

IBPS BANK PO/MT CWE EXAM 2014

Based on Memory

REASONING ABILITY

DIRECTIONS (Qs. 1–5): Every question below has a three statement, followed by four conclusions numbered I, II, III and IV. You have to consider every given statement as true, even if it does not conform to the well known facts. Read the conclusions and then decide which of the conclusions can be logically derived.

1. **Statements**

- I. Some toys are pens.
- II. Some pens are papers.
- III. Some papers are black.

Conclusions

- I. Some toys are black.
- II. No pen is black.
- III. No toy is black.
- IV. Some pens are black.
- (a) None follows
- (b) Either II or IV
- (c) Either I or III and either II or IV
- (d) Either I or IV
- (e) All of the above

2. **Statements**

- I. Some books are copies.
- II. All copies are green.
- III. Some green are yellow.

Conclusions

- I. All copies are yellow.
- II. Some yellow are green.
- III. Some copies are yellow.
- IV. All green are copies.
- (a) Only II
- (b) Either III or IV only
- (c) Either II or IV only
- (d) All of these
- (e) None of these

3. **Statements**

- I. All jugs are glasses.
- II. All glasses are cups.
- III. All jugs are pens.

Conclusions

- I. All pens are jugs.
- II. Some glasses are pens.
- III. Some cups are pens.
- IV. All pens are cups.
- (a) All follow
- (b) Only II
- (c) Only II and III
- (d) Only III and IV
- (e) None of these

4. **Statements**

- I. All ACs are DCs.
- II. Some DCs are ECs.
- III. All ECs are YYs.

Conclusions

- I. Some ACs are ECs.
- II. Some YYs are DCs.
- III. No ACs is ECs.
- IV. All DCs are ACs.
- (a) I and III
- (b) Only II
- (c) I and II
- (d) II and either I or III
- (e) None of these

5. **Statements**

- I. Some newspapers are radios.
- II. Some radios are televisions.
- III. No television is a magazine.

Conclusions

- I. No newspaper is a magazine.
- II. No radio is a magazine.
- III. Some radios are not magazine.
- IV. Some newspapers are televisions.
- (a) Only I follows
- (b) Only III follows
- (c) Either I or II follows
- (d) Both I and II follow
- (e) None of these

DIRECTIONS (Qs. 6–10): Study the following information carefully and answer the questions based on it.

Ten students A, B, C, D, E, F, G, H, I and J are sitting in a row facing west.

- (i) B and F are not sitting on either of the edges.
 - (ii) G is sitting to the left of D and H is sitting to the right of J.
 - (iii) There are four persons between E and A.
 - (iv) I is to the right of B and F is to the left of D.
 - (v) J is in between A and D and G is in between E and F.
 - (vi) There are two persons between H and C.
6. Who is sitting at the seventh place counting from left?
- (a) H
 - (b) C
 - (c) J
 - (d) Either H or C
 - (e) None of these
7. Who among the following is definitely sitting at one of the ends?
- (a) C
 - (b) H
 - (c) E
 - (d) Cannot be determined
 - (e) None of these

8. Who are immediate neighbours of I?
 (a) BC (b) BH
 (c) AH (d) Cannot be determined
 (e) None of these
9. Who is sitting second left of D?
 (a) G (b) F
 (c) E (d) J
 (e) None of these
10. If G and A interchange their positions, then who become the immediate neighbours of E?
 (a) G and F (b) Only F
 (c) Only A (d) J and H
 (e) None of these

DIRECTIONS (Qs. 11 - 15): Study the following information and answer the questions that follow:-

Twelve people Abhishek, Binit, Chand, Dhiraj, Eshita, Fatima, Garima, Hena, Ishan, Jatin, Kamal and Lalit are sitting around a rectangular table. The following information is known- The table has 12 chairs numbered from 1 to 12. 6 seats on one side of the table and 6 on the opposite side. The chairs are arranged in such a way that chair number 1 is just opposite to 12, 6 is opposite to 7 and so on- Abhishek is sitting opposite to Kamal who is the only person sitting between Chand and Jatin. Eshita is sitting opposite to Ishan who is the only person sitting between Binit and Lalit. Fatima, sitting at chair number 1, is diagonally opposite to Chand who is sitting opposite to Dhiraj.

11. If Garima is sitting opposite to Fatima then who is sitting opposite to Hena?
 (a) Lalit (b) Binit
 (c) Ishan (d) Uniquely not determined.
 (e) None of these
12. If Lalit is sitting opposite to Hena, then who is sitting opposite to Garima?
 (a) Eshita or Fatima (b) Jatin or Fatima
 (c) Jatin or Eshita (d) None of these
 (e) All of the above
13. How many persons are sitting between Binit and Dhiraj, if they are on the same side of the table?
 (a) 2 or 3 (b) 1 or 2
 (c) 1 or 3 (d) None of these
 (e) All of the above
14. Which one of the following is correct?
 (a) Lalit is sitting at seat number 12
 (b) Lalit is sitting at seat number 10
 (c) Kamal is sitting at seat number 8
 (d) Kamal is sitting at seat number 9
 (e) None of these
15. Which one of the following is not correct?
 (a) Lalit can be opposite to Jatin.
 (b) Jatin can be opposite to Hena.
 (c) Lalit is adjacent to Chand.
 (d) There are three person sitting between A and F.
 (e) None of these

DIRECTIONS (Qs. 16 - 20): This group of questions is based on a set of conditions. In answering some of the questions, it may be useful to draw a rough diagram. Choose the response that most accurately and completely answers each question. A circular field, with inner radius of 10 meters and outer radius of 20 meters, was divided into five successive stages for ploughing. The ploughing of each stage was handed over to a different farmer.

- (i) Farmers are referred to by the following symbols: F1, F2, F3, F4 and F5.
 (ii) The points between different stages of project are referred to by the following symbols: P1, P2, P3, P4, and P5, not necessarily in the order.
 (iii) Farmer F5 was given the work of ploughing stage starting at point P4.
 (iv) The stage from point P5 to point P3 was not the first stage.
 (v) Farmer F4 was given the work of the fourth stage.
 (vi) Stage 3 finished at point P1, and the work of which was not given to farmer F1.
 (vii) Farmer F3 was given work of stage ending at point P5.
16. Which was the finish point for farmer F2?
 (a) P1 (b) P2
 (c) P3 (d) P4
 (e) P5
17. Which stage was ploughed by farmer F5?
 (a) First (b) Second
 (c) Third (d) Fourth
 (e) Fifth
18. Which were the starting and finish points of stage 2?
 (a) P2 and P5 (b) P5 and P3
 (c) P3 and P1 (d) P5 and P4
 (e) P3 and P2
19. For which farmer was P2 a finishing point?
 (a) F1 (b) F2
 (c) F3 (d) F4
 (e) F5
20. Which was the starting point for farmer F3?
 (a) P2 (b) P3
 (c) P4 (d) P1
 (e) None of these

DIRECTIONS (Qs. 21-25) : In the following question *, ⊕, \$, £ and @ are used according to following meaning.

‘P*Q’ means, ‘P is neither equal nor smaller than Q’
 ‘P⊕Q’ means, ‘P is not smaller than Q’
 ‘P\$Q’ means, ‘P is neither greater nor smaller than Q’
 ‘P£Q’ means, ‘P is neither greater nor equal to Q’
 ‘P@Q’ means, ‘P is not greater than Q’

Now according to the following statement if they are true, judge their Conclusions I, II and III follow definitely true.

21. Statements

E @ F , O ⊕ F , P @ E , P \$ R

Conclusions

I. O \$ P II. E ⊕ R III. P £ O

- (a) Only I is true (b) Only II is true
 (c) Either I or II is true (d) Only III is true
 (e) None of these

22. **Statements**

A * B , B @ C , A \$ D , D £ E

Conclusions

- I. E * B II. C \$ A III. D @ E
(a) Only I is true (b) I and II are true
(c) Only III is true (d) No one is true
(e) None of these

23. **Statements**

I ⊕ H , H \$ T , S £ T , S @ R

Conclusions

- I. I * T II. I \$ T III. S * H
(a) All are true (b) Either I or II is true
(c) Only I is true (d) Only II is true
(e) None of these

24. **Statements**

S @ T , Q \$ N , T £ N , Q * O

Conclusions

- I. S \$ N II. N ⊕ O III. N * O
(a) None is true (b) Either I or III is true
(c) Only I is true (d) Only II is true
(e) None of these

25. **Statements**

H ⊕ J , J * K , L \$ K , K @ M

Conclusions

- I. K £ M II. L \$ J III. H ⊕ L
(a) I and III are true (b) Only II is true
(c) Only III is true (d) None is true
(e) None of these

DIRECTIONS (Qs. 26-30) : Each of the questions below consists of a questions and two statements numbered I and II given below it. Use the data given to decide whether the data provided in the statements 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 II 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. Among M, K, B, D and W, who is the youngest?
I. B is younger than D.
II. W is younger than K but older than M.
27. What does 'Ne' stands for in the code language?
I. 'Na Ni Nok Ne' means 'I will tell you' and 'Ni Nok Ne Nam' means 'he will tell you' in that code language.
II. 'Ni Ne Mo Nam' means 'will he call you' and 'Ne Mok Sac Ni' means 'how will you go' in that code language.
28. Who amongst P, Q, R, S, T and U is the tallest?
I. P is taller than R and T but not as tall as U, who is taller than Q and S.

