Test-I Quantitative Aptitude

Directions (Q. 1-5): In each of the following number series only one number is wrong. Find put that wrong number.

1. **3   5   11   29   87   314**
   - (a) 87
   - (b) 11
   - (c) 29
   - (d) 314
   - (e) None of these

2. **12   13   20   48   112   237**
   - (a) 13
   - (b) 237
   - (c) 20
   - (d) 48
   - (e) None of these

3. **8.1   9.2   17.3   26.5   43.8   71.5   114.1**
   - (a) 17.3
   - (b) 26.5
   - (c) 43.8
   - (d) 9.2
   - (e) None of these

4. **10   16   48   320   4864   154628**
   - (a) 154628
   - (b) 4864
   - (c) 320
   - (d) 16
   - (e) None of these

5. **48   24   72   34   108   54**
   - (a) 54
   - (b) 34
   - (c) 72
   - (d) 108
   - (e) None of these

Directions (Q. 6-10): Study the information carefully to answer the following questions.

A school consists of 2500 students. The ratio of boys to girls is 3 : 2. All the students are involved in five different games, viz Hockey, Boxing. Tennis, Football and Volleyball. 28 per cent of the girls are in Hockey. 16 per cent of the boys are in Tennis. One-fifth of the boys are in Volleyball. The ratio of girls to boys in Tennis is 2 : 3. 25 per cent of the total number of students are in Boxing. Girls in Volleyball are 60 percent of the boys in the same game. 22 per cent of the girls are in Football. The remaininggirls are in Boxing. 18 per cent of the boys are in Hockey and the remaining in Football.

6. **Number of boys in Hockey forms what per cent of the number of girls in the same game? (rounded off to two digits after decimal)**
   - (a) 96.43
   - (b) 103.70
   - (c) 80.36
   - (d) 117.43
   - (e) 128.91

7. **What is the number of girls in Boxing?**
   - (a) 180
   - (b) 220
   - (c) 160
   - (d) 200
   - (e) None of these

8. **Number of boys in Boxing forms what per cent of the total number of the students in the School?**
   - (a) 10.8
   - (b) 9
   - (c) 12
   - (d) 16
   - (e) 18.6

9. **What is the total number of girls in Tennis and Volleyball together?**
   - (a) 380
   - (b) 340
   - (c) 400
   - (d) 320
   - (e) None of these

10. **What is the number of boys in Football?**
    - (a) 300
    - (b) 270
    - (c) 240
    - (d) 225
    - (e) None of these

Directions (Q. 11-15): What approximate value should come in place of the question mark (?) in the following equations.

11. **$872.905 \div 9.013 \div 1.898 = ?$**
    - (a) 194
    - (b) 50
    - (c) 102
    - (d) 55
    - (e) 72

12. **$\sqrt[3]{86300} = ?$**
    - (a) 51
    - (b) 35
    - (c) 53
    - (d) 38
    - (e) 44

13. **$0.493 \times 1.864 \times 3.554 = ?$**
    - (a) 3.5
    - (b) 6.5
    - (c) 4.8
    - (d) 5.2
    - (e) 6.9

14. **$\dfrac{?}{2.951} \div \dfrac{55.985}{13.010} = 2.167$**
    - (a) 35
    - (b) 40
    - (c) 16
    - (d) 26
    - (e) 18

15. **$948.991 - 621.052 + ? = 723.486$**
    - (a) 305
    - (b) 416
    - (c) 396
    - (d) 348
    - (e) 443

Directions (Q. 16-20): In each of the following questions two equations I and II are given. You have to solve both the equations and Give answer

   - (a) if $x > y$
   - (b) if $x \le y$
   - (c) if $x < y$
   - (d) $x \ge y$
   - (e) $x = y$ or relationship between x and y cannot be established

16. I. $6x^2 + 13x + 5 = 0$
    II. $9y^2 + 22y + 8 = 0$

17. I. $4x + 2y = 51$
    II. $15y + 13x = 221$

18. I. $(x + y)^2 = 784$
    II. $92551 = 92567 - y$

19. I. $9x^2 + 3x = 38$
    II. $6y^2 + 34 = 29y$

20. I. $x^2 + 91 = 20x$
    II. $10y^2 - 29y + 21 = 0$

21. **A basket contains 6 red, 5 green and 8 blue balls. If four balls are picked at random, what is the probability that all four of them are either red or any two out of the four are green?**
    - (a) $\dfrac{5}{1292}$
    - (b) $\dfrac{925}{3876}$
    - (c) $\dfrac{359}{1938}$
    - (d) $\dfrac{11}{3876}$
    - (e) none of these

22. **Satish invests Rs 35,500 in a scheme which earns him simple interest @ 15 p.c.p.a. for two years. At the end of two years he reinvests the principal amount plus interest earned in another scheme which earns him compound interest @ 20 p.c.p.a.**

What will be the total interest earned by Satish over the principal amount at the end of 5 years?
(a) Rs. 30,956.80   (b) Rs. 35,017.20
(c) Rs. 43,597.80   (d) Rs. 44,247.20
(e) None of these

23. 12 men can complete apiece of work in 36 days. 18 women can complete the same piece of work in 60 days. 8 men and 20 women work together for 20 days. If only women were to complete the remaining piece of work in 4 days, how many women would be required?
(a) 70   (b) 28   (c) 66   (d) 40
(e) None of these

