

IBPS Specialist (I.T.) Officer Exam 2015

Directions (Qs. 1-5): Study the following information carefully and answer the given questions below it. A word arrangement machine, when given an input line of words, rearrange them following a particular rule in each step. The following is an illustration of input and the steps of rearrangement.

Input: go for though by easy ticket access at

Step I access go for to though by easy ticket at

Step II access at go for to though by easy ticket

Step III access at by go for to though easy ticket

Step IV access at by easy go for to though ticket

Step V access at by easy for go to though ticket

Step VI access at by easy for go though to ticket

Step VII access at by easy for go though ticket to

(and step VII is the last step for this input). As per the rules followed in the above steps, find out in the following questions the appropriate step for the given output.

1. Input: to over series on fast the so

Which of the following steps will be the last but one?

- (1) II (2) III (3) IV
(4) V (5) None of these

2. Input: every and poor to an for

Which of the following steps would be 'an and every for poor to

- (1) II (2) IV (3) V
(4) III (5) None of these

3. The step II of an input is 'and do put to an that'.

Which of the following would definitely be the input

- (1) do and put to an that
(2) do put to and that an
(3) do an put to and that
(4) Cannot be determined
(5) None of these

4. Input: over go for though as are.

Which step will be the last step of the above input?

- (1) II (2) VI (3) IV
(4) VII (5) III

5. Input: storm for and on was he at.

Which of the following will be step IV for the given input?

- (1) and at he for storm on was
(2) and at for he storm on was
(3) and at for he on storm was
(4) and at for he on was storm
(5) None of these

Directions (Qs. 6-10): In the following questions, the symbols are used as follows.

A © B means 'A is greater than B'.

A @ B means 'A is either greater than or equal to B'.

A = B means 'A is equal to B'.

A @ B means 'A is smaller than B'.

A @ means 'A is either smaller than or equal to B'.

Now in each of the following questions, assuming the three statements to be true, state which of the two conclusions I and II given below them is definitely true.

6. Statements:

I. Q @ R

II. R @ M

III. M @ P

Conclusions:

I. P © R

II. P © Q

- (1) Only conclusion I is true.
(2) Only conclusion II is true.
(3) Either I or II is true.
(4) Neither I nor II is true.
(5) Both I and II are true.

7. Statements:

I. M @ K

II. K © R

III. R © P

Conclusions:

I. P @ K

II. P @ M

- (1) Only conclusion I is true.
(2) Only conclusion II is true.
(3) Either I or II is true.
(4) Neither I nor II is true.
(5) Both I and II are true.

8. Statements:

I. T © M

II. M = P

III. P © Q

Conclusions:

I. Q @ T

II. T © Q

- (1) Only conclusion I is true.
(2) Only conclusion II is true.
(3) Either I or II is true.
(4) Neither I nor II is true.
(5) Both I and II are true.

9. Statements:

I. P @ Q

II. Q © N

III. N @ M

Conclusions:

I. M = Q

II. M @ Q

- (1) Only conclusion I is true.
 (2) Only conclusion II is true.
 (3) Either I or II is true.
 (4) Neither I nor II is true.
 (5) Both I and II are true.

10. Statements:**I. E @ F****II. M @ F****III. F @ N****Conclusions:****I. M @ E****II. N @ E**

- (1) Only conclusion I is true.
 (2) Only conclusion II is true.
 (3) Either I or II is true.
 (4) Neither I nor II is true.
 (5) Both I and II are true.

11. Pointing to a girl, Ram said, 'She is the daughter of my grandfather's only son.' How is the girl related to Ram?

- (1) Daughter (2) Sister (3) Cousin sister
 (4) Data inadequate (5) None of these

Directions (Qs. 12-16): Study the following information to answer the given questions.

Twelve cars viz Alto, Swift, Santro, Amaze, Innova, Polo, Verna, Figo, Civic, City, Zen and Spark are parked in two parallel rows containing six cars each, in such a way that there is an equal distance between adjacent cars. In row-1, cars are parked in such a manner that the driver seated in the cars would face the South. In row-2, cars are parked in such a manner that the drivers seated in these cars would face the North. Therefore, in the given parking arrangement each car parked in a row faces another car of the other row.

- (1) Alto must be parked at one of the extreme ends. Alto is parked second to the left of Santro. Santro faces Figo.
 (2) Verna and Innova are parked immediately next to each other. Neither is parked next to Figo or Santro.
 (3) Civic is parked in such a manner that its driver when seated in the parked car would face South. Civic is parked third to the left of Polo.
 (4) City is parked in such a manner that it faces Zen. Zen is parked second to the left of Spark. Spark faces North and is not parked next to Figo.
 (5) Swift is parked third to the right of Zen and faces Innova.

(Note: Left and right parking directions are with reference to the driver as if the driver is seated in the car.)

12. How many cars are parked between Santro and Civic?

- (1) One (2) Two (3) Three
 (4) Four
 (5) Both cars are parked in different rows

13. Polo is related to Zen in the same way as Innova is related to Amaze. Which of the following in City related to, following the same pattern?

- (1) Alto (2) Innova (3) Santro
 (4) Verna (5) Spark

14. Which of the following cars are parked at extreme ends of the rows?

- (1) Spark, Verna (2) Innova, Polo (3) Polo, Amaze
 (4) Spark, Innova (5) Zen, Swift

15. Which of the following cars faces Polo?

- (1) Alto (2) Civic (3) Spark
 (4) Verna (5) Amaze

16. Which of the following is true regarding Figo?

- (1) A driver seated in the parked Figo would face North
 (2) Swift is parked second to the right of the car facing Figo.
 (3) Verna and Zen are parked immediately next to figo
 (4) Alto and Amaze are parked at the extreme ends of the row in which figo is parked
 (5) None is true

Directions (Qs. 17-18): Following question are based on the information given below

- (i) 'P × Q' means 'P is the brother of Q'.
 (ii) 'P ÷ Q' means 'P is the sister of Q'.
 (iii) 'P + Q' means 'P is the father of Q'.
 (iv) 'P - Q' means 'P is the mother of Q'.

17. Which of the following represents 'M is nephew of P'?

- (1) $P - K + M$
 (2) $P \times K \div M \div T$
 (3) $P \div K \times M$
 (4) $P \div K + M \times T$
 (5) None of these

18. How is related T related to D in the expression: $H + T \div R - P$?

- (1) Nephew (2) Niece (3) Nephew or niece
 (4) Data inadequate (5) None of these

19. Raman started walking towards South. After walking 15 m, he turned to the left and walked 15 m. He again turned to his left and walked 15 m. How far is he from his original position and in which direction?

- (1) 15 m, North (2) 15 m, South (3) 30 m, East
 (4) 15 m, West (5) 15 m, East

20. A river x flows West to East and further turns left and goes in a Semi-circle round a hillock and then turns left at right angles. In which direction is the river finally flowing?

- (1) East (2) West (3) North
 (4) South (5) None of these

Directions (Qs. 21-25): Study the following information and answer the question given below it.

Twelve people are sitting in two parallel rows containing six people each, in such a way that there is an equal distance between adjacent persons. In row - 1, A, B, C, D, E and F are seated and all of them are facing South. In row - 2, P, Q, R, S, T

and U are seated and all of them are facing North. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row.