- II.** R is the third in height in the ascending order and not as tall as U, P and Q, Q being taller than P but not the tallest.

29. Who is paternal uncle of P?

- I.** P is brother of L, who is daughter of Q, who is sister of N, who is brother of S.
II. M is brother of K, who is husband of L, who is mother of G, who is sister of P.

30. What is Sudin's rank in the class of 44 students?

- I.** Ramesh, whose rank is 17th in the class, is ahead of Shyam by 6 ranks, Shyam being 7 ranks ahead of Sudin.
II. Suketu is 26 ranks ahead of Sudin and Shyamala is 6 ranks behind Sudin while Savita stands exactly in the middle of Shyamala and Suketu in ranks, her rank being 17.

DIRECTIONS (Qs.31-34) : Study the following information carefully and answer questions that follow :

The convenience of online shopping is what I like best about it. Where else can you shop even at midnight wearing your night suit? You do not have to wait in a line till the shop assistant is ready to help you with your purchases. It is much better experience as compared to going to a retail store. – A consumer's view.

31. Which of the following can be a **strong argument** in favour of retail store owners?
- (a) Online shopping portals offer a great deal of discounts which retail stores offer only during the sale season.
(b) One can compare a variety of products online which cannot be done at retail stores.
(c) Many online shopping portals offer the 'cash on delivery' feature which is for those who are sceptical about online payments.
(d) Many consumers prefer shopping at retail stores which are nearer to their houses.
(e) In online shopping the customer may be deceived as he cannot touch the product he is paying for.
32. Which of the following can be **inferred** from the given information? (*An inference is something that is not directly stated but can be inferred from the given information*)
- (a) One can shop online only at night.
(b) Those who are not comfortable using computers can never enjoy the experience of online shopping.
(c) All retail stores provide shopping assistants to each and every customer.
(d) The consumer whose view is presented has shopped at retail stores as well as online.
(e) The consumer whose view is presented does not have any retail stores in her vicinity.

33. Read the following information carefully and answer the given question:

Many manufacturing companies are now shifting base to the rural areas of the country as there is a scarcity of space in urban areas. Analysts say that this shift will not have a huge impact on the prices of the products manufactured by these companies as only about 30% consumers live in urban areas.

Which of the following may be **consequence** of the given information?

- (a) The prices of such products will decrease drastically in the urban areas.
 - (b) People living in urban areas will not be allowed to work in such manufacturing companies.
 - (c) These manufacturing companies has set-ups in the urban areas before shifting base.
 - (d) Those who had already migrated to the urban areas will not shift back to rural areas.
 - (e) The number of people migrated from rural to urban areas in search of jobs may reduce.
34. Read the following information carefully and answer the given question:
'Pets are not allowed in the park premises' - A notice put up at the park entrance by the authority that is responsible for maintenance of the park.
Which of the following can be **an assumption** according to the given information? (*An assumption is something that is supposed or taken for granted*)
- (a) At least some people who visit the park have pets.
 - (b) This is the only park which does not allow pets
 - (c) People who ignored this notice were fined
 - (d) There are more than one entrances to the park
 - (e) Many people have now stopped visiting the park
35. In a code language 'PROVIDE' is written as 'MULYFGB', then what will be code for 'BECAUSE' in same languages
- (a) YZHDRV B (b) ZHYDRV B
 - (c) YHZDRV B (d) ZYDHSV B
 - (e) None of these

DIRECTIONS (Qs. 36-38) : Study the following information carefully and answer the questions that follow :

In a building there are thirteen flats on three floors— II, III and IV. Five flats are unoccupied. Three managers, two teachers, two lawyers and one doctor occupy the remaining flats. There are at least three flats on any floor and not more than six flats on any floor. No two persons of the same profession stay on any floor. On the second floor, out of four flats, one occupant is the lawyer and has only one neighbour. One teacher lives one floor below the other teacher. The doctor is not the neighbour of any of the lawyers. No flat is unoccupied on the third floor.

36. How many flats are there on the third floor?
 - (a) Three or Four (b) Four
 - (c) Five (d) Three
 - (e) None of these
37. What is the combination of occupants on the second floor?
 - (a) Lawyer, Manager (b) Teacher, Doctor
 - (c) Manager, Doctor (d) Manager, Teacher
 - (e) None of these
38. Who among the following is the neighbour of the other lawyer?
 - (a) Manager
 - (b) Teacher
 - (c) Both the Manager and the Teacher
 - (d) Data inadequate
 - (e) None of these

DIRECTIONS (Qs. 39 - 44) : 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 input and rearrangement:

Input : exam 81 56 over down up 16 64

Step I : down exam 81 56 over up 16 64

Step II : down 81 exam 56 over up 16 64

Step III : down 81 exam 64 56 over up 16

Step IV : down 81 exam 64 over 56 up 16

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

As per the rule followed in the above steps, answer the following questions.

39. **Input** : 98 11 64 22 but will an it
which of the following will be step VI?
 - (a) step VI can't be possible because step V will be the last step
 - (b) an 98 but 64 it 22 11 will
 - (c) an 98 but 64 it 22 will 11
 - (d) an 11 but 22 it 64 will 98
 - (e) None of these
40. **Input**: 32 now 20 gift 53 box 62 at
Which of the following will be step IV?
 - (a) at 62 box 53 32 now 20 gift
 - (b) at 62 box 53 gift 32 now 20
 - (c) at 62 box 53 gift 20 now 32
 - (d) at 62 53 box 32 now 20 gift
 - (e) None of these
41. **Input**: pay by 18 36 nose ear 72 54
Which of the following steps will be the last step?
 - (a) Can't say (b) Five
 - (c) Seven (d) Six
 - (e) None of these
42. Step III of an input is:
damn 96 flag 87 78 14 saint put
which of the following steps will be the last but one?
 - (a) Can't say (b) Four
 - (c) Five (d) Six
 - (e) None of these
43. Step II of an input is :
jug 99 wax sun top 15 31 47
which of the following is definitely the input?
 - (a) wax sun top 15 31 47 jug 99
 - (b) wax sun jug 99 top 15 31 47
 - (c) wax sun top jug 99 15 31 47
 - (d) Cannot be determined
 - (e) None of these
44. Step IV of an input is: Come 95 forward 40 sky 17 over 23.
Then which of the following can certainly not be step III?
 - (a) come 95 forward sky 17 over 23 40
 - (b) come 95 forward 17 sky over 23 40
 - (c) come 95 forward sky 40 17 over 23
 - (d) Cannot be determined
 - (e) None of these

DIRECTIONS (Qs. 45 to 48): Study the following information carefully and answer the questions that follow:

Mr Ghosh recently redecorated his house by coordinating orange and three other colours for the walls, carpets and curtains of four different rooms. From the information below, determine the colours of the carpet, walls and curtains for each of the room and answer the following questions:

- (a) Yellow was the only colour used in all the four rooms. It was used at least once for walls, carpets and curtains.
 - (b) Three different colours were used in each room but only the dining room and the bedroom were decorated in the same three colours.
 - (c) The same colour was chosen for the curtains in the bedroom, the carpet in the living room and the walls in the dining room. That colour was not used at all in the study room.
 - (d) The only room with both green and grey in its colour scheme had carpet of the same colour as in the dining room.
 - (e) Grey was the only colour used exactly twice—both times for curtains
 - (f) The study room walls were painted the same colour as the living room walls.
45. Which of the following rooms had orange curtains and green walls?
 - (a) Dining room (b) Living room
 - (c) Bedroom (d) Study
 - (e) None of these
 46. Which of the two rooms had green carpets?
 - (a) Dining room and bedroom
 - (b) Study and living room
 - (c) Living room and dining room
 - (d) Study and dining room
 - (e) None of these
 47. Which room did not use grey colour at all?
 - (a) Dining room (b) Cannot say
 - (c) Study (d) Living room
 - (e) None of these
 48. The dining room had ____ curtains.
 - (a) Green (b) yellow
 - (c) Orange (d) grey
 - (e) None of these
 49. In a certain code language 'how many goals scored' is written as '5 3 9 7'; 'many more matches' is written as '9 8 2'; and 'he scored five' is written as '1 6 3 '. How is 'goals' written in that code language?
 - (a) 5 (b) 7
 - (c) 5 or 7 (d) Data inadequate
 - (e) None of these
 50. In a certain code TEMPORAL is written as OLDSMBSP. How is CONSIDER written in that code?