24. The number obtained by interchanging the two digits of a two-digit number is less than the original number by 27. If the difference between the two digits of the number is 3, what is the original number?
(a) 74   (b) 63   (c) 85
(d) Cannot be determined (e) None of these

25. A train running at the speed of 20 metres/second crosses a pole in 24 seconds less than the time it requires to cross a platform thrice its length at the same speed. What is the length of the train?
(a) 270 metres   (b) 340 metres
(c) 180 metres   (d) Cannot be determined
(e) None of these

Directions (Q. 26-30): Each of the questions below consists of a question and two statements numbered I and II. You have to decide whether the data provided in the statemen Is are sufficient to answer the question. Read both the statements and give answer

(a) if the data in Statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.
(b) if the data in statement II alone are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.
(c) if the data either in statement I alone or in statement 11 alone are sufficient to answer the question.
(d) if the data in both the statements I and II together are not sufficient to answer the question.
(e) if the data in both the statements I and II together are necessary to answer the question.

26. What is Niddi's age?

I. Niddi is 3 times younger than Rani.
II. Surekha is twice the age of Rani and the sum of their ages is 72.

27. What is the ratio of the total number of girls to the total number of boys in a school?
I. The ratio of the total number of boys to the total number of girls last year was 4 : 5.
II. There are 3500 students in the school, out of which 60% are boys.

28. What is the speed of a bus?
I. The bus covers a distance of 80 km in 5 hrs.
II. The bus covers a distance of 160 km in 10 hrs.

29. What is the ratio of the number of freshers to the number of seniors in a college.
I. The ratio of males and females in the college is 2 : 3
II. There are 1125 female freshers in the college.

30. What is Mr Mehta's present income?
I. Mr Mehta's income increases by 10% every year.
II. His income will increase by Rs 2,500 this year.

31. In how many different ways can the letters of the wore 'CREAM'be arranged?
(a) 480   (b) 120   (c) 260   (d) 25
(e) None of these

32. What will be the difference between the simple interes and compound interest accrued on an amount of Rs 19,200 at the end of 3 years at the rate of 12 p.c.p.a?
(a) Rs. 722.6826   (b) Rs. 802.5144
(c) Rs. 862.6176   (d) Rs. 798.1824
(e) None of these

33. A 240-metre long train crosses a platform in 20 secc-as What is the speed of the train?
(a) 10 metre/second   (b) 12 metre/second
(c) 18 metre/second   (d) Cannot be determined
(e) None of these

34. The number obtained after interchanging the of a two-digit number is greater than the original mesa by 9. If the sum of the two digits of the number b what is the original number?
(a) 67   (b) 58   (c) 76
(d) Cannot be determined (e) None of these

35. The average of the ages of a man and his daughter is 34 years. Ifthe respective ratio oftheir ages four years from now is 14 : 5, what is the daughter's present age?
(a) 12   (b) 18   (c) 10
(d) Cannot be determined (e) None of these

Test-II Reasoning Ability

Directions (Q. 36-40): Study the following information carefully and answer the given questions.

Eight friends A, B, C, D, E, F, G and H are sitting in a straight line facing north. H is on the immediate right of D, who is not at the end of the row. B is on the immediate left of E but B is neither a neighbour of A nor sits at the ends of the row. C and E are not adjacent to each other. There are three persons between B and H. A is adjacent to F, who is on the immediate left of C. G is second to the left of 11 and is on the immediate right of E.

36. **Which of the following statements is true?**
(a) B is in the middle of the row.
(b) H is at the right end of the row.
(c) A is second to the left of B.
(d) All are true
(e) None of these

37. **Which of the following pairs sit at the ends of the row?**
(a) BH (b) FC (c) AH (d) CB
(e) None of these

38. **If C faces south then how many persons will be sitting to the right of C?**
(a) One (b) Two (c) Three (d) Four
(e) None of these

39. **If A is related to H and F is related to D in a certain way, then, following the same way, C is related to which of the following?**
(a) H (b) B (c) G (d) E
(e) None of these

40. **Which of the following persons sits second to the right of B?**
(a) A (b) C (c) D (d) G (e) H

Directions (Q. 41-45): Study the following information carefully and answer the given questions.

H, I, J, K, L, M, N and P are eight family members sitting around a circle facing the centre but not necessarily in the same order. There are five females and three males in the family. L sits second to the right of his sister and on the immediate left of his wife. J sits third to the right of L. M sits second to the right of her husband P, who is not an immediate neighbour of his sister K. I sits second to the right of H and has two children. N is not an immediate neighbour of L but son of P. P sits second to the right of L, who is brother of K.