U sits third to right of S. S faces F and F does not sit at any of the extreme ends of the line. D sits third to right of C. R faces C. The one facing E sits third to right of P. B and P do not sit at the extreme ends of the line. T is not an immediate neighbour of U and A is not an immediate neighbour of C.

21. Who amongst the following faces D?

- (1) T (2) P (3) Q
(4) R (5) None of these

22. Who amongst the following represent the people sitting at extreme ends of the rows?

- (1) R, F (2) T, A (3) D, R
(4) C, Q (5) S, A

23. Four of the following five are alike in a certain way and thus form a group. which is the one that does not belong to that group?

- (1) B - T (2) A - Q (3) C - S
(4) F - P (5) D - R

24. Four of the following five are alike in a certain way and thus form a group. which is the one that does not belong to that group?

- (1) D (2) S (3) U
(4) T (5) A

25. How many persons are seated between R and T ?

- (1) One (2) Two (3) Three
(4) Four (5) Five

Directions (Qs. 26-30): Study the following information carefully and answer the given questions

Representatives from eight different Banks viz., A, B, C, D, E, F, G and H are sitting around a circular table facing the centre but not necessarily in the same order. Each one of them is from a different Bank viz. UCO Bank, ICICI Bank, Bank Of Maharashtra, Canara Bank, Syndicate Bank, Punjab National Bank, Bank of India and Dena Bank.

F sits second to right of the representative from Canara Bank. Representative from Bank of India is an immediate neighbour of the representative from Canara Bank. Two people sit between the representative of Bank of India and B. C and E are immediate neighbours of each other. Neither C nor E is an immediate neighbour of either B or the representative from Canara Bank. Representative from Bank of Maharashtra sits second to Right of D. D is neither the representative of Canara Bank nor Bank of India. G and the representative from UCO Bank are immediate neighbours of each other. B is not the representative of UCO Bank. Only one person sits between C and the representative from ICICI Bank.

H sits third to left of the representative from Dena Bank. Representative from Punjab National Bank sits second to left of the representative from Syndicate Bank. D is represent ICICI Bank

26. Who amongst the following sit exactly between B and the representative from Bank of India?

- (1) A and the representative from UCO Bank.
(2) F and G
(3) H and the representative from Bank of Maharashtra
(4) H and G
(5) Representative from Syndicate Bank and ICICI Bank.

27. Who amongst the following is the representative from ICICI Bank

- (1) A (2) C (3) H
(4) G (5) D

28. Four of the following five are alike in a certain way and thus form a group. which is the one that does not belong to that group?

- (1) H - UCO Bank (2) A - Canara Bank
(3) D - Bank of Maharashtra
(4) E - Syndicate Bank
(5) F - Punjab National Bank

29. Who amongst the following sits second to left of B?

- (1) C (2) H
(3) The representative from Canara Bank
(4) The representative from Punjab National Bank
(5) G

30. Which of the following is true with respect to the given seating arrangement?

- (1) B is the representative from Bank of Maharashtra
(2) C sits second to right of H
(3) The representative from Dena Bank sits to the immediate left to the representative from Bank of India.
(4) A sits second to right of the representative from Bank of India.
(5) The representatives from Bank of Maharashtra and Syndicate Bank are immediate neighbours of each other

Directions (Qs. 31-35): In each of the question sets below are two/three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

31. Statements:

- I. All boys are girls
II. Some girls are cow
III. No cow is a clock

Conclusions:

- I. Atleast some clocks are girls.
II. No clock is a boy

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

32. Statements:

- I. All boys are girls

II. Some girls are cow

III. No cow is a clock

Conclusions:

I. All boys being cows is a possibility.

II. No clock is a girl

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

33. Statements:

I. All boys are girls

II. Some girls are cow

III. No cow is a clock

Conclusions:

I. All clocks being boys is a possibility

II. Atleast some girls are boys

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

34. Statements:

I. Some books are pens.

II. All pens are notebooks.

Conclusions:

I. At least some books are notebooks.

II. All notebooks being books is a possibility.

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

35. Statements:

I. Some books are pens.

II. All pens are notebooks.

Conclusions:

I. No notebook is a book.

II. All pens being books is a possibility

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

Directions (Qs. 36-38): In making decisions about important questions, it is desirable to distinguish between 'strong' argument and 'weak' argument. A 'strong' argument must be both important and directly related to the question and may be of minor importance or may be related to the trivial aspect of the question. Each question below is followed by two arguments, numbered I and II. You have to decide which of the arguments is 'strong' and which is 'weak'

36. Statement: Keeping in consideration the increasing life - cycle of human beings in India, should the age limit for retirement in government jobs be increased?

Arguments:

I. Yes, country 'X' and 'Y' have already decided to practise it.

II. Yes, it is the actual demand of lakhs of existing employees.

- (1) Only argument one is strong
- (2) Only argument II is strong
- (3) Either I or II strong
- (4) Neither I nor II is strong
- (5) Both I and II are strong

37. Statement: Should the admission to professional courses in India be restricted only on merit without any concession to any particular group of students?

Arguments:

I. Yes, this will improve the quality of the professionals as they will be able to complete the courses successfully.

II. No, this will marginalize a large number of socially and economically backward students out of the reach of the professional courses.

- (1) Only argument one is strong
- (2) Only argument II is strong
- (3) Either I or II strong
- (4) Neither I nor II is strong
- (5) Both I and II are strong

38. Statement: Should Indian private companies be allowed to operate air services in India?

Arguments:

I. Yes, Indian Private Managements are socially bound to give better services.

II. No, we should not ape the western countries.

- (1) Only argument one is strong
- (2) Only argument II is strong
- (3) Either I or II strong
- (4) Neither I nor II is strong
- (5) Both I and II are strong

Directions (Qs. 39-40): In each of the questions, below is given a statement followed by two courses of action. Course of action is a step for 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 statement, you have to assume everything in the statement to be true, then decide which of the given suggested courses of action is/are logically worth pursuing.

39. Statement: The CBI has received a complaint of an officer taking bribe to do the duty he is supposed to
Courses of Action:

I. CBI should wait for some more complaints about the officer to be sure about the matter.

II. CBI should try to catch the officer red - handed and then take a strict action against him.

- (1) Only I follows
- (2) Only II follows
- (3) Either I or II follows

(4) Neither I nor II follows

(5) Both I and II follow

40. Statement: There has been significant drop in the water level of all the lakes supplying water to the city.

Courses of Action:

I. The water supply authority should impose a partial cut in supply to tackle the situation.

II. The government should appeal to all residents through mass media for minimal use of water.

(1) Only I follows (2) Only II follows

(3) Either I or II follows

(4) Neither I nor II follows

(5) Both I and II follow

41. In a certain code 'CURATIVE' is written as 'BSVDDUHS'. How is 'STEAMING' written in that code?

(1) BFUTFMHL (2) TUFBFMHL (3) BFUTLHMF

(4) BFUTHOJN (5) None of these

42. Four of the following five are alike in a certain way and thus form a group. which is the one that does not belong to that group?

(1) X-ray (2) Telephone (3) Computer

(4) Radio (5) Television

Directions (Qs. 43-45): Study the following information carefully and answer the given question.

An increase in the pollution level in the city by way of industrial effluents and automobile exhaustions would pose a severe threat to the inhabitants.

(A) All the factories in the city should immediately be closed down.