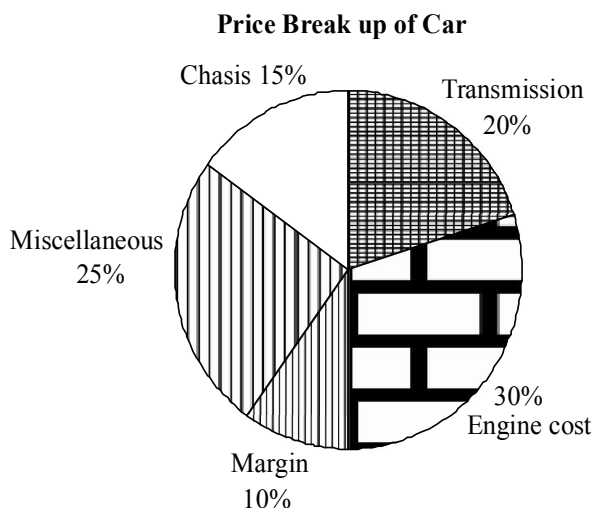
- (a) RMNBSFEJ (b) BNMRSFEJ
- (c) RMNBJEFS (d) TOPDQDCH
- (e) None of these

QUANTITATIVE APTITUDE

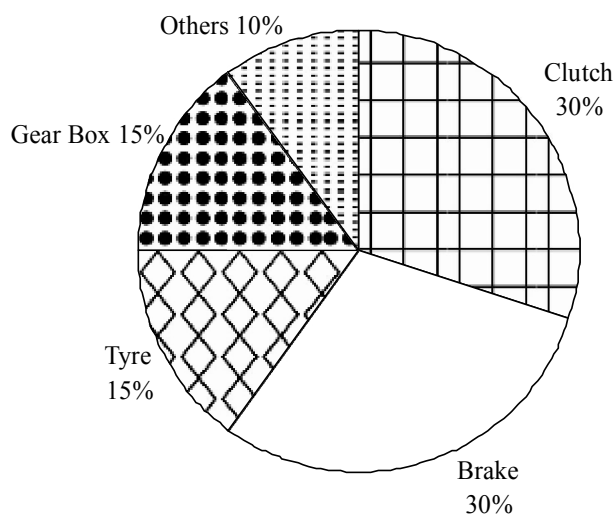
51. Three containers A, B and C are having mixtures of milk and water in the ratio 1 : 5, 3 : 5 and 5 : 7, respectively. If the capacities of the containers are in the ratio 5 : 4 : 5, then find the ratio of the milk to the water if the mixtures of all the three containers are mixed together.
 - (a) 51 : 115 (b) 52 : 115
 - (c) 53 : 115 (d) 54 : 115
 - (e) None of these
52. Groundnut oil is now being sold at ₹ 27 per kg. During last month its cost was ₹ 24 per kg. Find by how much % a family should reduce its consumption, so as to keep the expenditure same.
 - (a) $11\frac{1}{9}\%$ (b) $11\frac{1}{11}\%$
 - (c) $11\frac{9}{10}\%$ (d) $9\frac{1}{10}\%$
 - (e) None of these
53. An ice-cream company makes a popular brand of ice-cream in rectangular shaped bar 6 cm long, 5 cm wide and 2 cm thick. To cut the cost, the company has decided to reduce the volume of the bar by 20%, the thickness remaining the same, but the length and width will be decreased by the same percentage amount. The new length L will satisfy :
 - (a) $5.5 < L < 6$ (b) $5 < L < 5.5$
 - (c) $4.5 < L < 5$ (d) $4 < L < 4.5$
 - (e) None of these
54. A sum of ₹ 725 is lent in the beginning of a year at a certain rate of interest. After 8 months, a sum of ₹ 362.50 more is lent but at the rate twice the former. At the end of the year, ₹ 33.50 is earned as interest from both the loans. What was the original rate of interest?
 - (a) 3.6% (b) 4.5%
 - (c) 5% (d) 3.46%
 - (e) None of these
55. The difference between compound interest and simple interest on a sum for 2 years at 10% per annum, when the interest is compounded annually is ₹ 16. If the interest were compounded half-yearly, the difference in two interests would be:
 - (a) ₹ 24.81 (b) ₹ 26.90
 - (c) ₹ 31.61 (d) ₹ 32.40
 - (e) None of these
56. A person lent out a certain sum on simple interest and the same sum on compound interest at certain rate of interest per annum. He noticed that the ratio between the difference of compound interest and simple interest of 3 years and that of 2 years is 25 : 8. The rate of interest per annum is:
 - (a) 10% (b) 11%
 - (c) 12% (d) $12\frac{1}{2}\%$
 - (e) None of these

57. A contract is to be completed in 46 days and 117 men were set to work, each working 8 hours a day. After 33 days, $\frac{4}{7}$ of the work is completed. How many additional men may be employed so that the work may be completed in time, each man now working 9 hours a day ?
- (a) 80 (b) 81
(c) 82 (d) 83
(e) None of these
58. Two pipes A and B can fill a cistern in 30 minutes and 40 minutes respectively. Both the pipes are opened. Find when the second pipe B must be turned off so the cistern may just be full in 10 minutes.
- (a) $26\frac{2}{3}$ min (b) 25 min
(c) $40\frac{2}{3}$ min (d) $42\frac{2}{3}$ min
(e) None of these
59. A train leaves station X at 5 a.m. and reaches station Y at 9 a.m. Another train leaves station Y at 7 a.m. and reaches station X at 10:30 a.m. At what time do the two trains cross each other ?
- (a) 7:36 am (b) 7:56 am
(c) 8:36 am (d) 8:56 am
(e) None of these
60. A boat running upstream takes 8 hours 48 minutes to cover a certain distance, while it takes 4 hours to cover the same distance running downstream. What is the ratio between the speed of the boat and speed of water current respectively?
- (a) 2:1 (b) 3:2
(c) 8:3 (d) Cannot be determined
(e) None of these

DIRECTIONS (Qs. 61-65) : Study the pie charts given below and answer the following questions.



Cost break up of Transmission



Price of Car = ₹1,00,000

61. What is the cost of Gear Box?
- (a) ₹9000 (b) ₹6000
(c) ₹3000 (d) ₹15,000
(e) None of these
62. What percentage of total cost is contributed by the brake?
- (a) 5.5% (b) 6.6%
(c) 6% (d) 5.4%
(e) None of these
63. If the price of tyres goes up by 25%, by what amount should be the sale price be increased to maintain the amount of profit?
- (a) ₹750 (b) ₹2250
(c) ₹3750 (d) ₹375
(e) None of these
64. If transmission cost increases by 20%, by what amount is the profit reduced (total price of car remains same)?
- (a) ₹3000 (b) ₹4000
(c) ₹6000 (d) Cannot be determined
(e) None of these
65. What % of sale price is contributed by clutch?
- (a) 6% (b) 2%
(c) 3% (d) Cannot be determined
(e) None of these

DIRECTIONS (Qs. 66 - 70) : Read the following information and answer the questions that follow.

In a huge Jewellery shop, the electric gadgets being used are 17 tubelights of 40 W each, 14 fans of 80 W each, 16 bulbs of 60 W each, 11 bulbs of 100 W each, 11 AC's of 2100 W each, 9 laptops of 200 W each and 10 TV's of 120 W each. In a day, tube lights and TV's are used for 8 h but 60 W bulbs are used for 7 h and 100

W bulbs are used for 9 h whereas laptops and AC's are used for 5 h and 9 h respectively. However, fans are used for 11 h. (Note: 1000 W = 1 unit, 1 month = 30 days).

66. What is the total electric energy consumed (in units) by 60 W bulbs in the whole month?
- (a) 432 (b) 576
(c) 67.2 (d) 201.6
(e) None of these
67. Electricity consumed by all fans is what per cent of energy consumed by all the laptops?
- (a) 132.2% (b) 136.88%
(c) 122.68 (d) 169.62%
(e) None of these
68. Out of the following, which type of gadgets consume more electricity in the shop?
- (a) Fans (b) Tubelights
(c) Laptops (d) TV's
(e) None of these
69. If one electric unit costs ₹ 2.70 and power (used by AC's) unit costs ₹ 3.70, then what money is paid to the electricity department for one month?
- (a) ₹ 27368 (b) ₹ 28683
(c) ₹ 78600 (d) ₹ 2900
(e) None of these
70. What is the ratio of consumption of electricity in units by 60W and 100 W bulbs in a month?
- (a) 5 : 6 (b) 4 : 5
(c) 3 : 4 (d) 2 : 3
(e) None of these

DIRECTIONS (Qs.71–75): In each of the following questions two equations are given. You have to solve them and give answer accordingly.

- (a) If $x > y$ (b) If $x < y$
(c) If $x = y$ (d) If $x \geq y$
(e) If $x \leq y$

71. I. $2x^2 + 5x + 1 = x^2 + 2x - 1$
II. $2y^2 - 8y + 1 = -1$

72. I. $\frac{x^2}{2} + x - \frac{1}{2} = 1$
II. $3y^2 - 10y + 8 = y^2 + 2y - 10$

73. I. $4x^2 - 20x + 19 = 4x - 1$
II. $2y^2 = 26y + 84$

74. I. $y^2 + y - 1 = 4 - 2y - y^2$

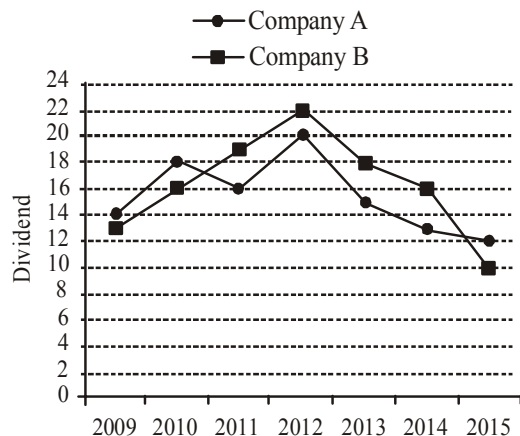
II. $\frac{x^2}{2} - \frac{3}{2}x = x - 3$

75. I. $6x^2 + 13x = 12 - x$

II. $1 + 2y^2 = 2y + \frac{5y}{6}$

DIRECTIONS (Qs. 76-80): Study the following graph carefully to answer these questions.

