to Ahmedabad. R goes to Chennai for marketing of product Z. Same product is marketed in Bangalore and Delhi. E and Q are marketing the same product. P goes to Pune for marketing of product Z.

26. Which of the following group of managers go for marketing product 'X'?

(1) E, Q, R   (2) J, Q, M   (3) J, M, R
(4) Q, M, R   (5) None of these

27. E goes to which of the following cities?

(1) Jaipur   (2) Cochin   (3) Ahmedabad
(4) Cannot be determined   (5) None of these

28. Which of the following combination of product, manager and city is **correct**?

(1) X—Q—Jaipur   (2) X—Q—Cochin
(3) X—E—Bangalore   (4) Y—D—Cochin
(5) None of these

29. Which of the following persons go for marketing of product Y?

(1) Q, D, M   (2) Q, T   (3) T, D, Q
(4) T, D   (5) None of these

30. Who goes to Bangalore?

(1) Q   (2) M   (3) D
(4) D or Q   (5) None of these

Qs. 31-35. In the following questions, the symbols @, #, $, ★ and © are used with different meanings as explained below:

'A @ B' means 'A is neither smaller than nor equal to B'.
'A # B' means 'A is not greater than B'.
'A $ B' means 'A is neither greater than nor equal to B'.
'A ★ B' means 'A is neither greater than nor smaller than B'.
'A © B' means 'A is not smaller than B'.

Assuming the above statements to be true, you have to decide which of the conclusions is/are **definitely true** and then mark your answer accordingly.

Statements:

31. F @ J,   J # R,   R ★ L,   L © M

Conclusions:

    I. F $ R
    II. M # R
    III. M © J

(1) None is true   (2) Only I is true
(3) Only II is true   (4) Only either II or III is true
(5) All are true

Statements:

32. T # W,   W $ Q,   Q © D,   D @ J

Conclusions:

    I. J $ T
    II. T # J
    III. T $ Q

(1) Only I and III are true
(2) Only either I or II is true
(3) Only II and III are true
(4) Only III and either I or II are true
(5) None of these

Statements:

33. L # V,   V $ E,   E © U,   U @ B

Conclusions:

    I. B $ E
    II. L $ E
    III. B ★ L

(1) Only I and II are true
(2) Only III is true
(3) Only either I or II is true
(4) All are true
(5) None of these

Statements:

34. M $ T,   T ★ R,   R @ H,   H # G

Conclusions:

    I. M $ H
    II. R @ G
    III. M # R

(1) Only I is true
(2) Only II is true
(3) Only III is true
(4) All are true
(5) None is true

Statements:

35. H © R,   R @ W,   W ★ E,   J $ F

Conclusions:

    I. H @ F
    II. J $ W
    III. R @ J

(1) Only I and II are true
(2) Only II and III are true
(3) Only III is true
(4) Only either I or III is true
(5) All are true

Qs. 36-40. Study the following information carefully and answer the questions given below:

Eight persons A, B, C, D, E, F, G and H are sitting around a rectangular table in such a way that two persons sit on each of the four sides of the table facing the centre. Persons sitting on opposite sides are exactly opposite to each other.

D faces North and sits exactly opposite to H. E is to the immediate left of H. A and G sit on the same side. G is exactly opposite of B who is to the immediate right of C. A is next to the left of D.

36. Who is sitting opposite to A?

(1) G   (2) D   (3) E
(4) A   (5) None of these

37. Who is next to E in clockwise direction?

(1) G   (2) B   (3) F
(4) A or F   (5) None of these

38. Which of the following pairs of persons has both the persons sitting on the same side with first person sitting to the right of second person?