41. **How many sons does L, have?**
(a) One (b) Two (c) None
(d) Can't be determined (e) None of these

42. **Who among the following sits second to the right of I?**
(a) P (b) J (c) N (d) K
(e) None of these

43. **How is K related to J?**
(a) Aunt (b) Sister (c) Mother (d) Father
(e) None of these

44. **Which of the following groups represents the group of females?**
(a) I, K, L (b) H, N, J (c) H, J, I
(d) M,K,N (e) None of these

45. **Which of the following statements is true?**
(a) H is son of L (b) K is brother-in-law of I
(c) M is sister of K (d) I is mother of H and J
(e) None of these

46. India's talented young batsmen face a different challenge. They arc confronted by the toughest task in cricket — adjusting from low-bouncing pitches to strips that encourage the faster bowlers to try their luck by banging a few in their half of the wicket.
Which of the following occasions is most likely to have elicited this statement?
(a) A new Indian cricket team has been selected.
(b) Majority of the Indian cricket team consists of fast bowlers.
(c) The Indian cricket team has gone on a foreign tour.
(d) There has been inconsistency of talent in the Indian cricket team.
(e) None of these

47. As the countdown begins for Nissan Motor India's ambitious launch of Datsun brand, which aims to take on Maruti Suzuki's Alto and Hyundai Eon head-on, the Japanese carmaker has begun a road show covering 100 locations spread over 10 weeks.
Which of the following can best be concluded from the above statement?
(a) The marketing blitz is one of the largest in the Indian automobile industry in recent times.
(b) The average car buyer in India will have plenty to choose from.
(c) There will be an encouraging response from the car buyers.
(d) The company wants to reach out to prospective first-time car buyers across the country who could touch and feel the car before closing the purchase.
(e) None of these

48. It took the soaring rhetoric of US President Barack Obama — in his eulogy to Mandela — to finally bury the embarrassing legacy of American policy towards the South African leader during his lifetime. It has taken a black president of the US to make amends for treating Mandela as an enemy, long after the Cold War had ended. Which of the following can be the best reason for the assertion made in the above statement?
(a) Mandela was opposed to racism.
(b) Obama is opposed to racism.
(c) The Cold War has now ended.
(d) US Presidents are entitled to change their foreign policy.
(e) None of these

49. The alarming surge in the incidence of crimes committed by juveniles — National Crime Research Bureau data shows a majority of juveniles involved in crimes are 16 to 18 years of age — calls for urgent and considered action. Studies have shown that children are now attaining maturity earlier.
Which of the following inferences can be made in the above situation?
(a) Manipulation in date of birth should not be allowed by certificate-issuing authorities:

(b) There should be uniformity in our laws on the age of majority.

(c) Blanket protection should not be extended to all juveniles below 18 years of age.

(d) Juveniles involved in heinous crimes are different from children in need of care and protection.

(e) None of these

50. **A hung verdict is just that: divided and unclear. And Party X would be quite justified in querying why, despite its consistent stand on governing only in case of a clear verdict, should the onus of forming the government be laid at its door.**
Which of the following assumptions is implicit in the above statement? (An assumption is something supposed or taken for granted.)

(a) Party X does not have a clear majority.

(b) Party X is the single largest party in the house.

(c) Party X is not the single largest party in the house.

(d) Both (a) and (b)

(e) Both (a) and (c)

51. How many such pairs of letters are there in the word INTEREST each of which has as many letters between them in the word as in the English alphabetical series?

(a) None   (b) One   (c) Two   (d) Three

(e) More than three

52. How many meaningful English words can be formed with the letters MLEI using each letter only once in each word?

(a) One   (b) Two   (c) Three   (d) None

(e) None of these

Directions (Q. 53-58): Study the following information carefully and answer the given questions.

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 the input and its rearrangement:

Input : success cause 81 follow 25 related 31 give 19 35

Step I : 31 cause 81 follow 25 related give 19 35 success

StepII : 31 25 cause 81 follow give 19 35 related success

Step III : 3125 35 cause 81 give 19 follow related success

Step IV: 31253581 give 19 cause follow related success

Stcp V : 3125 35 81 19 give cause follow related success

Step VI: 4 7 8 9 10 give cause follow related success

Step VI is the last step of the rearrangement of the above input.

As per the rules followed in the above steps, find out in each of the questions the appropriate step for the given input.

Input: inflation 92 73 loan 68 price economic 58 79 credit 69 service

53. How many steps will be required to complete the arrangement of the above input?

(a) Five   (b) Six   (c) Seven   (d) Eight

(e) None of these

54. If'inflation' is related to '73' and 'economic' is related to '58', in the same way 'service' is related to which of the following in Step III?

(a) price   (b) 68   (c) loan   (d) 79

(e) None of these

55. Which of the following would be at the 6th position from the left in Step IV?

(a) loan   (b) 79   (c) price   (d)16

(e) None of these

56. What will be the position of'credit' in Step II?

(a) 9th from the left   (b) 6th from the right

(c) 5th from the right   (d) 7th from the left

(e) None of these

57. How many words/numbers are there between '58' and 'price'in Step III?

(a) One   (b) Two   (c) Three   (d) None

(e) None of these

58. Which of the following steps would be the last step one?

(a) 111   (b) IV   (c) V   (d) VI

(e) None of these

Directions (Q. 59-60): Study the following information carefully and answer the given questions:

There are six letters O, R, U, D, N and A which are arranged in a particular manner such that A is placed fourth to the ofN. O is notpiaced immediately next to either A or N. B letters R and U are placed immediately next to O. D is ni the left end of the row.

59. Which of the following pairs sits at the extreme end the row?

(a) OD   (b) AD   (c) NA   (d) DN

(e) None of these

60. Which of the following meaningful words will be formed after arrangement?

(a) DAROUN   (b) ARDOUN

(c) AROUND   (d) ARUNOD

(e) None of these

Directions (Q. 61-65): Study the following information carefully and answer the given questions.