Annual dividend offered by two companies over the years



76. Shri Giridhar invested total amount of ₹ 25000 in 2009 for one year in the two companies together and got a total dividend of ₹ 3340. What was the amount invested in Company A?
- (a) ₹ 12000 (b) ₹ 9000
(c) ₹ 16000 (d) Cannot be determined
(e) None of these
77. Anuja invested ₹ 35000 in Company B in 2011. After one year she transferred the entire amount with dividend to Company A in 2012 for one year. What amount will be received back by Anuja including dividend?
- (a) ₹ 49980 (b) ₹ 49000
(c) ₹ 48300 (d) ₹ 49563.50
(e) None of these
78. An amount of ₹ 18000 was invested in Company A in 2012. After one year the same amount was re-invested for one more year. What was the total dividend received at the end of two years?
- (a) ₹ 5805 (b) ₹ 6300
(c) ₹ 6480 (d) ₹ 6840
(e) None of these
79. Bhushan invested different amounts in Companies A and B in 2015 in the ratio of 5 : 8. What will be the ratio between the amounts of dividends received from Companies A and B respectively?
- (a) 2 : 3 (b) 5 : 6
(c) 3 : 4 (d) Cannot be determined
(e) None of these
80. In the year 2014, Suraj invested ₹ 56000 in Company B. How much more or less dividend would he have received had the amount been invested in Company A?
- (a) ₹ 1640 more (b) ₹ 1640 less
(c) ₹ 1860 less (d) ₹ 1680
(e) None of these

DIRECTIONS (Qs. 81 - 85) : Study the following table to answer the given questions.

Production (in crore units) of six companies over the years

Company	Years						Total
	2009	2010	2011	2012	2013	2014	
TP	103	150	105	107	110	132	707
ZIR	75	80	83	86	90	91	505
AVC	300	300	300	360	370	340	1970
CTU	275	280	281	280	285	287	1688
PEN	25	30	35	40	42	45	217
SIO	85	87	89	91	92	96	540
Total	863	927	893	964	989	991	5627

81. The production of Company AVC in 2000 is approximately what per cent of its average production over the given years?
 (a) 300 (b) 110
 (c) 136 (d) 118.25
 (e) None of these
82. For SIO, which year was the per cent increase or decrease in production from the previous year the highest?
 (a) 2013 (b) 2010
 (c) 2014 (d) 2012
 (e) None of these
83. Which company has less average production in the last three years compared to that of first three years?
 (a) No company (b) CTU
 (c) ZIR (d) TP
 (e) None of these
84. The total production of the six companies in the first two given years is what per cent of that of last two given years? (round off up to two decimal places)
 (a) 87.08 (b) 104.55
 (c) 90.40 (d) 10.62
 (e) None of these
85. For ZIR, which of the following is the difference between production in 2013 and that in 2014?
 (a) 10,00,00,000 (b) 1,00,00,000
 (c) 10,00,000 (d) 40,00,000
 (e) None of these
86. When the price of a radio was reduced by 20%, its sale increased by 80%. What was the net effect on the sale?
 (a) 44% increase (b) 44% decrease
 (c) 66% increase (d) 75% increase
 (e) None of these
87. Two sides of a plot measure 32 metres and 24 metres and the angle between them is a perfect right angle. The other two sides measure 25 metres each and the other three angles.
 What is the area of the plot?
 (a) 768 (b) 534
 (c) 696.5 (d) 684
 (e) None of these
88. In how many different ways can the letters of the word 'LEADING' be arranged in such a way that the vowels always come together?
 (a) 360 (b) 480
 (c) 720 (d) 5040
 (e) None of these
89. In a class, there are 15 boys and 10 girls. Three students are selected at random. The probability that 1 girl and 2 boys are selected, is:
 (a) $\frac{21}{46}$ (b) $\frac{25}{117}$
 (c) $\frac{1}{50}$ (d) $\frac{3}{25}$
 (e) None of these
90. Gauri went to the stationery and bought things worth ₹25, out of which 30 paise went on sales tax on taxable purchases. If the tax rate was 6%, then what was the cost of the tax free items?
 (a) ₹15 (b) ₹15.70
 (c) ₹19.70 (d) ₹20
 (e) None of these

DIRECTIONS(Qs 91-95): In this type of questions, one term in the number series is wrong. Find out the wrong term.

91. 93, 309, 434, 498, 521, 533
 (a) 309 (b) 434
 (c) 498 (d) 521
 (e) None of these
92. 46080, 3840, 384, 48, 24, 2, 1
 (a) 384 (b) 48
 (c) 24 (d) 2
 (e) None of these
93. 5, 27, 61, 122, 213, 340, 509
 (a) 27 (b) 61
 (c) 122 (d) 509
 (e) None of these
94. 11, 5, 20, 12, 40, 26, 74, 54
 (a) 5 (b) 20
 (c) 40 (d) 26
 (e) None of these

95. 1, 3, 10, 21, 64, 129, 356, 777
 (a) 21 (b) 129
 (b) 10 (d) 356
 (e) None of these

DIRECTIONS (96-100): What approximate value will come in place of question mark (?) in the following questions (You are not expected to calculate the exact value).

96. $9228.789 - 5021.832 + 1496.989 = ?$
 (a) 6500 (b) 6000
 (c) 6300 (d) 5700
 (e) 5100
97. $1002 \div 49 \times 99 - 1299 = ?$
 (a) 700 (b) 600
 (c) 900 (d) 250
 (e) 400
98. $29.8\% \text{ of } 260 + 60.01\% \text{ of } 510 - 103.57 = ?$
 (a) 450 (b) 320
 (c) 210 (d) 280
 (e) 350
99. $(21.98)^2 - (25.02)^2 + (13.03)^2 = ?$
 (a) 25 (b) 120
 (c) 10 (d) 65
 (e) 140
100. $\frac{\sqrt{2498} \times \sqrt{625}}{\sqrt{99}} = ?$
 (a) 110 (b) 90
 (c) 200 (d) 160
 (e) 125

ENGLISH LANGUAGE

DIRECTION (Qs. 101-115): Read the following passage carefully and answer the questions given below it. Certain words/phrases have been printed in bold to help you locate them while answering some of the questions.

Governments have traditionally equated economic progress with steel mills and cement factories. While urban centers thrive and city dwellers get rich, hundreds of millions of farmers remain mired in poverty. However, fears of food shortages, a rethinking of antipoverty priorities and the crushing recession in 2008 are causing a dramatic shift in world economic policy in favour of greater support for agriculture.

The last time when the world's farmers felt such love was in the 1970s. At that time, as food prices spiked, there was real concern that the world was facing a crisis in which the planet was simply unable to produce enough grain and meat for an expanding population. Governments across the developing world and international aid organisations **plowed** investment into agriculture in the early 1970s, while technological breakthroughs, like high-yield strains of important food crops, boosted production. The result was the Green Revolution and food production exploded.

But the Green Revolution became a victim of its own success. Food prices plunged by some 60% by the late 1980s from their

peak in the mid- 1970s. Policymakers and aid workers turned their attention to the poor's other **pressing** needs, such as health care and education. Farming got **starved** of resources and investment. By 2004, aid directed at agriculture sank to 3.5% and "Agriculture lost its glitter." Also, as consumers in high-growth giants such as China and India became wealthier, they began eating more meat, so grain once used for human consumption got diverted to beef up livestock.

By early 2008, panicked buying by importing countries and restrictions **slapped** on grain exports by some big producers helped drive prices up to heights not seen for three decades. Making matters worse, land and resources got reallocated to produce cash crops such as biofuels and the result was that voluminous reserves of grain **evaporated**. Protests broke out across the emerging world and fierce food riots toppled governments.

This spurred global leaders into action. This made them aware that food security is one of the fundamental issues in the world that has to be dealt with in order to maintain administrative and political stability. This also spurred the U.S. which traditionally provisioned food aid from American grain surpluses to help needy nations, to move towards investing in farm sectors around the globe to boost productivity. This move helped countries become more productive for themselves and be in a better position to feed their own people.

Africa, which missed out on the first Green Revolution due to poor policy and limited resources, also witnessed a 'change'. Swayed by the success of East Asia, the primary poverty-fighting method favoured by many policymakers in Africa was to get farmers off their farms and into modern jobs in factories and urban centers. But that strategy proved to be highly insufficient. Income levels in the countryside badly trailed those in cities while the FAO estimated that the number of poor going hungry in 2009 reached an all time high at more than one billion.

In India on the other hand, with only 40% of its farmland irrigated, entire economic boom currently underway is held hostage by the unpredictable monsoon. With much of India's farming areas suffering from drought this year, the government will have a tough time meeting its economic growth targets. In a report, Goldman Sachs predicted that if this year too receives weak rains, it could cause agriculture to contract by 2% this fiscal year, making the government's 7% GDP-growth target look "a bit rich". Another green revolution is the need of the hour and to make it a reality, the global community still has much backbreaking farm work to do.