(1) DF   (2) CB   (3) FC
(4) AG   (5) None of these

39. Who is sitting opposite to E?

(1) D   (2) A   (3) F
(4) A or D   (5) None of these

40. Which of the following statements is **definitely** true?

(1) A is facing North
(2) E is sitting opposite to F
(3) F is to the left of G
(4) C is to the left of A
(5) None of these

Qs. 41-45. Below in each question are given two statements (A) and (B). These statements may be either independent causes or may be effects of independent causes or a common cause. One of these statements may be the effect of the other statement. Read both the statements and decide which of the following answer choice correctly depicts the relationship between these two statements. Mark answer:

(1) if statement (A) is the cause and statement (B) is its effect.
(2) if statement (B) is the cause and statement (A) is its effect.
(3) if both the statements (A) and (B) are independent causes.
(4) if both the statements (A) and (B) are effects of independent causes.
(5) if both the statements (A) and (B) are effects of some common cause.

41. (A) State government has ordered immediate ban on airing of certain movie channels on television.
(B) Few social activists have come together and demanded ban on telecasting 'Adult' movies on television.

42. (A) Employment scenario in the country has remarkably improved recently.
(B) The number of prospective job-seekers going abroad has increased recently.

43. (A) Government has tightened security checks at all important places and also at various public places.
(B) Incidences of terrorist attacks are increasing day by day.

44. (A) High Court has fixed a time limit for repairing all the roads in the city.
(B) Road Development Authorities in the city are carrying out road repair work on urgent basis.

45. (A) There is an outbreak of several epidemics in the country.

(B) There was a worst flood situation ever experienced in the past in most parts of the country.

Qs. 46-50. In making decisions about important questions, it is desirable to be able to distinguish between 'strong' arguments and 'weak' arguments. 'Strong' arguments are those which are both important and directly related to the question. 'Weak' arguments are those which are of minor importance and also may not be directly related to the question or may be related to a trivial aspect of the question.

Each question below is followed by two arguments numbered I and II. You have to decide which of the argument is a 'strong' argument and which is a 'weak' argument. Give answer:

(1) if only argument I is strong.
(2) if only argument II is strong.
(3) if either I or II is strong.
(4) if neither I nor II is strong.
(5) if both I and II are strong.

46. Should the teenagers be denied access to internet?
Arguments:

I. Yes, most of the children particularly the teenagers are found to be indulged in accessing pornographic contents.
II. No, denying access to internet would mean denying access to a lot of useful information, instead the access may be controlled.

47. Should computer education be made a compulsory subject at school level by the Government?
Arguments:

I. No, it may be difficult to teach computers in the schools located in rural parts of the country.
II. Yes, it is difficult to function without computer in the era of modernization.

48. Should hand baggage on all international flights be permanently banned?
Arguments:

I. No, it causes a lot of inconvenience since items of minimum requirement need to be carried during long haul flights.
II. Yes, it is necessary to ensure security of passengers on board.

49. Should all the universities in the country switch over to grade system rather than awarding marks?
Arguments:

I. Yes, with this the students falling in a particular range of marks can be treated on par.
II. No, it will be difficult to rank the students when required to be short-listed.

50. Should there be complete ban on telecast of Adult movies on television?
Arguments:

I. Yes, such movies adversely affect the children and their interests are to be given top priority.
II. No, instead they can be telecast at certain fixed time when children are generally away from home.

A word and number arrangement machine when given an input line of words and numbers rearranges them following a particular rule in each step. The following is an illustration of input and rearrangement.

Input : say dry 42 96 get 39 kite 67

Step I   : 96 say dry 42 get 39 kite 67

Step II : 96 dry say 42 get 39 kite 67

Step III : 96 dry 39 say 42 get kite 67

Step IV : 96 dry 39 say 67 42 get kite

Step V : 96 dry 39 say 67 get 42 kite

Arrangement in Step V is the final arrangement and Step V is the last step.

You have to answer the questions by following the same rules as illustrated above.