In a certain code language, "the economic growth of India' is written as "fa di ga hi na', 'high price low growth state' is written as 'ha ga ta sa ka', 'growth of the united state' is written as .'ta hi fa ga la' and 'high inflation in India' is written as 'di ha ja pa'.

61. What is the code for 'economic'?

(a) fa   (b) na   (c) hi   (d) di

(e) None of these

62. 'ta' is the code for

(a) growth   (b) of   (c) state   (d) the

(e) None of these

63. 'high rate in india' can be coded as

(a) si di paha   (b) padihasa

(c) ha pa ga fa   (d) ha na pa di

(e) None of these

64. **What is the code for 'price'?**
(a) sa   (b) ha   (c) ta   (d) ka
(e) Either ka or sa

65. **'low price in economic' can be coded as**
(a) na pa ka la   (b) pa sa na ja
(c) ka sa na pa   (d) Can't be determined
(e) None of these

Directions (Q. 66-70): In each question below arc given two/three statements followed by two conclusions numbered I and 11. You have to take the given statements to be true even if they seem to be at variance with 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. Give answer

(a) if only conclusion I follows.
(b) if only conclusion II follows.
(c) if either conclusion I or II follows.
(d) if neither conclusion I nor II follows.
(e) if both conclusions I and II follow.

66. **Statements : Some glasses are cups.**
     All cups are balls.
     No ring is a ball.
Conclusions : I. Some glasses are balls.
     II. No cup is a ring.

(67-68):
Statements : No cat is a dog.
     No dog is a monkey.
     Some monkeys are rats.

67. **Conclusions: I. No cat is a monkey.**
     II. Some rats are not dogs.

68. **Conclusions : I. Some rats are monkeys.**
     II. Some monkeys are cats.

(69-70):
Statements: All books are goods.
     All goods are bags.
     Some bags are luggages.

69. **Conclusions : I. No bag is a book.**
     II. Some books are luggages.

70. **Conclusions : I. Some goods are luggages.**
     II. Some luggages are bags.

Test-III English Language

Directions (Q. 71-79): Read the passage carefully and answer the questions given below it.

The Reserve Bank of India (RBI) stipulated that debit cards would be issued to customers having Savings Bank and Current Accounts but not to cash credit or loan account holders.

Banks may issue only online debit cards, including co-branded debit cards where there is an immediate debit to the customers' account, and where straight-through processing is involved, RBI said.

"Banks are, henceforth, not permitted to issue offline-debit cards. Banks which are now issuing offline debit cards may conduct a review of their offline debit card operations and discontinue operations of such cards within a period of six months from the date of this circular," RBI said in a notification to all banks.

Banks were also asked to ensure that customers were duly informed regarding switching over to online debit cards. However, till such time-as offline cards were phased out, the outstanding balances/unspent balance stored on the cards would be subject to computation of reserve requirements.

"No bank shall despatch a card to a customer unsolicited, except in the case where the card is a replacement for a card already held by the customer," it added.

Each bank shall make available to the cardholders, in writing, a set of contractual terms and conditions governing the issue and use of such a card. These terms shall maintain a fair balance between the interests of the parties concerned and shall be expressed clearly.

"The terms shall specify that the bank shall be responsible for direct losses incurred to a cardholder due to a system malfunction directly within the bank's control."

However, the RBI said that banks would not be held liable for any loss caused by a technical breakdown of the payment system if the breakdown of the system was recognisable for the cardholder by a message on the display of the device or otherwise known. The responsibility of the bank for the non-execution or defective execution of the transaction is limited to the principal sum and the loss of interest subject to the provisions of the law governing the terms.

With a view to reducing the instances of misuse of lost/stolen cards, the apex bank asked banks to issue cards with photographs of the cardholder or any other advanced methods that may evolve from time to time.

Banks should undertake review of their operations/issue of debit cards on a half-yearly basis. The review would include, inter alia, card usage analysis, including cards not used for long durations due to their inherent risks.

Banks were asked to ensure to put in place an effective mechanism for redressal of customer complaints. "The name, designation, address and contact number of important executives as well as the grievance redressal officer of the bank may be displayed on the website."

Further, the RBI said that there should be a system of acknowledging customers' complaints for follow-up, such as complaint number/docket number.

71. **Which of the following can be inferred on the basis of the guidelines issued by the RBI through its latest notification, as mentioned in the given passage?**
(A) Banks which are still issuing offline debit cards should review their offline debit card operations

and discontinue such operations with immediate effect.

(B) No bank will issue offline debit cards henceforth.

(C) Banks may issue MICR cheques to such customers as have not been issued online debit cards till the date of the latest notification.

(a) Only (A) and (C)   (b) Only (B) and (C)

(c) Only (C)   (d) All (A), (B) and (C)

(e) Only (B)

72. **What instruction(s) has/have been given to banks regarding the contractual terms and conditions governing the issue and use of debit cards?**

(a) No bank shall divulge the internal policy of banks to any of its customers.

(b) Each bank shall make available to the cardholders, in writing, a set of terms and conditions governing the issue and use of such a card.

(c) The terms and conditions will be prepared in such a manner as to benefit the banks.

(d) The terms and conditions should be prepared in duplicate and a copy thereof should be dispatched to the RBI.