101. What is the author's main objective in writing the passage
 (a) Criticising developed countries for not bolstering economic growth in poor nations
 (b) Analysing the disadvantages of the Green Revolution
 (c) Persuading experts that a strong economy depends on industrialization and not agriculture
 (d) Making a case for the international society to engineer a second Green Revolution
 (e) Rationalising the faulty agriculture policies of emerging countries
102. Which of the following is an adverse impact of the Green Revolution ?
 (a) Unchecked crop yields resulted in large tracts of land becoming barren
 (b) Withdrawal of fiscal impetus from agriculture to other sectors

- (c) Farmers began soliciting government subsidies for their produce
 (d) Farmers rioted as food prices fell so low that they could not make ends meet
 (e) None of these
103. What is the author trying to convey through the phrase "making the government's 7% GDP growth target look "a bit rich"?"
 (a) India is unlikely to achieve the targeted growth rate
 (b) Allocation of funds to agriculture has raised India's chances of having a high GDP
 (c) Agricultural growth has artificially inflated India's GDP and such growth is not real
 (d) India is likely to have one of the highest GDP growth rates
 (e) A large portion of India's GDP is contributed by agriculture
104. Which of the following factors was/were responsible for the neglect of the farming sector after the green revolution?
 (A) Steel and cement sectors generated more revenue for the government as compared to agriculture.
 (B) Large scale protests against favouring agriculture at the cost of other important sectors such as education and healthcare.
 (C) Attention of policy makers and aid organizations was diverted from agriculture to other sectors.
 (a) None (b) Only (C)
 (c) Only (B) & (C) (d) Only (A) & (B)
 (e) All (A), (B) & (C)
105. What prompted leaders throughout the world to take action to boost the agriculture sector in 2008?
 (a) Coercive tactics by the U.S. which restricted food aid to poor nations
 (b) The realization of the link between food security and political stability
 (c) Awareness that performance in agriculture is necessary in order to achieve the targeted GDP
 (d) Reports that high-growth countries like China and India were boosting their agriculture sectors to capture the international markets
 (e) Their desire to influence developing nations to slow down their industrial development.
106. What motivated the U.S. to focus on investing in agriculture across the globe ?
 (a) To make developing countries become more reliant on U.S. aid
 (b) To ensure grain surpluses so that the U.S. had no need to import food
 (c) To make those countries more self sufficient to whom it previously provided food
 (d) To establish itself in the market before the high-growth giants such as India and China could establish themselves
 (e) None of these
107. What impact did the economic recession of 2008 have on agriculture ?
 (a) Governments equated economic stability with industrial development and shifted away from agriculture
 (b) Lack of implementation of several innovative agriculture programmes owing to shortage of funds
 (c) It prompted increased investment and interest in agriculture
 (d) The GDP as targeted by India was never achieved because of losses in agriculture
 (e) None of these
108. What encouraged African policymakers to focus on urban jobs ?
 (a) Misapprehension that it would alleviate poverty as it did in other countries
 (b) Rural development outstripped urban development in many parts of Africa
 (c) Breaking out of protests in the country and the fear that the government would topple
 (d) Blind imitation of western models of development
 (e) None of these
109. Which of the following had contributed to exorbitant food prices in 2008 ?
 (A) Hoarding of food stocks by local wholesalers which inadvertently created a food shortage.
 (B) Export of foodgrains was reduced by large producers.
 (C) Diverting resources from cultivation of foodgrains to that of more profitable crops.
 (a) None (b) Only (C)
 (c) Only (B) (d) All (A), (B) & (C)
 (e) Only (B) & (C)
110. Which of the following is true about the state of agriculture in India at present ?
 (A) Of all the sectors, agriculture needs the highest allocation of funds.
 (B) Contribution of agriculture to India's GDP this year would depend greatly upon the monsoon rains.
 (C) As India is one of the high-growth countries, it has surplus food reserves to export to other nations.
 (a) Only (A) and (C) (b) Only (C)
 (c) Only (B) (d) Only (B) and (C)
 (e) None of these
-
- DIRECTION (Qs. 111- 113) : Choose the word/group of words which is most similar in meaning to the word printed in bold as used in the passage.**
-
111. STARVED
 (a) Deprived (b) Disadvantaged
 (c) Hungry (d) Fasting
 (e) Emaciated
112. SLAPPED
 (a) Beaten (b) Imposed
 (c) Withdrawn (d) Avoided
 (e) Persuaded
113. PLOWED
 (a) Cultivated (b) Bulldozed
 (c) Recovered (d) Instilled
 (e) Withdrew
-
- DIRECTION (Qs. 114 and 115): Choose the word/phrase which is most opposite in meaning to the word printed in bold as used in the passage.**
-
114. PRESSING
 (a) Unpopular (b) Undemanding
 (c) Unobtrusive (d) Unsuitable
 (e) Unimportant
115. EVAPORATED
 (a) Absorbed (b) Accelerated
 (c) Grew (d) Plunged
 (e) Mismanaged

DIRECTIONS (Qs. 116-120) : *The sentences given in each question, when properly sequenced, form a coherent paragraph. Each sentence is labelled with a letter. Choose the most logical order of the sentences from amongst the given choices so as to form a coherent paragraph.*

116. P : In the past, the customised tailoring units were localised to the township or city and catered exclusively to domestic demand.
 Q : Traditionally, Indians preferred custom-made clothing and the concept of ready-to-wear is a relatively recent one.
 R : Consumer awareness of styling issues and the convenience afforded by ready-to-wear helped RMG industry make small inroads into the domestic market in the 1980s.
 S : The customised tailoring outfits have always been a major source of clothing for domestic market.
 (a) Q R S P (b) Q S P R
 (c) R S Q P (d) S Q P R
 (e) None of these
117. P : Such a system will help to identify and groom executives for positions of strategists.
 Q : Evaluation of performance is more often than not done for the purpose of reward or punishment for past performance.
 R : They must become an integral part of the executive system'.
 S : Even where the evaluation system is for one's promotion to assume higher responsibilities, it rarely includes terms that are a key for playing the role of strategist effectively, e.g., the skills of playing the role of change agent and creative problem solving.
 (a) S Q P R (b) S R Q P
 (c) R S Q P (d) Q S R P
 (e) None of these
118. P : Participation involves more than the formal sharing of decisions.
 Q : Through anticipation individuals or organisations consider trends and make plans, shielding institutions from trauma of learning by shock.
 R : Innovative learning involves both anticipation and participation.
 S : It is an attitude characterised by the cooperation, dialogue and empathy.
 (a) Q R S P (b) P Q R S
 (c) R Q P S (d) S P Q R
 (e) None of these
119. P : Almost a century ago, when the father of the modern automobile industry, Henry Ford, sold the first Model T car, he decided that only the best would do for his customers.
 Q : Today, it is committed to delivering the 'finest quality with over six million vehicles a year in over 200 countries across the world.
 R : And for over 90 years, this philosophy has endured in the Ford Motor company.
 S : Thus a vehicle is ready for the customers only, if it passes the Ford 'Zero Defect Programme'.
 (a) P Q R S (b) P R Q S
 (c) R S P Q (d) P R S Q
 (e) None of these

120. P: Finish specialists recommended a chewing gum containing xylitol-a natural sweetener present in birch, maple, corn and straw-to be used several times a day by young children.
 Q : Chewing gum is a new solution that "may work for parents whose children suffer from chronic ear infections.
 R : An experiment was conducted involving three hundred and six children between two and six years.
 S : After Finish studies showed that xylitol is effective in preventing cavities, a team of researchers decided to investigate its effects on a very similar type of bacteria which causes ear infections.
 (a) Q R S P (b) P Q R S
 (c) R Q P S (d) Q P S R
 (e) None of these

DIRECTIONS (Q. 121-125) : *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 number of that part is the answer. If there is no error, the answer is (e). (Ignore errors of punctuation, if any.)*

121. The ongoing merger among /the two companies will/
 (a) (b)
 have an adverse/impact on consumers. No error
 (c) (d) (e)
122. It is evident that/the banking sector has underwent/
 (a) (b)
 tremendous changes during/the past two decades. No error
 (c) (d) (e)
123. According to the consultant/a more detail analysis of/
 (a) (b)
 customer needs / and product pricing is required. No error
 (c) (d) (e)
124. Over the next five years / the government needs to invest/
 (a) (b)
 at less 350 billion dollars/in rural infrastructure. No error
 (c) (d) (e)
125. The lack of no funds / has resulted in several / delays in
 (a) (b)
 launching our / new product in India. No error
 (c) (d) (e)

DIRECTIONS (Qs. 126-130) : *Read the following passage carefully to give the answer.*

Regular physical activity provides numerous health benefits — from leaner bodies and lower blood pressure to improved mental health and cognitive functioning. As the school physical education programme promotes physical activity and can teach skills as well as form or change behaviour, it holds an important key to influencing health and well-being across the life span. To improve the fitness of students, we need to rethink the design and delivery of school-based physical education programme. Adults in the United States think that information about health is more important for students to learn than contents in language, arts, mathematics, science, history or any other subject. Despite this high ranking, most schools devote minimal curriculum time to teaching students how to lead healthy lives. Our first step might be to consider ways to increase curriculum time devoted to physical education. In addition, schools need to thoughtfully analyse the design and delivery of school physical education programme to ensure that they are engaging,

developmentally appropriate, inclusive and instructionally powerful.

126. According to this passage, regular physical activity is needed to :
- control one's blood pressure
 - lose one's weight
 - improve one's cognitive skill
 - improve one's physical as well as mental health
 - None of these
127. In order to tone up the physical education programme :
- it should be made compulsory at school
 - an assessment of the existing programme should be made
 - a committee should be set up in every school
 - the programme should be reoriented and implemented
 - None of these
128. According to American, health education is more important than teaching :
- social sciences
 - liberal arts
 - any subject
 - natural sciences
 - None of these
129. The author wants the reoriented physical education programme to be :
- given minimal curriculum time
 - very comprehensive
 - relevant to the modern society
 - thoughtful
 - None of these
130. In order to improve the physical education programme, we should first of all :
- allot more time to the teaching and learning of physical activity
 - decide on the number of activities to be taught
 - employ qualified instructors
 - increase the teaching load of instructors
 - None of these

DIRECTIONS (Qs. 131-140) : *In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.*

Economic backwardness of a region is **131** by the co-existence of unutilized **132** on the one hand, and **133** natural resources, on the other. Economic development essentially means a process of **134** change whereby the real per capita income of a economy **135** over a period of time. Then, a simple but meaningful question arises; what causes economy development ? Or what makes a country developed ? This question has absorbed the **136** of scholars of socio-economic change for decades. Going through the **137** history of developed countries like America, Russia and Japan, man is essentially found as **138** in the process of economic development. Japan, whose economy was **139** damaged from the ravages of the Second World War, is the clearest example of our time to **140** kingdom role in economic development.