(B) The automobiles should not be allowed to ply on the road for more than four hours a day.

(C) The government should restrict the issue of fresh licences to factories and automobiles.

(D) Cancer, heart attacks, brain strokes, tuberculosis are the major disease which are rapidly

(E) All types of pollutants are very harmful for health.

(F) Excessive growth of industries has increased the pollution level in the city.

43. Which of the following among (A), (B), (C) and (D) can be an immediate course of action for the Government ?

(1) Only (A) (2) Only (B) (3) Only (C)

(4) Only (D) (5) All of these

44. Which of the following among (A), (B), (C) and (D) cannot be an immediate course of action for the government?

(1) Only (A) (2) Only (B) (3) Both (A) and (B)

(4) Only (D) (5) Only (C)

45. Which of the following among (A), (B), (D) and (E) may be the effect of increment in the pollution level in the city?

(1) Only (A) (2) Only (B) (3) Only (D)

(4) Only (E) (5) None of these

Directions (Qs. 46-50): Study the following information carefully and answer the question given below:

Eight persons P, Q, R, S, T, U, V and W 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.

S faces North and sits exactly opposite W. T is on the immediate left to W. P and V sit on the same side. V is exactly opposite Q, who is on the immediate right of R. P is next to the left of S.

46. Who is sitting opposite to P ?

(1) V (2) S (3) T

(4) P (5) R

47. Who is next to T in anticlockwise direction?

(1) V (2) W (3) U

(4) Q (5) R

48. 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) SU (2) RQ (3) UR

(4) PV (5) TW

49. Who is sitting opposite to T?

(1) S (2) P (3) U

(4) P or S (5) V or S

50. Which of the following statements is definitely true?

(1) P is facing North

(2) T is sitting opposite U

(3) U is the left of V

(4) R is to the left of P

(5) None of these

51. If the cost price of 15 articles be equal to the selling price of 20 articles, then find the loss or profit percentage in the whole transaction.

(1) 16% (2) 20% (3) 25%

(4) 26% (5) 28%

52. A toy is in the shape of a hemisphere surrounded by a cone. If radius of base of the cone is 3 cm and height is 4 cm. The total surface area of the toy is

(1) $33\pi \text{ cm}^2$

(2) $42\pi \text{ cm}^2$

(3) $66\pi \text{ cm}^2$

(4) $56\pi \text{ cm}^2$

(5) None of these

53. Two trains having length 110 m and 90 m are running on parallel lines in the same direction with a speed of 45 km/h and 50 km/h respectively. In what time will they pass each other?

(1) 136 s (2) 138 s (3) 142 s

(4) 146 s (5) None of these

54. A boat rows 25 km downstream and 20 km upstream taking 5 hr both sides. What is the speed of the current?

- (1) 1 km/hr (2) 2.5 km/hr (3) 3.5 km/hr
(4) 4.5 km/hr (5) 0.5 km/hr

55. A works twice as fast as B. If B can complete a work in 24 days independently, the number of days in which A and B can together finish the work is

- (1) 12 days (2) 9 days (3) 8 days
(4) 6 days (5) None of these

56. P, Q and R enter into a partnership by investments Rs.15000, Rs.21000 and Rs.27000 respectively. At the end of 8 months, Q receives Rs.1260 as his share in the total profit earn. Find the profit share of P.

- (1) Rs. 600 (2) Rs. 1620 (3) Rs. 1080
(4) Rs. 720 (5) Rs. 900

57. The average weight of 25 students is 16 kg. The average weight of the first 12 students is 14 kg and of the last 12 students is 17 kg. Find the weight of the thirteenth student,

- (1) 29 kg (2) 28 kg (3) 27 kg
(4) 24 kg (5) None of these

58. What will be the difference between simple interest and compound interest at 4% per annum on a sum of Rs. 5000 after 3 yr?

- (1) Rs. 24.32 (2) Rs. 28.56 (3) Rs. 32.48
(4) Rs. 36.18 (5) None of these

59. Pure milk costs Rs. 20 per litre. After adding water the milkman sells the mixture at the rate of Rs. 18 per litre, there by making a profit of 25%. In what ratio does he mix the two?

- (1) 18 : 7 (2) 18 : 5 (3) 12 : 7
(4) 12 : 5 (5) None of these

60. A car driver travels from the plains to a hill station. Which are 200 km apart at an average speed of 40 km/h. In the return trip he covers the same distance at an average speed of 20 km/h. The average speed of the car over the entire distance of 400 km is

- (1) 16.56 km/h (2) 17.89 km/h (3) 26.67 km/h
(4) 35 km/h (5) None of these

Directions (Qs. 61-65): What will come in place of question mark (?) in the following questions ?

61. 6, 7, 16, 51, 208, ?

- (1) 1036 (2) 1042 (3) 1048
(4) 1056 (5) 1045

62. 18, 48, 100, 180, 294, 448, ?

- (1) 979 (2) 586 (3) 732
(4) 648 (5) None of these

63. 289, 361, 529, 841, 961, ?

- (1) 2209 (2) 2136 (3) 1849
(4) 1681 (5) 1369

64. 8, 31, 122, 485, 1936, 7739, ?

- (1) 30460 (2) 30720 (3) 30840

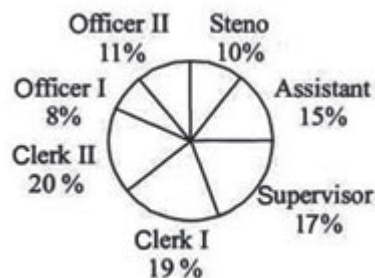
- (4) 30950 (5) None of these

65. 8484, 4248, 2112, 1074, 513, 286.5, ?

- (1) 136.25 (2) 161.25 (3) 107.25
(4) 112.25 (5) None of these

Directions (Qs. 66-70): Study the following information to answer the given questions.

Percentage of Different Types of Employees in an Organization



Total Employees = 7000

Employee	Direct Recruits(%)	Promotees(%)
Steno	30	70
Assistant	40	60
Supervisor	50	50
Clerk I	90	10
Clerk II	30	70
Officer I	90	10
Officer II	70	30

66. What is the difference in direct recruit and promotee assistants?

- (1) 210 (2) 280 (3) 180
(4) 110 (5) None of these

67. The promotee clerks I is approximately what per cent of that of direct recruit clerk I?

- (1) 10 (2) 9 (3) 11
(4) 10.50 (5) 9.75

68. How many employees are supervisor?

- (1) 1050 (2) 1019 (3) 1109
(4) 1290 (5) None of these

69. How many total direct recruits among all types of employees are there?

- (1) 4000 (2) 3885 (3) 3000
(4) 3115 (5) None of these

70. Which type of employees has maximum number of direct recruits?

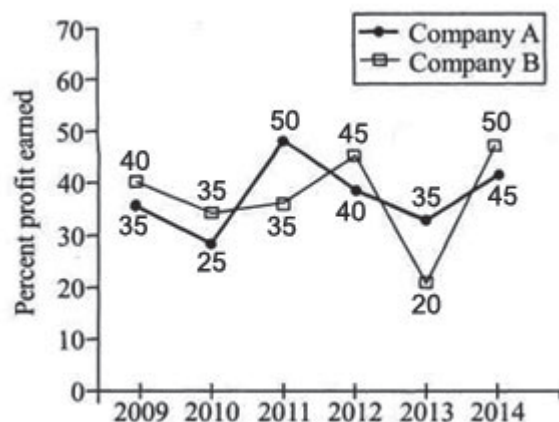
- (1) Clerk I and Officer I
(2) Officer I
(3) Clerk I (4) Clerk II (5) None of these

Directions (Qs. 71-75): Study the following graph to answer these questions.