(e) All the above

73. **Which of the following is/are true in the context of the passage?**

(a) Bank shall be responsible for the loss incurred to a cardholder if it is caused due to the malfunctioning of a device which is directly within the control of banks.

(b) Banks would be held responsible for any loss caused by a technical breakdown of the payment system if the breakdown of the system was recognisable for the cardholder by any means.

(c) Banks would be liable to compensate the loss incurred to a cardholder only up to the extent of principal sum. if the fault lies on the part of a bank.

(d) Only (a) and (b)

(e) Only (a) and (c)

74. **What has the apex bank asked other banks to do to reduce the instances of misuse of lost or stolen cards?**

(A) Issue cards bearing the thumb impression recognisable to the device.

(B) Issue cards acceptable to a device with two different pin numbers.

(C) Issue cards with photographs of the cardholders.

(a) Only (A)   (b) Only (B)

(c) Only (C)   (d) All (A), (B) and (C)

(e) None of these

75. **What instruction regarding outstanding balances stored on the cards have been issued by the central bank of India?**

(a) All outstanding balances stored on the cards be transferred to the RBI within a period of six months.

(b) All such balances be paid to the concerned customers.

(c) All such balances be accounted for in sundry receipt account,

(d) All such balances would be subject to computation of reserve requirements.

(e) None of these

76. **Find the correct statement (s) on the basis of the given passage.**

(A) As per the latest amendment, customers holding fixed deposits of larger amount would be issued smart cards.

(B) The RBI stipulated that debit cards would be issued to customers who have any type of bank accounts.

(C) It will be a prerogative of banks to issue only online debit cards including co-branded debit cards where there is an immediate debit to customer's account and where straight-through processing is involved.

(a) Only (B)   (b) Only (C)

(c) Only (A)   (d) Only (B) and (C)

(e) Only (A) and (C)

77. **What suggestion(s) has/have been made by the RBI for the redressal of customer's complaints?**

(a) Every bank should engage an employee who will listen to customer's complaints and reply suitably.

(b) A centralised customer grievance redressal should be opened jointly by banks.

(c) Full details of grievance redressal officers and important executives of the bank should be displayed on the website.

(d) A fortnightly review of the customer complain:? should be undertaken and the steps taken in this regard should be intimated to the head office of the concerned bank along with audit compliance report.

(e) All the above

78. **In order to have experience regarding the functioning of the debit cards, what instructions have been issued to banks by the RBI?**

(A) The review undertaken by bank should include card usage analysis.

(B) The cards not used for long duration should also be taken into consideration while undertaking review of debit cards.

(C) Banks should undertake review of their operation of issue of debit cards on a half-yearly basis.

(a) Only (A) and (B)   (b) Only (B) and (C)

(c) Only (A) and (C)   (d) All (A), (B) and (C)

(e) Only (C)

79. **The main issue dealt with in the given passage is**

(a) redressal of customer's complaints

(b) review of offline debit cards

(c) terms and conditions for debit card users and banks

(d) the responsibility of the bank

(e) norms for issuing debit cards

Directions (Q. 80-85): In each of the following questions four words arc given of which two are most nearly the same or opposite in meaning. Find the two words which are most nearly the same or opposite in meaning and And the number of the correct letter combination.

80. (A) Confusing   (B) Irritating
     (C) Bewildering   (D) Dictating
     (a) A-B   (b) A-C   (c) A-D   (d) B-C
     (e) B-D

81. (A) Melodious   (B) Witty
     (C) Loony   (D) Eccentric
     (a) A-B   (b) B-C   (c) C-D   (d) A-D
     (e) B-D

82. (A) Robust   (B) Pesky
     (C) Annoying   (D) Abhorring
     (a) A-B   (b) C-D   (c) A-C   (d) B-D
     (e) B-C

83. (A) Bridled   (B) Hurled   (C) Abusive (D) Unchecked
     (a) A-B   (b) B-C   (c) C-D   (d) A-D   (e) B-D

84. (A) Awesome   (B) Nomadic
     (C) Blushing   (D) Shameless
     (a) A-B   (b) B-C   (c) C-D   (d) A-C   (e) B-D

85. (A) Curb   (B) Courage   (C) Control (D) Identity
     (a) A-B   (b) B-C   (c) C-D   (d) A-C   (e) B-D

Directions (Q. 86-90): Rearrange the following seven sentences (A), (B), (C), (D), ((e), (F) and (G) in the proper sequence to form a meaningful paragraph and then answer the questions given below.

(A) This is the reason for more urine output and frequent urination under very cool conditions and winter.

(B) There is not any sweating or evaporation losses.

(C) But during winter, the surrounding temperature becomes very low.

(D) In order to maintain the blood pressure normal, the excess water along with the wastes is excreted mostly in the form of urine.

(E) Moreover, to keep the body temperature constant, the blood pressure is increased.

(F) During summer, when the surrounding temperature is high, we lose water in the form of sweat - direct evaporation - considerably.

(G) The result is that our body gets warmed up.