51. Which step will be the last step of an input for which third step is "91 go 28 mock pet 43 lead 37"?

(1) Eighth   (2) Seventh

(3) Sixth   (4) Fifth

(5) None of these

52. If the second step of an input is "52 at deep follow 41 16 road 32", what will be the fifth step?

(1) 52 at 16 road 32 deep follow 41

(2) 52 at 16 road 41 deep follow 32

(3) 52 at 16 road 32 follow 41 deep

(4) There will be no such step

(5) None of these

53. If the third step of an input is "65 daily 12 tie 42 23 foreign urgent" what will be definitely the input?

(1) foreign 65 tie urgent 12 42 23 daily

(2) foreign 65 urgent tie 42 daily 23 12

(3) foreign 65 12 urgent tie 42 daily 23

(4) Cannot be determined

(5) None of these

54. If the second step of an input is "76 from 48 super itself 56 18 went", how many more steps will be required to complete the arrangement?

(1) Five   (2) Six   (3) Four

(4) Three   (5) None of these

55. What will be the third step if the input is "thirty days from now 32 56 87 24"?

(1) 87 thirty days from now 32 56 24

(2) 87 days thirty from now 32 56 24

(3) 87 days 24 thirty from now 32 56

(4) 87 thirty 24 days 32 from now 56

(5) None of these

Qs. 56-60. In each question below is given a statement followed by two courses of action numbered I and II. A course of action is a step or administrative decision to be taken for improvement, follow-up or further action in regard to the problem, policy, etc. On the basis of the information given in the statement, you have to assume everything in the statement to be true, then decide which of the suggested courses of action logically follow(s) for pursuing. Give answer:

(1) if only I follows.

(2) if only II follows.

(3) if either I or II follows.

(4) if neither I nor II follows.

(5) if both I and II follow.

Statement:

56. All resident doctors in Government Hospitals have gone on mass casual leave in protest against the Government's new reservation policy.

Courses of action:

I. The Government should call a meeting of the representatives of the resident doctors and request them to resume their duties.

II. The Government should order strict action against striking doctors if they do not resume duties immediately.

Statement:

57. Air pollution level in the city is observed to be rising up day by day.

Courses of action:

I. City development authorities should offer incentive for those who are sharing a private vehicle.

II. City development authorities should impose heavy taxes on use of individual private vehicle.

Statement:

58. Many students are unable to cope up with the pressure of examinations and results and commit suicide.

Courses of action:

I. Education department should consider reforms in examination system.

II. Examining authorities should partially do away with written examinations and instead give weightage to test the practical knowledge through other modes of assessment.

Statement:

59. Cases of robbery while travelling in public transport have increased substantially in the recent past.

Courses of action:

I. Adequate number of security guards should be deployed in all public transport vehicles immediately.

II. People should be advised to refrain from carrying highly valuable articles while travelling by public transport system.
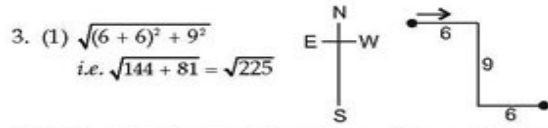
Statement:

60. There is an overall outbreak of epidemics of water-borne diseases in the State as an after effect of recent floods.
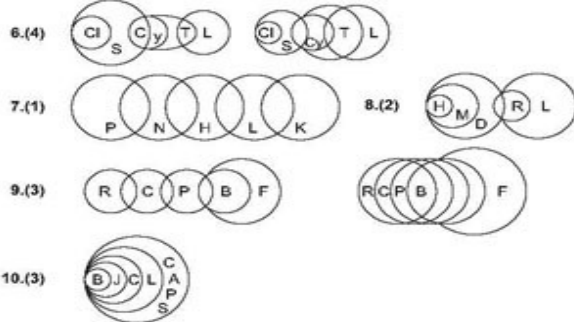
Courses of action:

I. The civic authorities should advise the people to use water purifiers before using drinking water and also advise them to maintain overall cleanliness in the locality.

II. The civic authorities should instruct the water supply department to add extra purifying elements to the water tanks before supplying to the public.

Qs. 61-75. In each of the questions given below which one of the five answer figures on the right should come after the problem figures on the left, if the sequence were continued?