131. (a) developed (b) cured
(c) improved (d) enhanced
(e) characterised

132. (a) sources (b) finances
(c) funds (d) manpower
(e) industries
133. (a) exhaustive (b) unexploited
(c) abundant (d) indefinite
(e) unreliable
134. (a) upward (b) drastic
(c) negligible (d) incredible
(e) sudden
135. (a) diminishes (b) degenerates
(c) increases (d) succumbs
(e) stabilizes
136. (a) plans (b) attempts
(c) attention (d) resources
(e) strategy
137. (a) existing (b) glorious
(c) ancient (d) economic
(e) discouraging
138. (a) pivotal (b) neutral
(c) insignificant (d) enchanted
(e) vicious
139. (a) increasingly (b) always
(c) gradually (d) deliberately
(e) badly
140. (a) enlighten (b) validate
(c) negate (d) underestimate
(e) belittle

COMPUTER KNOWLEDGE

141. In computer, what are the .xls, .doc. are
- File names
 - Extensions
 - Viruses
 - Binary files
 - None of these
142. What is the shortcut key to insert new document?
- ctrl+a
 - ctrl+n
 - ctrl+s
 - ctrl+d
 - None of these
143. What is the full form of LAN?
- Local Area Network
 - Land Area Network
 - Long Area Network
 - Line Area Network
 - None of these
144. Hard copy is a term used to describe...?
- Printed output
 - Writing on a hard board
 - Storing information on the hard disk
 - All of the above
 - None of these
145. The operating system is also called the _____ between the user and the computer.
- interrelate
 - interface
 - interference
 - intermediate
 - None of these

146. If a computer is constantly rebooting itself, what is most commonly the problem?
(a) Insufficient Power-Supply Unit
(b) Bad Sectors on Hard Drive
(c) Processor Overheating
(d) Defective/Bad Memory
(e) None of these
147. Networks are monitored by security personnel and supervised by _____ who set(s) up accounts and passwords for authorized network users.
(a) IT managers
(b) the government
(c) network administrators
(d) password administrators
(e) None of these
148. What is a benefit of networking your computer with other computers?
(a) Increase in the computer's speed
(b) Sharing of cables to cut down on expenses and clutter
(c) You have another computer if yours has a breakdown
(d) Increase in the speed of the network
(e) Sharing of resources to cut down on the amount of equipment needed
149. In a synchronous modem, the digital-to-analog converter transmits signal to the _____.
(a) equalizer (b) modulator
(c) demodulator (d) terminal
(e) None of these
150. The term "host" with respect to the internet, means _____.
(a) A computer that is a stand along computer
(b) A computer that is connected to the Internet
(c) A computer reserved for use by the host
(d) A large collection of computers
(e) Hyperlink
151. Which of the following operations is safe if an e-mail from an unknown sender is received?
(a) Open it to know about the sender and answer it.
(b) Delete it after opening it.
(c) Delete it without opening it.
(d) Open it and try to find who the sender is.
(e) None of these
152. Letters, numbers and symbols found on a keyboard are –
(a) Icon (b) Screen
(c) Keys (d) Menu
(e) None of these
153. Capital letters on a keyboard are referred to as –
(a) caps lock key (b) grownups
(c) big guys (d) upper case letters
(e) None of these
154. A symbol on the screen that represents a disk, document or program that you can select –
(a) keys (b) caps
(c) icon (d) monitor
(e) None of these
155. To insert a copy of the clipboard contents, whatever was last cut or copied at the insertion point.
(a) paste (b) stick in
(c) fit in (d) push in
(e) None of these
156. Documentation of computer program is important so that
(a) users can learn how to use the program
(b) other programmers can know how to maintain the program
(c) the programmer can see why the code is written that way while hunting for sources of error
(d) All of the above
(e) None of the above
157. A program that enables you to perform calculations involving rows and columns of numbers is called a _____.
(a) spreadsheet program
(b) word processor
(c) graphics package
(d) window
(e) None of the above
158. What does the data dictionary identify?
(a) Field names (b) Field types
(c) Field formates (d) All of the above
(e) None of these
159. Which is one function of a database management system (DBMS)?
(a) Ensuring usability
(b) Identifying what a user needs
(c) Deciding what to do with legacy systems
(d) Preventing errors arising, while enabling multiple, simultaneous users
(e) None of these
160. A relation (from the relational database model) consists of a set of tuples, which implies that
(a) relational model supports multi-valued attributes whose values can be represented in sets.
(b) for any two tuples, the values associated with all of their attributes may be the same.
(c) for any two tuples, the value associated with one or more of their attributes must differ.
(d) all tuples in particular relation may have different attributes.
(e) None of these

GENERAL AWARENESS WITH REFERENCE TO BANKING

161. To combat the menace of money laundering, which of the following financial institutions has introduced the 'Know Your Customer' Scheme?
(a) IDBI (b) RBI
(c) NABARD (d) SIDBI
(e) None of these
162. Which of the following sectors contributes maximum in deciding the growth in income of the states in India?
(a) Energy (b) Tourism
(c) Service (d) Transport
(e) Agriculture
163. Which of the following is the state where the number of people living below poverty line is maximum?
(a) Bihar (b) Andhra Pradesh
(c) Uttar Pradesh (d) Rajasthan
(e) Odisha

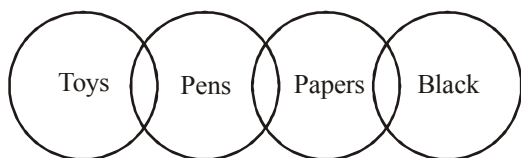
164. Who is the person closely associated with operation flood programmes and was honoured by Padma Vibhushan recently?
- (a) Dr. V. Kurien (b) Dr. M. S. Swaminathan
(c) Dr. Amartya Sen (d) Dr. A. P. J. Abdul Kalam
(e) None of these
165. What is the full form of MTSS?
- (a) Money Transfer Service Scheme
(b) Money Transparency Service Scheme
(c) Market Transfer Service Scheme
(d) Market Tax Service Scheme
(e) None of these
166. What is the full form of EFT?
- (a) Electric funds transfer
(b) Electronic finance transaction
(c) Electronics Fund Transfer
(d) Emergency fund transfer
(e) None of these
167. RuPay is an Indian domestic card scheme conceived and launched by
- (a) National Payments Corporation of India (NPCI)
(b) Industrial Finance Corporation of India (IFCI)
(c) National Minorities Development & Finance Corporation (NDMC)
(d) National Handicapped Finance and Development Corporation (NHFDC)
(e) None of these
168. Which of the following is referred as Fastest mode of transaction?
- (a) Transfer funds into different bank's accounts using NEFT(National Electronic Funds Transfer).
(b) Transfer funds into other bank accounts using RTGS (Real Time Gross Settlement).
(c) Transfer funds into various accounts using IMPS (Immediate Payment Service).
(d) Transfer funds into different account of the same bank
(e) None of these
169. What is the full form of CBS?
- (a) Customer Bond Solution
(b) Core banking System
(c) Core Banking Solution
(d) Customer Bond system
(e) None of these
170. What do you mean by Customer relationship management (CRM)?
- I. It is a system for managing a company's interactions with current and future customers.
II. It is a system for managing a company's interactions with current and past customers.
III. It often involves using technology to organize, automate, and synchronize sales, marketing, customer service, and technical support.
- (a) Only I (b) Only II
(c) Both II and III (d) Both I and III
(e) None of these
171. How RBI measured to liquidate the market?
- (a) By Reverse Repo rate
(b) By Repo rate
(c) By Cash Reserve Ratio
(d) By Statutory liquidity ratio
(e) None of these
172. The Bank should comply and intimate the compliance of Award to Ombudsman?
- (a) Within Two Months
(b) Within 3 months
(c) Within one month
(d) Within one year
(e) None of these
173. Cheque truncation can be done by?
- (a) Using MICR data
(b) Sending cheque by speed post
(c) Using image processing
(d) Both (a) & (b)
(e) None of the above
174. Which of the following is not insured by the DICGC (Deposit Insurance and Credit Guarantee Corporation)?
- (a) All Indian commercial Banks
(b) Foreign Banks branches functioning in India
(c) Local Area Banks
(d) Cooperative Banks
(e) Primary cooperative societies
175. Who is the current Secretary General of UNO?
- (a) Ban Ki-moon
(b) Kofi Annan
(c) U Thant
(d) Trygve Halvdan Lie
(e) None of these
176. What is the new name given to the Cadbury's India?
- (a) Ferrero Rocher Ltd
(b) Dante Confections
(c) Tootsie Roll Industries
(d) Mondelez India Foods Ltd
(e) None of these
177. Which day would be celebrated as Safe Motherhood Day as announced by Health Ministry of India?
- (a) 7th March
(b) 8th March
(c) 9th March
(d) 10 March
(e) None of these
178. Which Hollywood personality got awarded at IIFA 2014?
- (a) John Travolta (b) Arnold Sch
(c) Vin Diesel (d) Kevin Spacey
(e) None of these
179. Which author had received Padmabhushan award 2014?
- (a) Shobha Dey (b) Ruskin Bond
(c) Ravinder Singh (d) Chetan Bhagat
(e) None of these
180. What is the full form of IBSA ?
- (a) Indonesia, Brazil, South Africa
(b) Italy, Brazil, Sudan