Percent Profit Earned by Two Companies A and B over the Years

Profit = Income – Expenditure.

$$\text{Percent profit} = \left(\frac{\text{Profit}}{\text{Expenditure}} \times 100 \right) \%$$



71. If the income of company 'A' in 2011 was Rs. 142500. What was its expenditure in that year?

- (1) Rs. 105000 (2) Rs. 95500 (3) Rs. 99500
(4) Rs. 105555 (5) None of these

72. Expenditure of company 'B' in 2012 was 90% of its expenditure in 2011. Income of company 'B' in 2012 was what percent of its income in 2011?

- (1) 130.5
(2) $96\frac{2}{3}$
(3) 121.5
(4) $96\frac{1}{3}$
(5) None of these

73. If the expenditure of company 'A' in 2010 was Rs. 70 lac and income of company A in 2010 was equal to its expenditure in 2011. What was the total income (Rs. in lac) of the company A in 2010 and 2011 together?

- (1) 175 (2) 131.25 (3) 218.75
(4) Cannot be determined (5) None of these

74. Expenditure of company 'B' in years 2009 and 2010 were in the ratio of 5 : 7 respectively. What was the respective ratio of their incomes?

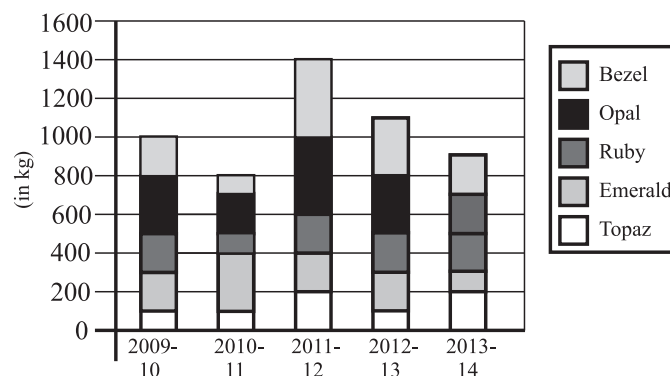
- (1) 10 : 13 (2) 8 : 13 (3) 13 : 14
(4) 11 : 14 (5) None of these

75. Total expenditure of companies A and B together in 2014 was Rs. 13.5 lac. What was the total income of two companies (in Rs. lac) in that year?

- (1) 19.757 (2) 20.25 (3) 19.75
(4) Cannot be determined (5) None of these

Directions (Qs. 76-80): The following questions are based on the stacked bar graph given below.

Sales of Various precious Stones in India for the Period of 2009-2010 to 2013-2014



76. What is the total sales of Ruby as a per cent of the total sales of precious stones for the given period?

- (1) 17.3% (2) 19.23% (3) 23.1%
(4) Cannot be determined (5) None of these

77. By what percent is the average annual sales of Emerald for the given period more than the sales of Opal in 2012-13

- (1) 120% (2) 50% (3) 25%
(4) 40% (5) None of these

78. For how many years is the sales of Bezel as a percentage of the total sales of precious stones less than that of Topaz?

- (1) One (2) two (3) Three
(4) Four (5) None of these

79. If the sales of Topaz increased from 2008-09 to 2014-15 by 25% and increased from 2013-2014 to 2014-15 by 50%, then what is the difference between the sales of Topaz in 2008-09 and that in 2014-15?

- (1) 50000 tonnes (2) 100000 tonnes (3) 140000 tonnes
(4) 160000 tonnes (5) None of these

80. Which of the given precious stones experienced the highest percentage growth in the sales in any year over that of the previous year for the period 2010-11 to 2013-14?

- (1) Topaz (2) Emerald (3) Ruby
(4) Bezel (5) None of these

Directions (81-85): Study the following information carefully to answer the questions given below it.

A survey conducted on 1800 villages shows that 25% of the total villages have only adequate water supply. 15% of the total number have proper supply of electricity only. 7% of the total number of villages have only proper education facilities. 12% of the total number of villages have tele-communication services only 16% of the total number of villages have proper health care services only. 6% of the total number of villages have adequate water as well as supply of electricity. 8% of the total number of villages have adequate supply of water, electricity as well as health care services. 5% of the total number of villages have proper supply of electricity, tele-communication services as well as health care services and 6% of the total number of villages have all the facilities.

81. How many villages in all have adequate water supply?

- (1) 702 (2) 450 (3) 594

- (4) 810 (5) None of these

82. How many villages in all have adequate supply of water as well as electricity?

- (1) 360 (2) 108 (3) 720
(4) 972 (5) None of these

83. How many villages in all do not have proper supply of electricity?

- (1) 720 (2) 850 (3) 920
(4) 1080 (5) None of these

84. How many villages have only proper education facilities?

- (1) 108 (2) 126 (3) 234
(4) 216 (5) None of these

85. How many villages have all the facilities?

- (1) 90 (2) 126 (3) 144
(4) 106 (5) None of these

Directions (Qs. 86-90) : Each of the question below consists of a question and two statements marked A and B given below it. You have to decide whether the data provided in the statements are sufficient to answer the question.

86. What is the average age of children in the class?

A. Age of the teacher is as many yrs as the number of children.

B. Average age increased by 2 yr, if the teachers age is also included.

- (1) The data in statement A alone is sufficient to answer the question.
(2) The data in statement B alone is sufficient to answer the question.
(3) The data either in statement A alone or in statement B alone is sufficient to answer the question
(4) The data given in both statements A and B together are not sufficient to answer the question.
(5) The data in both statements A and B together are necessary to answer the question.

87. What is the average monthly income of a man if he saves Rs. 85000 during a year?

A. The average monthly expenditure for the first 4 months is Rs. 18000.

B. The average monthly expenditure for the next 8 months is Rs. 21000.

- (1) The data in statement A alone is sufficient to answer the question.
(2) The data in statement B alone is sufficient to answer the question.
(3) The data either in statement A alone or in statement B alone is sufficient to answer the question
(4) The data given in both statements A and B together are not sufficient to answer the question.
(5) The data in both statements A and B together are necessary to answer the question.

88. What is the salary of D, in a group A, B, C, D, E and F whose average salary is Rs. 45000?

A. Total salaries of A and F is Rs. 88900.

B. Total salaries of B and C is Rs. 95200.

- (1) The data in statement A alone is sufficient to answer the question.
(2) The data in statement B alone is sufficient to answer the question.
(3) The data either in statement A alone or in statement B alone is sufficient to answer the question
(4) The data given in both statements A and B together are not sufficient to answer the question.
(5) The data in both statements A and B together are necessary to answer the question.

89. What is the temperature on Thursday?

A. Average temperature for Monday, Tuesday and Wednesday is 34°C.

B. Average temperature for Tuesday, Wednesday and Thursday is 38°C.

- (1) The data in statement A alone is sufficient to answer the question.
(2) The data in statement B alone is sufficient to answer the question.
(3) The data either in statement A alone or in statement B alone is sufficient to answer the question
(4) The data given in both statements A and B together are not sufficient to answer the question.
(5) The data in both statements A and B together are necessary to answer the question.