PROBLEM FIGURES   ANSWER FIGURES

1. (4) There are two series, A, B, C, D, E, F and B, D, F, H, J.
2. (3) 4 and 9.

3. (1) $\sqrt{(6+6)^2 + 9^2}$
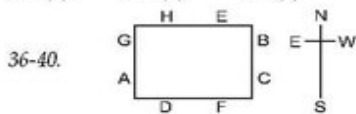   i.e. $\sqrt{144 + 81} = \sqrt{225}$

4. (2) The set of the second half letters will come in the beginning. GIOUSCONTA   L – R
5. (2) E and I.
6-10. Consider all probabilities and make Venn diagrams to reach a fool-proof conclusion.

6.(4)

7.(1)   8.(2)

9.(3)

10.(3)

11. (5)   12. (4)   13. (2)
14. (5) Only I   15. (3)
16. (4) $13 \times (4 + 3) = 91$; $(91 \times 5) - 55 = 400$.
17. (5) $5^2 + (49 \div 7) = 32$; $32 + (87 - 29) = 90$.
18. (2) $(17 \times 4) - 8 = 60$; $7 + (60 \div 15) = 53$.
19. (1) $28 + (78 - 56) = 50$; $28 \times (7 + 13) = 560$.
20. (3) $(4 \times 15) - 18 = 42$; $4^2 + (36 \div 9) = 20$.
21. (5)   22. (3)   23. (4)   24. (1)   25. (2)

City	Banga-lore	Delhi	Chennai	Hydera-bad	Jaipur	Cochin	Pune	Ahmeda-bad
Person	D	T	R	J	Q	E	P	M
Product	Y	Y	Z	Z	X	X	Z	X

26. (5)   27. (2)   28. (1)   29. (4)   30. (3)
31. (4)   32. (4)   33. (1)   34. (3)   35. (5)

36-40.

36. (5)   37. (2)   38. (4)   39. (3)   40. (2)
41. (5)   42. (1)   43. (2)   44. (1)   45. (2)
46. (2)   47. (5)   48. (1)   49. (5)   50. (4)

51-55. The logic is, fix highest no. (96) at 1st place, without changing order of others and then alphabetically the lowest word (dry) in Step 2. After that lowest no. (39) and highest word in Step 4 (like say). In Step 5 next highest no. and lowest word and so on ......

51. (2) Given Step III—91 go 28 mock pet 43 lead 37
    Step IV—91 go 28 pet mock 43 lead 37
    Step V—91 go 28 pet 43 mock lead 37
    Step VI—91 go 28 pet 43 lead mock 37
    Step VII—91 go 28 pet 43 lead 37 mock.
    Arrangement in Step VII is the final arrangement. So Step VII is the last Step.
52. (2) Given Step II—52 at deep follow 41 16 road 32
    Step III—52 at 16 deep follow 41 road 32
    Step IV—52 at 16 road deep follow 41 32
    Step V—52 at 16 road 41 deep follow 32
53. (4) In this type of problems—going back is not possible. So, input cannot be determined.
54. (3) Given Step II—76 from 48 super itself 56 18 went
    Step III—76 from 18 48 super itself 56 went
    Step IV—76 from 18 went 48 super itself 56
    Step V—76 from 18 went 56 48 super itself
    Step VI—76 from 18 went 56 itself 48 super
    Arrangement completes in Step VI—it means 4 more Steps are required to complete the arrangement.
55. (3) Input: thirty days from now 32 56 87 24
    Step I—87 thirty days from now 32 56 24
    Step II—87 days thirty from now 32 56 24
    Step III—87 days 24 thirty from now 32 56

56. (1)   57. (4)   58. (3)   59. (5)   60. (5)
61. (1)   62. (2)   63. (3)   64. (5)   65. (2)
66. (4)   67. (2)   68. (4)   69. (2)   70. (2)
71. (5)   72. (2)   73. (1)   74. (1)   75. (4)