- (c) India, Brazil, South Africa
(d) India, Belgium, Saudi Arabia
(e) None of these
181. Who is the author of the book '2 states' in the same name a film was released recently?
(a) Ravinder Singh
(b) Drijoy Dutta
(c) Amish Patel
(d) Chetan Bhagat
(e) None of these
182. Who is appointed as the new deputy governor of RBI?
(a) R Gandhi (b) S S Mudra
(c) Arjit Patel (d) Anil Sinha
(e) None of these
183. Name the committee which is probing the IPL Spot-Fixing?
(a) Murali Panel Committee
(b) Mudgal Panel committee
(c) Rangaswamy Panel Committee
(d) Rangarajan Panel Committee
(e) None of these
184. Kudamkulam Nuclear power plant is situated in which state?
(a) Andhra Pradesh (b) Karnataka
(c) Odhisha (d) TamilNadu
(e) None of these
185. Who is the current Prime Minister of UK?
(a) David Cameroon
(b) James Cameroon
(c) Robert Cameroon
(d) Davis Cameroon
(e) None of these
186. Shivasumdamam Hydro Power Project is located in which state?
(a) Andhra Pradesh (b) Karnataka
(c) Kerala (d) Tamilnadu
(e) None of these
187. Catolania referendum is related to which country?
(a) Spain (b) Italy
(c) Brazil (d) Germany
(e) None of these
188. What is the minimum capital required for foreign bank to open branch in India?
(a) 400 Crore (b) 450 Crore
(c) 500 Crore (d) 550 Crore
(e) None of these
189. Priyanka Chopra in the movie Mary Kom, played the role of?
(a) Gymnastics (b) Singer
(c) Boxer (d) Wrestler
(e) None of these
190. What is the current Repo Rate?
(a) 7% (b) 7.5 %
(c) 8% (d) 8.5 %
(e) None of these
191. 2014 Asian Games was held at?
(a) Doha, Qatar
(b) Incheon, South Korea
(c) Rio de Janeiro, Brazil
(d) Beijing, China
(e) None of these
192. Recently, Northern Railways started a smart Card system, what is the name of the Card?
(a) Go Bharat Smart Card
(b) Go Nation Smart Card
(c) Go India Smart Card
(d) Go Railway Smart Card
(e) None of these
193. What is the name of the Pension Scheme of the Unorganised Sector in India?
(a) Aajeevika Scheme
(b) Swavalamban Scheme
(c) Indira Awas Yojna
(d) Varishtha Scheme
(e) None of these
194. SEBI extended the time guideline to appoint at least one women in board of director to _____?
(a) 31st December 2014
(b) 31st March 2015
(c) 30th June 2015
(d) 31st December 2015
(e) None of these
195. Which account will not come under RBI's limitation of ATM Transaction?
(a) Current Deposits/Account
(b) Basics Savings Bank Deposit Account
(c) Recurring Deposit/Account
(d) Fixed Deposit/Account
(e) None of these
196. What is the name of BRICS Bank?
(a) Federative Republic Bank
(b) New Republic Bank
(c) New Development Bank
(d) New BRICS Bank
(e) None of these
197. What is the capital of Portugal?
(a) Ankara (b) Tunis
(c) Lisbon (d) Algiers
(e) None of these
198. What is the currency of Saudi Arabia?
(a) Dinar (b) Riyal
(c) Take (d) Ruble
(e) None of these
199. Upalappu Srinivas of famous for?
(a) Mandolin (b) Table
(c) Guitar (d) Sexophone
(e) None of these
200. Who is the new Chairman & Managing Director of Allahabad Bank?
(a) S. K. Roy (b) T.C.A Ranganathan
(c) Rakesh Sethi (d) U. K. Sinha
(e) Rahul Khullar

HINTS & SOLUTIONS

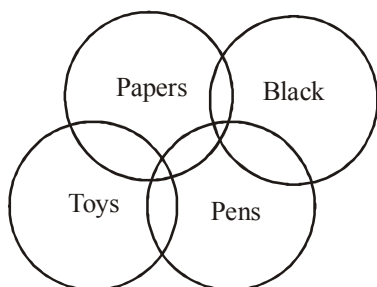
1-5 :

1. (c) All possible cases

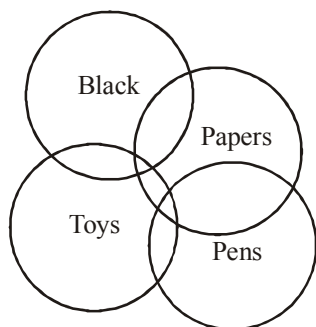


- I. False
 II. False
 III. False
 IV. False
- Either

OR

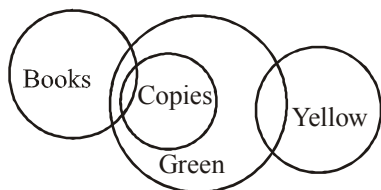


OR



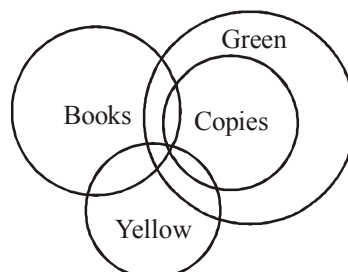
Alternative Here, special case can be applied for Conclusions I and III. Also for Conclusion II and Conclusion IV.

2. (a) All possible cases

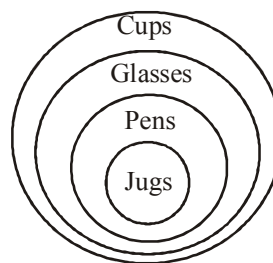


- I. False
 II. True
 III. False
 IV. False
- Hence, only II follows.

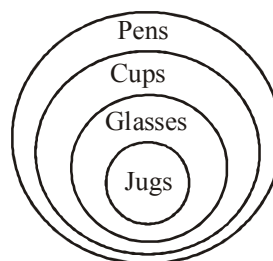
OR



3. (e) All possible cases are

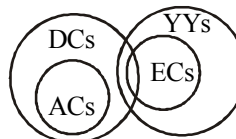


OR



- I. False
 II. False
 III. False
 IV. False
- Hence, none follows.

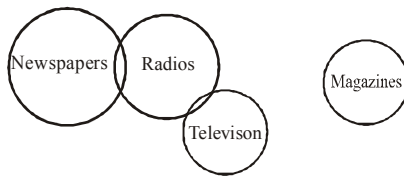
4. (d) All possible cases



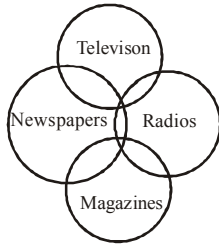
- I. False
 II. True
 III. False
 IV. False
- Either

Hence, either I or III and II follow.

5. (b) All possible cases

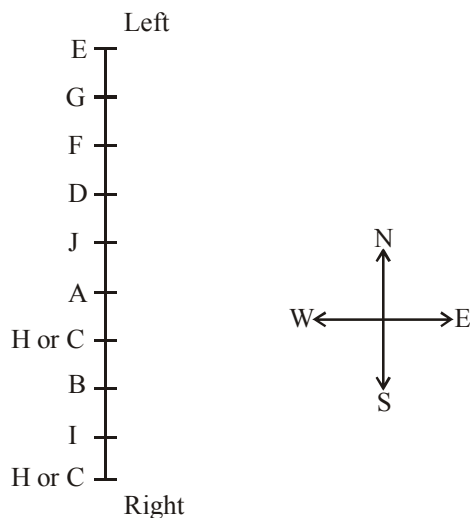


OR



- I. False II. False
III. True IV. False
Hence, conclusions III follow.

6-10 :



6. (d) 7. (c) 8. (d) 9. (a) 10. (c)

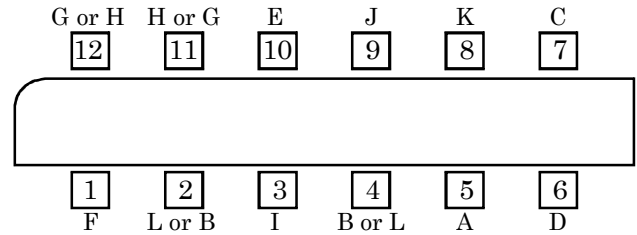
11-15 :

Let us denote these 12 students by their 1st letter of name, like Abhishek is A and so on.

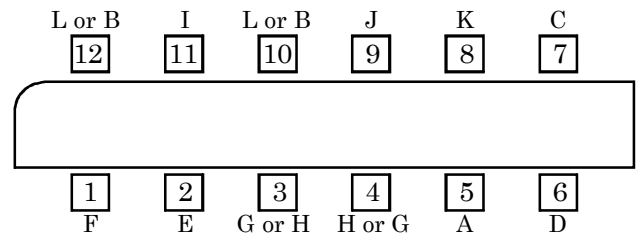
From the given information we can conclude that (C) and (D) are at seat numbers 7 and 6, respectively. And (K) is the only person between (C) and (J) while (A) is opposite to (K). Hence, (A), (K) and (J) must be at seat numbers 5, 8 and 9, respectively.