90. The average of 12 numbers is 18. Find the new average when

A. The average of first 10 numbers is 20.

B. Each number is multiplied by 6.

- (1) The data in statement A alone is sufficient to answer the question.
(2) The data in statement B alone is sufficient to answer the question.
(3) The data either in statement A alone or in statement B alone is sufficient to answer the question
(4) The data given in both statements A and B together are not sufficient to answer the question.
(5) The data in both statements A and B together are necessary to answer the question.

Directions (Qs. 91-93) : What approximate value should come in place of the question mark (?) in the following questions? (Note that you are not expected to calculate the exact value)

91. $195.994 + 13.995 \div 2.5 = ?$

- (1) 5.15 (2) 5.9 (3) 5.75
(4) 5.1 (5) 5.6

92. $\sqrt{441.441} + \sqrt{256.256} = ?$

- (1) 37 (2) 36 (3) 34
(4) 31 (5) 30

93. $68.721 - 12.815 - 8.409 - 1.152 = ?$

- (1) 62.915 (2) 67.115 (3) 58.295
(4) 52.715 (5) 46.345

Directions (Qs. 94-95) : What should come in place of question mark (?) in the following questions?

94. $6 \times 0.6 \times 0.06 \times 0.006 \times 60 = ?$

- (1) 77.76 (2) 7.776 (3) 0.7776
(4) 0.07776 (5) 0.00776

95. $\frac{4.5 \times 3.7 + 4.5 \times 6.3}{1.5 \times 8.4 - 1.5 \times 7.4} = ?$

- (1) 24 (2) 28 (3) 34
(4) 32 (5) 30

Directions (Qs. 96-100) : In each of these questions two equations are given. You have to solve these equations and Give answer.

96. I. $x^2 - 6x = 7$

II. $2y^2 + 13y + 15 = 0$

- (1) If $x < y$
(2) If $x > y$
(3) $x = y$
(4) $x \geq y$
(5) $x \leq y$

97. I. $3x^2 - 7x + 2 = 0$

II. $2y^2 - 11y + 15 = 0$

- (1) If $x < y$
(2) If $x > y$
(3) $x = y$
(4) $x \geq y$
(5) $x \leq y$

98. I. $10x^2 - 7x + 1 = 0$

II. $35y^2 - 12y + 1 = 0$

- (1) If $x < y$
(2) If $x > y$
(3) $x = y$
(4) $x \geq y$
(5) $x \leq y$

99. I. $4x^2 = 25$

II. $2y^2 - 13y + 21 = 0$

- (1) If $x < y$
(2) If $x > y$
(3) $x = y$
(4) $x \geq y$
(5) $x \leq y$

100. I. $3x^2 + 7x = 6$

II. $6(2y^2 + 1) = 17y$

- (1) If $x < y$
(2) If $x > y$
(3) $x = y$
(4) $x \geq y$
(5) $x \leq y$

Directions (Qs. 101-110): Read the following passage carefully and answer the questions given below it. Certain words have been printed in **bold** to help you locate them while answering some of the questions.

Indeed the western recession is really the beginning of good news for India! But to understand that we will have to move away for a while from the topic of western recession ... to the Japanese recession! For years the Japanese style of management has been admired. However, over the last decade or so, one key question has sprung up 'if Japanese management style is as wonderful as described then why has Japan been in a recession for more than a decade?'

The answer to this question is very simple. Culture plays a very Important part in shaping up economies. What succeeds in one culture fails in another. Japanese are basically non materialistic. And however rich, they become, unlike others, they cannot just keep throwing and buying endlessly. And once they have everything they need; there is a saturation point. It was only when companies like Toyota realized that they cannot keep selling cars endlessly to their home market that they went really **aggressive** in the western markets and the rest is history. Japanese companies grew bigger by **catering** to the world markets when their home markets shrunk.

And the markets have to shrink finally after attaining a level of affluence! And that's great for the world because earth needs sustainable development. It does not need monstrous consumers who keep consuming at the cost of the environment and the earth. There should be limits to growth so that consumers are not converted into material dustbins for the profit of a handful of corporations.

Owing to the materialistic culture elsewhere, it was possible to keep selling never products to the consumers despite having existing ones which served equally well. They were lured through advertising and marketing techniques of 'dustbinisation' of the customer; and then finally, once they became ready customers, they were given loans and credits to help them buy more and more. When all the creditworthy people were given loans to a logical limit, they ceased to be a part of the market. Even this would have been understandable if it could work as an eye opener. Instead of taking the 'Right Step' as Toyota did, they preferred to take a 'shortcut'. Now banks went to the non creditworthy people and gave them loans. The people expectedly defaulted, and the entire system collapsed.

Now like Toyota, western companies will learn to find new markets. They will now lean towards India because of its common man! The billion plus population in the next 25 years will become a **consuming** middleclass. Finally the world's attention will shift to the developing world. Finally, there will be a real **surge** in income of these people and in the next fifty odd years, one can really hope to see an equal world in terms of material plenty, with poverty being almost nonexistent! And this will happen not by selling more cars to Americans and Europeans. It will happen by creating markets in India, China, Latin America and Africa by giving their people purchasing power and by making products for them.

The recession has made us realize that it is not because of worse management techniques, but because of limits to

growth. And they will realize that it is great for planet earth. After all, how many cars and houses must the rich own before calling it enough? It's time for them to look at others as well. Many years back, to increase his own profits, Henry Ford had started paying his workers more, so that they could buy his cars. In similar fashion, now the developed world will pay the developing world people so that they can buy their cars and washing machines.

The recession will kick-start the process of making the entire world more **prosperous**, and lay the foundation of limits to growth in the west and the foundation of real globalization in the world or the globalization of prosperity. And one of its first beneficiaries will be India.

101. What does the author mean by the "Right Step" in the passage?

- (1) Giving loans to creditworthy people only
- (2) Considering market growth along with environment protection.
- (3) Restricting people to buy only such products which are needed by them.
- (4) To start looking at newer avenues and markets.
- (5) None of these

102. Although admired since years, why did the scepticism over the Japanese management style start since the last decade?

- (1) Japanese companies have been moving out of their home markets since the last decade.
- (2) Japanese banks have provided loans indiscriminately to the creditworthy as well as non creditworthy people.
- (3) Because Japanese markets have been going through a period of continuous recession since the last decade.
- (4) The unlimited growth of the Japanese markets has come at the cost of the western market.
- (5) None of these

103. Why does the author foresee the markets being created in the developing countries instead of America and Europe ?

- (1) All developing countries have materialistic culture.
- (2) Developed countries are willing to make an effort to achieve globalization.
- (3) American and European markets have had a large number of credit defaulters.
- (4) Recession has not hit the markets of developing countries yet.
- (5) None of these

104. According to the author, what is the main cause of Japanese recession ?

- (1) Only a handful of corporations earned profits and not the people in general.
- (2) Non creditworthy people defaulted which led to a collapse of the entire system.
- (3) Consumers were sold newer products which were similar in quality to the existing ones.

(4) Japanese do not purchase endlessly and thus when products had been sold to every customer, the markets slowed down.