86. **Which of the following should be the FIRST sentence after rearrangement?**
     (a) A   (b) F   (c) C   (d) D   (e) G

87. **Which of the following should be the THIRD sentence after rearrangement?**
     (a) G   (b) E   (c) A   (d) B   (e) D

88. **Which of the following should be the FOURTH sentence after rearrangement?**
     (a) E   (b) B   (c) D   (d) C   (e) A

89. **Which of the following should be the LAST (SEVENTH) sentence after rearrangement?**
     (a) B   (b) C   (c) G   (d) E   (e) A

90. **Which of the following should be the SECOND sentence after rearrangement?**
     (a) F   (b) D   (c) C   (d) G   (e) B

Directions (Q. 91-100): In the following passage, some of the words have been left out, each of which is indicated by a number. Find the suitable word from the options given against each number and fill up the blanks with appropriate words to make the paragraph meaningful.

Ironically, the most shocking thing about the spot-fixing **(91)** that has rocked the Indian Premier League is that it may not have come as a rude shock to too many in the game. For, the moral **(92)** of IPL's **(93)** - packaging dumbed-down entertainment as sport with the sole aim of making money -had left plenty of room for shady dealings of this kind. Hannah Arendt's famous phrase, the **(94)** of evil, may not be out of place in the context of the popular league and the **(95)** cloud of corruption under which it has **(96)**.

Three players of the Rajasthan Royals team and a number of bookmakers have been arrested but when the whole **(97)** is focused **(98)** on crass commerce, it is only a matter of time before a few of those involved in it lose their moral compass. The utter lack of **(99)** in the IPL did come to light a few years ago and the Board of Control for Cricket in India (BCCI) **(100)** responded by pointing a finger at the man, Lalit Modi, whose brainchild the league was.

91. (a) even   (b) scandal   (c) matter   (d) incident
     (e) accident

92. (a) blank   (b) depletedness
     (c) vacuousness   (d) destitute
     (e) exhaustion

93. (a) program   (b) venue   (c) programme
     (c) placard   (e) agenda

94. (a) form   (b) resource   (c) nuance   (d) banality
     (e) affect

95. (a) black   (b) white   (c) mephitic
     (d) important   (e) attraction

96. (a) prospered   (b) augment
     (c) decayed   (d) yielded
     (e) blossomed

97. (a) ballgame   (b) enterprise
     (c) endeavour   (d) engagements
     (e) campaign

98. (a) astigmatically   (b) imprudent
     (c) practically   (d) myopically
     (e) unsagaciously

99. (a) opacity   (b) transparency
     (c) faithlessness   (d) translucency
     (e) accuracy

100. (a) anticipated   (b) forcibly
      (c) never   (d) ever
      (e) predictably

✍ **ANSWER KEY**

1. (a)	**2.** (c)	**3.** (e)	**4.** (a)	**5.** (b)	**6.** (a)	**7.** (c)	**8.** (e)	**9.** (b)	**10.** (d)
11. (b)	**12.** (e)	**13.** (a)	**14.** (d)	**15.** (c)	**16.** (e)	**17.** (a)	**18.** (c)	**19.** (b)	**20.** (a)
21. (b)	**22.** (d)	**23.** (a)	**24.** (d)	**25.** (e)	**26.** (e)	**27.** (b)	**28.** (c)	**29.** (d)	**30.** (e)
31. (b)	**32.** (c)	**33.** (d)	**34.** (a)	**35.** (e)	**36.** (b)	**37.** (c)	**38.** (b)	**39.** (c)	**40.** (d)
41. (c)	**42.** (b)	**43.** (a)	**44.** (c)	**45.** (d)	**46.** (c)	**47.** (b)	**48.** (b)	**49.** (c)	**50.** (a)
51. (e)	**52.** (b)	**53.** (b)	**54.** (c)	**55.** (a)	**56.** (c)	**57.** (b)	**58.** (c)	**59.** (b)	**60.** (c)
61. (b)	**62.** (c)	**63.** (a)	**64.** (e)	**65.** (c)	**66.** (e)	**67.** (a)	**68.** (a)	**69.** (d)	**70.** (b)
71. (e)	**72.** (b)	**73.** (a)	**74.** (c)	**75.** (d)	**76.** (b)	**77.** (c)	**78.** (d)	**79.** (e)	**80.** (b)
81. (c)	**82.** (e)	**83.** (d)	**84.** (c)	**85.** (d)	**86.** (b)	**87.** (d)	**88.** (a)	**89.** (e)	**90.** (c)
91. (b)	**92.** (c)	**93.** (e)	**94.** (d)	**95.** (c)	**96.** (a)	**97.** (b)	**98.** (d)	**99.** (b)	**100.** (e)

Hint & Solutions

1. Here, $3 \times 1.5 + 0.5 = 5$
$$5 \times 2 + 1 = 11$$
$$11 \times 2.5 + 1.5 = 29$$
$$29 \times 3 + 2 = 89$$
$$89 \times 3.5 + 2.5 = 314$$

Hence, in the given series 87 is a wrong number and should be replaced by 89.

2. Here,
$$12 + 1^3 = 13$$
$$13 + 2^3 = 21$$
$$21 + 3^3 = 48$$
$$48 + 4^3 = 112$$
$$112 + 5^3 = 237$$

Hence, in the given series 20 is a wrong number and should be replaced by 21.

3. Here,
$$8.1 + 9.2 = 17.3$$
$$9.2 + 17.3 = 26.5$$
$$17.3 + 26.5 = 43.8$$
$$26.5 + 43.8 = 70.3$$
$$43.8 + 70.3 = 114.1$$

Hence, the wrong number is 71.5. It should be replaced by 70.3.