(5) None of these

105. How does the author foresee the future globalization as an analogy to Henry Ford's example ?

- (A) Car companies would start selling cars in developing countries as well.
- (B) By paying the developing world, the developed world would increase its own profit, in turn bringing affluence to developing world as well.
- (C) To earn profit, the companies in developing countries would move to developed countries.

- (1) Only A (2) Only B (3) Only C
- (4) Only A and C (5) None of these

106. According to the passage, which of the following was NOT an effect of providing loans and credits to the customers ?

- (A) The non creditworthy people defaulted.
- (B) People bought new products which were not needed.
- (C) Poverty became non-existent.

- (1) Only A (2) Only B (3) Only A and B
- (4) Only B and C (5) Only C

107. Why is recession the beginning of good news for India in the author's view ?

- (A) India can provide an attractive market to the western companies.
- (B) India has remained largely unaffected by recession owing to its huge population.
- (C) Indians keep purchasing products despite owning equally good products.

- (1) Only C (2) Only B (3) Only A
- (4) Only B and C (5) None of these

108. What does the author mean by 'Dustbinisation' of the customer ?

- (1) Convincing the customer to buy products he does not need.
- (2) Denying non creditworthy people of any loans.
- (3) Denying more loans to people who have already taken loans to a logical limit.
- (4) Moving from old customers at the home market to foreign markets.
- (5) None of these

109. Why according to the author is the current recession great for 'Planet Earth' ?

- (A) It will make people non-materialistic like the Japanese.
- (B) The unlimited market growth which caused hazards to the environment would be checked to a certain extent.
- (C) Banks will now provide loans only to the creditworthy people.
- (D) Developing countries will also be benefited by shifted markets.

- (1) Only A (2) Only B and D (3) Only A and B
- (4) Only B (5) None of these

110. Choose the word which is most similar in meaning to the word printed in bold as used in the passage.

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- (1) Considering (2) Lending (3) Supplying
(4) Working (5) Indulging

Directions (Qs. 111-115): Rearrange the following six sentences/ group of sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph; then answer the questions given below them.

- (A) The storm, aptly named Hercules, closed major roads with snowdrift.
(B) A fierce winter storm brought dangerous glacial temperature in New York City on Friday.
(C) This caused a lot of inconvenience to passengers.
(D) With more than 24 inches of snow falling in the city, a state of emergency was declared.
(E) More than 4,000 international and domestic flights were also cancelled.
(F) Indeed storms are disastrous.

111. Which of the following should be the FIRST sentence after the rearrangement?

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

112. Which of the following should be the FOURTH sentence after the rearrangement?

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

113. Which of the following should be the FIFTH sentence after the rearrangement?

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

114. Which of the following should be the SIXTH sentence after the rearrangement?

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

115. Which of the following should be the SECOND sentence after the rearrangement?

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

Directions (Qs. 116-125): In the following passage there are blanks each of which has been numbered. Find out the appropriate word that fits each blank.

Twenty years (116) now, nearly 70% of the world's population will live in urban areas. The impact of urbanization might not all be positive on countries such as India as urban expansion is happening at a much (117) rate than infrastructure expansion.

Sustainability issues need to be (118) so that economic development is not at the (119) of public health. Some urban services that ought to be in (120) in a city like water, electricity, sewage, transport etc. need special consideration.

TERI (The Energy Research Institute) has put together a detailed report that (121) sustainability in the provision of basic urban services in Indian cities.

(122) public transport is a major reason for the proliferation of private vehicles on the road. Respiratory illness in children living in urban areas is on the (123) with more cases of asthma being (124) because of pollution. The future of cities of Indian dreams depends on (125) we can build better cities today.

116. Find out the appropriate word that fits blank (116).

- (1) from (2) to (3) till
(4) after (5) on

117. Find out the appropriate word that fits blank (117).

- (1) slower (2) faster (3) great
(4) quick (5) speed

118. Find out the appropriate word that fits blank (118).

- (1) calculated (2) knowed (3) heard
(4) understanding (5) considered

119. Find out the appropriate word that fits blank (119).

- (1) rate (2) payment (3) costs
(4) price (5) expense

120. Find out the appropriate word that fits blank (120).

- (1) functional (2) large (3) abundance
(4) vicinity (5) close

121. Find out the appropriate word that fits blank (121).

- (1) clears (2) collates (3) speculates
(4) postulates (5) creates

122. Find out the appropriate word that fits blank (122).

- (1) Good (2) Great (3) Absence
(4) Available (5) Inadequate

123. Find out the appropriate word that fits blank (123).

- (1) rise (2) inflationary (3) multiplication
(4) expanse (5) growing

124. Find out the appropriate word that fits blank (124).

- (1) reported (2) produced (3) held
(4) resulted (5) created

125. Find out the appropriate word that fits blank (125).

- (1) whether (2) if (3) since
(4) why (5) how

Directions (Qs. 126-130): Which of the phrases (1), (2), (3) and (4) given below should replace the phrase given in bold type in the following sentence to make the sentence grammatically meaningful and correct? If the sentence is correct as it is and no correction required, make (5) as the answer.

126. The rationale for the use of various measures were known to people since long.

- (1) had known (2) was being known (3) to be known
(4) had been known
(5) No correction required

127. The prison inmates refused water and food stating that they are a hunger strike.

- (1) they are under (2) we have been under
(3) we would be at (4) they were on
(5) No correction required

128. The differences could resolve through negotiation and talks.

- (1) should have resolve (2) should have resolved
(3) could have resolved (4) could be resolved
(5) No correction required

129. The construction work was in full swing.

- (1) in fully swinging (2) fully swinging (3) swinging in full
(4) in full swinging
(5) No correction required

130. What does it matter most is what you talk to others rather than how you do so.

- (1) What matters it (2) What matters
(3) How does it matter (4) What it matters
(5) No correction required

Directions (Qs. 131-140): Read each sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence, the name of the part is the answer. If there is No error, the answer is (5).

131. This is the piano (1)/ which my uncle (2)/ brought it (3)/ for you. (4)/ No error (5)

- (1) This is the piano (2) which my uncle (3) brought it
(4) for you. (5) No error

132. "Harish is comparatively better (1)/ today and we hope that (2)/ he will recover soon", (3)/ said Ramesh. (4)/ No error (5)

- (1) "Harish is comparatively better
(2) today and we hope that
(3) he will recover soon",
(4) said Ramesh.
(5) No error

133. When he lent me (1)/ some money, he asked (2)/ to return it back (3)/ within a week, (4)/ No error (5)

- (1) When he lent me (2) some money, he asked
(3) to return it back (4) within a week. (5) No error

134. He doesn't know (1)/ about the real factors (2)/ that has created (3)/so many problems. (4)/ No error (5)

- (1) He doesn't know
(2) about the real factors
(3) that has created (4) so many problems.
(5) No error

135. He reimbursed (1)/ the money which (2)/ I spent (3)/ on him medical treatment. (4)/ No error (5)

- (1) He reimbursed (2) the money which
(3) I spent
(4) on him medical treatment.