4. Here
$$10 + 2 - 4 = 16$$
$$16 \times 4 - 16 = 48$$
$$48 \times 8 - 64 = 320$$
$$320 \times 16 - 256 = 4864$$
$$4864 \times 32 - 1024 = 154624$$

hence, the wrong number is 154628. It should be replaced by 154624.

5. Here,
$$48 \div 2 = 24$$
$$24 \times 3 = 72$$
$$72 \div 2 = 36$$
$$36 \times 3 = 108$$
$$108 \div 2 = 54$$

Hence, the wrong number is 34. It should be replaced by 36.

6. No. of girls in Hockey $= 1000 \times \dfrac{28}{100} = 280$

No of boys in Hockey $= 1500 \times \dfrac{18}{100} = 270$

$\therefore$ reqd% $= \dfrac{270}{280} \times 100 = 96.428 = 96.43$

7. No. of girls in Boxing
$$= 1000 - (280 + 160 + 180 + 220) = 1000 - 840 = 160$$

8. No. of boys in Boxing $= 625 - 160 = 465$

$\therefore$ reqd% $= \dfrac{465}{2500} \times 100 = 18.6$

9. No. of girls in Tennis $= 160$

$\Rightarrow$ No. of girls in Volleyball $= \dfrac{300 \times 160}{100} = 180$

$\therefore$ Required number $= 160 + 180 = 340$

10. No. of boys in Football
$$= 1500$$
$$= (240 + 300 + 465 + 270)$$
$$= 1500 - 1275 = 225$$

11. $872.905 \div 9.013 \div 1.898 \approx 872 \div 9 \div 2 \div 49$

12. Note that $30^3 = 27,000$
$$40^3 = 64,000$$
$$50^3 = 1,25,000$$

Hence, the value of $\sqrt[3]{86300}$ will be lie between 40 and 50. Hence, we have only one such option Therefore, opt 5) as answer.

13. $0.493 \times 1.864 \times 3.554$
$$\approx 0.5 \times 1.9 \times 3.5 \approx 3.325$$

14. $\dfrac{?}{2.951} \div \dfrac{55.985}{13.010} = 2.167 \approx \dfrac{?}{3} \times \dfrac{13}{56} = 2.2$

$\therefore \qquad ? \approx \dfrac{3 \times 56 \times 2.2}{13} \approx 28.43$

15. $? = 723.486 + 621.052 - 948.991$
$$\approx 723 + 621 - 948 \approx 396$$

16. I. $6x^2 13x + 5 = 0$
$$6x^2 + 3x + 10x + 5 = 0$$

$$3x(2x+1)+5(2x+1)=0$$
$$(3x+5)(2x+1)=0$$
$$\therefore \qquad\qquad x=\frac{-5}{3}\text{ or }\frac{-1}{2}$$

II. $9y^2+22y+8=0$
$$9y^2+18y+4y+8=0$$
$$9y(y+2)+4(y+2)=0$$
$$(9y+4)(y+2)=0$$
$$\therefore \qquad\qquad y=\frac{-4}{2}\quad\text{ or }\quad -2$$

Thus, from I and II the relationship between x and y can't be established.

17. $4x+2y=51$ \hfill ...(i)
$$13x+15y=221 \hfill …(ii)$$
From (i) and (ii), we get
$$x=9.5\text{ and }y=6.5$$
$$\therefore \qquad\qquad x>y$$

18. **From I : We get**
$$(x+y)=\pm\sqrt{784}=\pm28$$
From II : we get
$$y=92567-92551=16$$
Now, using I, we get
$$y>x,\quad\text{ie}\quad x<y.$$

19. I. $8x^2+3x-38=0$
$$8x^2-16x+19x-38=0$$
$$8x(x-2)+19(x-2)=0$$
$$(8x+19)(x-2)=0$$
or, $\qquad\qquad x=\dfrac{-19}{8}\text{ or }2$

II. $6^2-29y+34=0$
$$6y^2-12y-17y+34=0$$
$$6y(y-2)-17(y-2)=0$$
$$(6y-17)(y-2)=0$$
$$y=\frac{17}{6}\quad\text{ or }\quad 2$$

Thus, from I and II, we get Hence, $x\le y$.

20. I. $x^2-20x+91=0$
$$x^2-13x-7x+91=0$$
$$x(x-13)-7(x-13)=0$$
$$(x-7)(x-13)=0\quad\text{or,}\quad x=7\quad\text{or}\quad 13$$
II. $10y^2-29y+21=0$
$$10y^2-15y-14y+21=0$$
$$5y(2y-3)-7(2y-3)=0$$
$$(5y-7)(2y-3)=0$$
$$y=\frac{7}{5}\quad\text{ or }\quad\frac{3}{2}$$
Thus, from I and II we get $x>y$.

21. **The required probability**
$$=\frac{{}^6C_4+{}^5C_2.{}^6C_1.{}^8C_1+{}^5C_2.{}^6C_2+{}^5C_2.{}^8C_2}{{}^{19}C_4}$$
$$=\frac{15+480+150+280}{3876}=\frac{925}{3876}$$

22. **The required total interest**
$$=35{,}500\times\frac{130}{100}\times\frac{120}{100}\times\frac{120}{100}\times\frac{120}{100}-35{,}500$$
$$=\frac{15+480+150+280}{3876}=\frac{925}{3876}$$

22. **The required total interest**
$$=35{,}500\times\frac{130}{100}\times\frac{120}{100}\times\frac{120}{100}\times\frac{120}{100}-35{,}500$$
$$=35{,}500\times1.3\times1.2\times1.2\times1.2-35{,}500$$
$$=79{,}747.2-35{,}500=\text{Rs. }44{,}247.2$$

Note that during the first two years Satish gets an interest equal to 30% of the total sum invested. And during the last three years he gets an interest equal to 72.8% of the total sum invested.