(5) No error

136. Shabnam asked (1)/ me if there was any place (2)/ in the (3)/ compartment for her. (4)/ No error (5)

- (1) Shabnam asked
(2) me if there was any place
(3) in the (4) compartment for her.
(5) No error

137. All his family members (1)/ are (2)/ social (3)/ and cooperative. (4)/ No error (5)

- (1) All his family members
(2) are
(3) social (4) and cooperative. (5) No error

138. According to me (1)/ every student should (2)/go through the (3)/ notes given by the professors. (4)/ No error (5)

- (1) According to me (2) every student should
(3) go through the
(4) notes given by the professors.
(5) No error

139. I want to join into (1)/ lecturership (2)/ because I think it is a (3)/ noble profession. (4)/ No error (5)

- (1) I want to join into (2) lectureship
(3) because I think it is a
(4) noble profession.
(5) No error

140. We must wait (1)/ for quieter time before (2)/ the people's claims (3)/ can override over the claims of the party. (4)/ No error (5)

- (1) We must wait
(2) for quieter time before
(3) the people's claims
(4) can override over the claims of the party.
(5) No error

Directions (Qs. 141-145): Choose the correct alternatives.

141. The ___ of the PM Modi's statement cannot be verified by people who have no access to official PMO records.

- (1) verbosity (2) veracity (3) validity
(4) ambiguity (5) None of these

142. The more one's actions and thoughts are ___, the happier one grows.

- (1) divergent (2) unravelled (3) integrated
(4) split (5) None of these

143. The Chandra Telescope will search for planets around stars, a key to the___ of extraterrestrial life, and examine interstellar dust and gases out of which stars are born.

- (1) perception (2) race (3) enquiry
(4) quest (5) None of these

144. He knew everything better than anybody else, and it was an affront to his___ vanity that you should disagree with him.

- (1) overstrung (2) overweening (3) overwhelming
(4) overwrought (5) None of these

145. One major_____ between the Election Commission and the Central Government related to the powers of the former in respect of the deployment of CISF at places where elections are held.

- (1) irritant (2) conflict (3) pain
(4) culprit (5) None of these

Directions (Qs. 146-150): In each question, an incomplete statement followed by fillers is given. Pick out the best one which can complete incomplete stem correctly and meaningfully.

146. In order to help the train company attain its goal of enhancing profit, all the employees_____

- (1) urged the management to grant paid leaves.
(2) appealed the management to implement new welfare schemes.
(3) voluntarily offered to work overtime with lucrative overtime.
(4) voluntarily offered to render additional services in lieu of nothing.
(5) decided to enhance production at the cost of quality of the train company's services.

147. His behavior is so unpredictable that he_____

- (1) never depends upon his friends for getting his work done.
(2) is seldom trusted by others.
(3) always finds it impossible to keep his word.
(4) always insists on getting the work completed on schedule.
(5) seldom trusts others as far as his work is concerned.

148. Although initial investigations pointed towards him _____

- (1) the preceding events corroborated his involvement in the crime
(2) the additional information confirmed his guilt
(3) the subsequent events established that he was guilty.
(4) the subsequent events proved that he was innocent
(5) he gave an open confession of his crime

149. The weather outside was extremely pleasant and hence we decided to _____

- (1) utilise our time in watching the television
(2) refrain from going out for a morning walk
(3) enjoy a morning ride in the open
(4) employ this rare opportunity for writing letters
(5) remain seated in our rooms in the bungalow

150. With great efforts his son succeeded in convincing him not to donate his entire wealth to an orphanage_____

- (1) and lead the life of a wealthy merchant
(2) but to a home for the forsaken children
(3) and make an orphan of himself
(4) as the orphanage needed a lot of donations

- (5) as the orphanage had been set up by him

151. The number of tuples in a relation is called its_____. While the number of attributes in a relation is called it's_____

- (1) Degree, Cardinality (2) Cardinality, Degree
(3) Rows, Columns (4) Columns, Rows (5) None of these

152. Which of the following is false for a query?

- (1) It is an expression which on evaluation returns results from the DBMS.
(2) It is a command given to the DBMS
(3) DBMS might support some kind of command to execute a query
(4) queries make the database useful
(5) None of these

153. What are the valid responses of a RDBMS?

- (1) Completion codes (2) Messages
(3) Results of the queries
(4) all of the above
(5) None of these

154. The GROUP BY clause is not:

- (1) used to combine, or group, rows with related values into elements of a smaller set of rows.
(2) often used in conjunction with SQL aggregate functions
(3) used to preserve duplicate rows in a result set.
(4) used to eliminate duplicate rows from a result set.
(5) None of these

155. The parameter which gives probability of the transport layer itself spontaneously termination 2 a connection due to internal problem is called?

- (1) Protection (2) resilience (3) option negotiation
(4) transfer failure (5) None of these

156. What is the valid host range the IP address 172.16.10.22 255.255.255.240 is a part of?

- (1) 172.16.10.20 through 172.16.10.22
(2) 172.16.10.1 through 172.16.10.255
(3) 172.16.10.16 through 172.16.10.23
(4) 172.16.10.17 through 172.16.10.31
(5) 172.16.10.17 through 172.16.10.30

157. Which of the following are invalid SQL language % elements?

- (1) colon
(2) Queries which retrieve data based on specific criteria.
(3) Expressions which can produce either scalar values or tables consisting of columns and rows of data.
(4) Statements which may have a persistent effect on schemas and data, or which may control transactions, program flow, connections, sessions, or diagnostics.
(5) None of these

158. Which protocol working at the Transport layer provides a connectionless service between hosts?

- (1) IP (2) ARP (3) TCP
(4) UDP (5) None of these

159. Which of the following categories of the data integrity RDBMS will enforce specific business rules:

- (1) Entity Integrity (2) Domain Integrity
(3) Referential integrity
(4) User-Defined Integrity
(5) None of these

160. SQL is all but:

- (1) SQL is an ANSI standard computer language
(2) SQL allows you to access a database
(3) SQL allows you to execute queries against a database
(4) SQL does not allow you to update records in a database
(5) None of these

161. Disk scheduling includes deciding

- (1) which should be accessed next
(2) order in which disk access requests must be serviced
(3) the physical location of the file
(4) the logical location of the file
(5) None of these

162. Which among following scheduling algorithms give minimum average waiting time

- (1) FCFS (2) SJF (3) Round robin
(4) On priority (5) None of these

163. What is not true about COMMIT and ROLLBACK?

- (1) interact with areas such as transaction control and locking.
(2) COMMIT alone cannot make data permanent.
(3) both terminate any open transaction and release any locks held on data.
(4) both maintain consistency of database.
(5) None of these

164. Which of the following is a function of e-mail system?

- (1) Composition (2) Transfer (3) Reporting
(4) All of above (5) None of these

165. Mobile computers and personal digital assistant (PDAs) are the examples of?

- (1) Radio broadcasting (2) Wireless network
(3) Geosynchronous (4) LAN (5) None of these

166. The XOR operator + is?

- (1) commutative (2) associative
(3) distributive over AND operator
(4) (1) and (2)
(5) None of these

167. An identifier in C?

- (1) is a name of thing such as variable and function
(2) is made up of letters numerals and the underscore
(3) can contain both uppercase and lowercase letters

- (4) All of above
(5) None of above

168. Milestones are used to ?

- (1) Know the cost of the project
(2) Know the status of the project
(3) Know the user expectations
(4) None of the above
(5) None of these

169. The average search time of hashing with linear probing will be less if the load factor ?

- (1) is far less than one (2) equals one
(3) is far greater than one
(4) none of above
(5) None of these

170. Negative numbers can't be represented in ?

- (1) signed magnitude form
(2) 1's complement form
(3) 2's complement form (4) None of above
(5) None of these

171. Sending a file from your personal computer's primary memory or disk to another computer is called?

- (1) Uploading (2) hang on (3) logging on
(4) downloading (5) None of these

172. The memory cell of a dynamic RAM is simpler and smaller than the memory cell of a RAM?

- (1) volatile (2) semiconductor (3) static
(4) bipolar (5) None of above

173. The normal form that is not necessarily dependency preserving is

- (1) 2NF (2) 3NF (3) BCNF
(4) 4NF (5) None of these

174. Fifth Normal form is concerned with

- (1) Functional dependency
(2) Multivalued dependency
(3) Join dependency (4) Domain key (5) None of these

175. A _____ Does not have a distinguishing attribute if its own and mostly are dependent entities, which are part of some another entity.