Hence, he will get an interest equal to 1.2464 times of the sum during the five years because
$$1\times\frac{130}{100}\times\frac{172.8}{100}-1=1.2464$$
Thus, the required interest
$$=35500\times1.2464$$
$$=\text{Rs. }44247.20$$

23. **From the first statement, it is obvious that $432(=12\times36)$ men can complete the piece of work in one day. Again, from the second statement, we come to know that 1080 women can complete the same piece of work in one day.**

From the above information it is clear that the efficiency of one man is equal to the efficiency of 2.5 women.
$$\left(\begin{array}{l}\text{OR, }12\times36\,\text{M}=18\times60\,\text{W}\\[4pt]\Rightarrow\ \dfrac{\text{M}}{\text{W}}=\dfrac{18\times60}{12\times36}=2.5\end{array}\right)$$

Now, 8 men + 20 women
$$=8\times2.5\text{ women}+20\text{ women}$$
$$=40\text{ women}$$
Now, during 20 days, the 40 women complete the work equal to 800 women in one day.

Thus the remaining work is equal to the work of $(1080-800=)$ 280 women working in one day.

Since the remaining work needs to be finished in 4 days, the required number of women $=280\div4=70$

24. **The possible numbers can be as follows :**
96, 85, 74, 63, 52 and 41.

25. **We have**
$$\frac{4\text{L}}{20}-\frac{\text{L}}{20}=24$$
$$[\text{when L}=\text{Length of the train}]$$
Solving the above equation, we get
$$\text{L}=\frac{24\times20}{3}=160\text{ metres}$$

26. **Statement II :**
Let the age of Rani $=x$ years
$$\therefore \qquad\text{Age of Surekha}=2x\text{ years}$$
$$\text{Sum of their ages}=72$$

$$x = 18 \, \text{yrs}$$

Statement I :

$$\text{Niddi's age} = 3 \, \text{times younger than Rani}$$
$$= \frac{18}{3} = 6 \, \text{years.}$$

27. **Statement II :**

$$\text{Required ratio} = \frac{\text{No. of girls}}{\text{No. of boys}} = \frac{1400}{2100}$$
$$= \frac{2}{3} = 2 : 3$$

28. **From either of the statements,**

$$\text{Speed of bus} = \frac{80 \, \text{km}}{5 \, \text{hr}} = \frac{160 \, \text{km}}{10 \, \text{hr}} = 16 \, \text{km/h}$$

29. **Both statements are not sufficient to give the required ratio.**

30. **Let the present income of Mehta be Rs. x. Income increase by 10% every year**

$$\frac{x}{10} = 2500$$
$$\therefore \qquad\qquad x = \text{Rs. } 25000.$$

31. **The word CREAM has five distinct letters.**

$$\therefore \text{Number of arrangements} = {}^5P_5$$
$$= 5! = 5 \times 4 \times 3 \times 2 \times 1 = 120$$

32. **Quicker Method :**

Required difference between CI and SI after 3 yrs
$$= \frac{Sr^2(300 + r)}{(100)^3}$$

Where, $\qquad\qquad S = \text{Principal,}$
$$r = \text{Rate of interest}$$
$$= \frac{19200 \times (12)^2(300 + 12)}{(100)^3}$$

$$= \frac{19200 \times 144 \times 312}{1000000}$$
$$= \text{Rs. } 862.6176$$

33. **When a train crosses a platform the distance covered by it = length of platform + length of train**

$$= \frac{\text{Length } bof \text{ train} + \text{Length of platform}}{\text{Time taken}}$$

we are not provided with the length of platform. Hence, we cannot determine the speed of train.

34. **Let the original number $10x + y$ where $x < y$.**

According to the question,
$$10y + x - 10x - y = 9$$
$$\Rightarrow \qquad\qquad 9y - 9x = 9$$
$$\Rightarrow \qquad\qquad y - x = 1 \qquad\qquad \dots\text{(i)}$$
$$\text{and,} \qquad\qquad x + y = 13 \qquad\qquad \dots\text{(ii)}$$
From equations (i) and (ii),
$$y = 7 \quad \text{and} \quad x = 6$$
$$\therefore \qquad\qquad \text{Number} = 6 \times 10 + 7 = 67$$

35. **Sum of the present ages of man and his daughter**
$$= 2 \times 34 = 68 \, \text{yrs}$$

Let the age of man after 4 yrs be $14x$ yrs and that of daughter after 4 yrs be $5x$ yrs.

Sum of the ages of man and his daughter after 4 yrs.
$$= 68 + 8 = 76 \, \text{yrs}$$
$$\therefore \qquad\qquad 14x + 5x = 76$$
$$\Rightarrow \qquad\qquad 19x = 76$$
$$\therefore \qquad\qquad x = \frac{76}{19} = 4$$

Daughter's present age