- (1) Weak entity (2) Strong entity
(3) Non attributes entity
(4) Dependent entity
(5) None of these

176. _____ is the complex search criteria in the where clause.

- (1) Sub string (2) Drop Table (3) Predict
(4) Predicate (5) None of these

177. The term module in the design phase refers to?

- (1) Functions (2) Procedures (3) Sub programs
(4) All of the above (5) None of these

178. Switch is a Device of ____ Layer of OSI Model.

- (1) 1077 (2) 1086 (3) Application Layer
(4) Session Layer (5) None of these

179. The number of binary trees with 3 nodes which when traversed in post order gives the sequence A, B, C is?

- (1) 3 (2) 9 (3) 7
(4) 5 (5) None of these

180. Which database level is closest to the users?

- (1) External (2) Internal (3) Physical
(4) Conceptual (5) None of these

181. Which are the two ways in which entities can participate in a relationship?

- (1) Passive and active (2) Total and partial
(3) Simple and Complex (4) All of the above
(5) None of these

182. Which among these is incorrect for relations?

(i) degree-number of tuples

(ii) relation-table

(iii) tuple-row

(iv) attribute-column

- (1) only(i) (2) (i) and (ii) (3) (i) and (iii)
(4) (iii) and (iv) (5) None of these

183. Which of the following is used to define the structure of a relation, deleting relations and relating schemas ?

- (1) DML(Data Manipulation Language)
(2) DDL(Data Definition Language)
(3) Query (4) Relational Schema
(5) None of these

184. Which of the following is not true?

- (1) External view: highest level of abstraction as seen by a user
(2) Conceptual view: sum total of Data Base Management System user's views
(3) Internal level: middle level of abstraction
(4) Internal level: how the data are physically stored.
(5) None of these

185. Which of the following is true about WHERE clause?

- (1) does not include a comparison predicate
(2) no restriction on the number of rows
(3) eliminates all rows from the result set where the comparison predicate does not evaluate to True
(4) The WHERE clause is applied after the GROUP BY clause.
(5) None of these

186. What protocol is used to find the hardware address of a local device?

- (1) RARP (2) ARP (3) IP
(4) ICMP (5) BootP

187. Establishing a virtual connection is functionally equivalent to?

- (1) Connecting as virtual memory
(2) Physically connecting a DTE and DCE
(3) Placing a telephone call prior to a conversation
(4) Placing a modem prior to a conversation
(5) None of above

188. Which of the following is a variation of Frequency Division multiplexing (FDM) ?

- (1) Time division Multiplexing (TDM)
(2) Pulse Code Multiplexing (PCM)
(3) Wavelength Division Multiplexing (WDM)
(4) None of above
(5) All of the these

189. The binary equivalent of the Gray code 11100 is ____ ?

- (1) 10111 (2) 00111 (3) 01011
(4) 10101 (5) None of these

190. Star Topology is Based On a Central Device that can be?

- (1) HUB (2) Switch (3) Only (1)
(4) Both (1) and (2) (5) None of these

191. Any program in C has access to three standard files?

- (1) Standard input file, standard output file, standard error file
(2) Stdin, stdout, stderr
(3) All of above
(4) Key words, screen, stderr
(5) All of above

192. The index register in a digital computer is used for?

- (1) Pointing to the stack address
(2) Indirect addressing
(3) Keeping track of number of times a loop is executed
(4) Address modification
(5) None of these

193. The HAVING clause:

- (1) includes a comparison predicate used to eliminate rows after the GROUP BY clause is applied to the result set
(2) it acts on the results of the GROUP BY clause,
(3) aggregate functions can be used in the HAVING clause predicate
(4) all of the above
(5) None of these

194. What are the functions of DCL?

- (1) handling the authorization aspects of data.
(2) permitting the user to control who has access to see or manipulate data within the database.
(3) both (1) and (2) (4) (1) only (5) None of these

195. Which of these are the activities done by RDBMS?

- (1) take note of authorizations
(2) take note of constraints

- (3) Update variables according to authorizations and constraints
 (4) all of the above
 (5) None of these

196. Which of the following are the properties of entities?

- (1) Groups (2) Table (3) Attributes
 (4) Switchboards (5) None of these

197. _____ is preferred method for enforcing data integrity

- (1) Constraints (2) Stored Procedure (3) Triggers
 (4) Cursors (5) None of these

198. _____ data type can store unstructured data

- (1) RAW (2) CHAR (3) NUMERIC
 (4) VARCHAR (5) None of these

199. A DBMS responds to commands given by

- (1) general purpose application programs
 (2) Custom developed application programs
 (3) users (4) all of the above (5) None of these

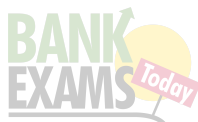
200. Which one of the following provides the ability to query information from the database and to insert tuples into, delete tuples from, and modify tuples in the database?

- (1) DML (Data Manipulation Language)
 (2) DDL (Data Definition Language)
 (3) Query (4) Relational Schema
 (5) None of these

- (127) 4 (128) 4 (129) 5 (130) 2 (131) 3 (132) 1 (133) 3
 (134) 3 (135) 4 (136) 2 (137) 5 (138) 1 (139) 2 (140) 4
 (141) 1 (142) 3 (143) 4 (144) 2 (145) 2 (146) 4 (147) 2
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 (155) 2 (156) 5 (157) 1 (158) 4 (159) 4 (160) 4 (161) 2
 (162) 2 (163) 2 (164) 4 (165) 2 (166) 4 (167) 4 (168) 2
 (169) 1 (170) 4 (171) 1 (172) 3 (173) 1 (174) 3 (175) 1
 (176) 4 (177) 4 (178) 2 (179) 4 (180) 1 (181) 2 (182) 1
 (183) 2 (184) 3 (185) 3 (186) 2 (187) 3 (188) 3 (189) 1
 (190) 4 (191) 2 (192) 4 (193) 4 (194) 3 (195) 4 (196) 3
 (197) 1 (198) 1 (199) 4 (200) 1

Explanations

You can get access to detailed explanations for all questions on this test on the Studycopter Android App, Studycopter website or through Studycopter's printed books.

**Answers**

- (1) 4 (2) 4 (3) 4 (4) 3 (5) 2 (6) 5 (7) 1
 (8) 5 (9) 4 (10) 2 (11) 2 (12) 5 (13) 3 (14) 3
 (15) 1 (16) 2 (17) 4 (18) 5 (19) 5 (20) (21) 1
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