Then we have following two cases:

Case I



Case II



11. (d) From the above 2 cases, it follows case (i) and opposite to Fatima is either Lalit or Binit.
12. (b) From the above 2 cases,
In case (i) if Lalit is sitting opposite to Hena then Fatima is sitting opposite to Garima.
In case (ii) if Lalit is sitting opposite to Hena then Jatin is sitting opposite to Garima.
13. (c) From the above 2 cases, it follows case (i) and number of persons sitting between Binit and Dhiraj is either 1 or 3.
14. (c) From the given options only option (c) is correct.
15. (c) From the given options option (c) is in correct.

16-20 :

Given that there are five stages of the project from stage 1 to stage 5 on the field with starting and ending points from amongst P1, P2, P3, P4 and P5. Now given information is as follows:

- (i) Stage 3 finished at P1.
(ii) Stage 4 must have started from point P1.
(iii) Fourth stage work was given to farmer F4; hence, from all these outcomes we can conclude that 2nd stage is from P5 to P3.

Hence we can conclude that-

Stage 1- From point P2 to point P5

Stage 2- From point P5 to point P3

Stage 3- From point P3 to point P1

Stage 4- From point P1 to point P4

Stage 5- From point P4 to point P2

Now it is given that-

Farmer F3 first stage.

Farmer F4 fourth stage (from 5th information).

Farmer F5 fifth stage (given that work of stage starting at point P4 is given to farmer 5).

Farmer F1 second stage.

Stage 1- From point P2 to point P5 Farmer F3

Stage 2- From point P5 to point P3 Farmer F1

Stage 3- From point P3 to point P1 Farmer F2

Stage 4- From point P1 to point P4 Farmer F4

Stage 5- From point P4 to point P2 Farmer F5

16. (a) Point P1
 17. (e) From the above result, we get that the fifth stage was ploughed by farmer F5.
 18. (b) From the above result we get that the starting and ending points of stage 2 are P5 and P3.
 19. (e) From the above result, we get that the P2 was the finishing point for farmer F5.
 20. (a) From the above result, we get that the starting point for farmer F3 was P2.

21-25 :

$$\begin{aligned} P * Q &\Rightarrow P > Q \\ P \oplus Q &\Rightarrow P \geq Q \\ P \$ Q &\Rightarrow P = Q \\ P \pounds Q &\Rightarrow P < Q \\ P @ Q &\Rightarrow P \leq Q \end{aligned}$$

21. (e) **Statements**

$$O \geq F \geq E \geq P = R$$

Conclusions

- I. $O \$ P \rightarrow O = P$ (False)
 II. $E \oplus R \rightarrow E \geq R$ (True)
 III. $P \pounds O \rightarrow P < O$ (False)

22. (a) **Statements**

$$E > D = A > B \leq C$$

Conclusions

- I. $E * B \rightarrow E > B$ (True)
 II. $C \$ A \rightarrow C = A$ (False)
 III. $D @ E \rightarrow D \leq E$ (False)

23. (b) **Statements**

$$I \geq H = T > S \leq R$$

Conclusions

- I. $I * T \rightarrow I > T$
 II. $I \$ T \rightarrow I = T$ } Either

III. $S * H \rightarrow S > H$ (False)

24. (e) **Statements**

$$S \leq T < N = Q > O$$

Conclusions

- I. $S \$ N \rightarrow S = N$ (False)
 II. $N \oplus O \rightarrow N \geq O$ (False)
 III. $N * O \rightarrow N > O$ (True)

25. (d) **Statements**

$$H \geq J > K = L, K \leq M$$

Conclusions

- I. $K \pounds M \rightarrow M > K$ (False)
 II. $L \$ J \rightarrow L = J$ (False)
 III. $H \oplus L \rightarrow H \geq L$ (False)

26. (d) **From I and II:** We get

$$D > B \dots (i)$$

$$K > W > M \dots (ii)$$

Still, we lack some clue as to whether B or M is the youngest. Hence, both statements I and II even together are not sufficient.

27. (d) **From I:** Na Ni Nok Ne \rightarrow I will tell you ... (i)

Ni Nok Ne Nam \rightarrow he will tell you ... (ii)

From (i) & (ii) Na \rightarrow I and Nam = he

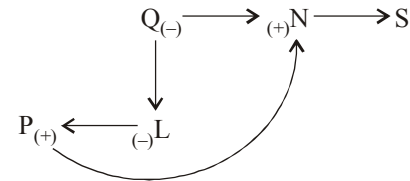
From II: Ni Ne Mo Nam \rightarrow will he call you ... (iii)

Ne Mok Sac Ni \rightarrow how will you go ... (iv)

Ne Ni is common in all the four statements. Exact transformation of Ne can't be determined.

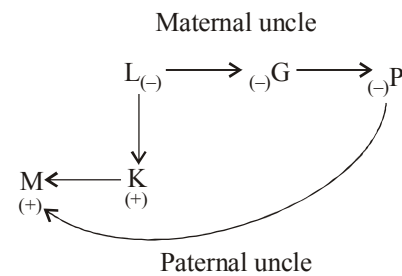
28. (c) **From I:** $P > R, P > T, U > P, U > Q, U > S$
 \rightarrow U is tallest. [Since U is taller than P, Q & S and P is taller than R and T]
From II: $R < U, P \& Q \dots (i); Q > P \dots (ii)$
 From (i) and (ii) $R < P < Q < U$
 Hence U is tallest.

29. (b) **From I:**



N is maternal uncle of P.

From II:



M is the paternal uncle of P

30. (c) **From I:** Ramesh = 17th
 \therefore Shyam = $(17 + 6) = 23$ th
 Sudin = $(23 + 7) = 30$ th

From II:

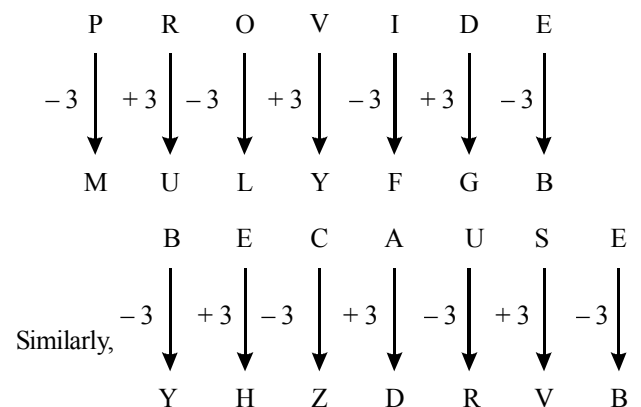
$$\text{Suketu} \xleftarrow{25} \text{Sudin} \xrightarrow{5} \text{Shyamala}$$

$$\text{Suketu} \xrightarrow{15} \text{Savita} \xrightarrow{15} \text{Shyamala}$$

$$\text{Suketa} \xrightarrow{16} \text{Savita} \xrightarrow{8} \text{Sudin} \xrightarrow{15} \text{Shyamala}$$

So, sudin is 26th in rank in class of 44 students.

31. (e) In online shopping the customer may be deceived as he cannot touch the product he is paying for.
 32. (d) The customer whose view is presented has shopped at retail stores as well as online.
 33. (e) The number of people migrating from rural to urban areas in search of jobs may reduce.
 34. (a) At least some people who visits the park have pets.
 35. (c) As,



36-38 :

Total Number of flats = 13; Unoccupied flats = 5

Occupied flats = 8

Number of flats on second floor = 4

Second floor comprises four flats. One occupant is lawyer and since he has only one neighbour, this implies that out of four flats on second floor, two are unoccupied.

Again, since no flat is unoccupied on the third floor, it implies that there are three unoccupied flats on floor IV.

Since there are at least three flats on any floor and no two same profession stay on any floor and the doctor is not the neighbour of any lawyer, then floor III comprises only three flats. Thus, floor IV comprises six flats (3 occupied + 3 unoccupied).

Since there are three managers and no two same profession stay on any floor, therefore, there will be a manager in each floor. Also there are only two occupant in second floor and one of them is lawyer, therefore, second occupant should be manager.

Again, since there are two teachers, there will be a teacher each on floors III and IV. Again, doctor can't be neighbour of a lawyer. Hence, the doctor and lawyer will not reside on same floor. Therefore, on floor III – either Doctor or Lawyer then, on floor IV – either Lawyer or Doctor.

Floor	Total Flats	Occupied flats	Unoccupied flats	Occupants
II	4	2	2	Lawyer, Manager
III	3	3	0	Teacher, Manager, Lawyer or Doctor
IV	6	3	3	Teacher, Manager, Doctor or Lawyer

36. (d) Clearly, there are three flats.

37. (a) From above table that combination is Lawyer & Manager.

38. (c) Both the manager and the teacher are the neighbour of other lawyer.

39-44 :

Here, logic is very simple. It is a case of **Arrangement**. Input and following steps give the following information:

In step I the word which comes first according to alphabetical order rearranges first.

In the second step the highest among the given numbers gets arranged and occupies the place after the word arranged in step I.

These two steps get repeated alternately. Thus, in the last

step all the words get arranged alphabetically whereas numbers get arranged in descending order.

If any word or number is already arranged in any step, the next number or word is arranged.

39. (c) **Input** : 98 11 64 22 but will an it

Step I : an 98 11 64 22 but will it

Step II : an 98 but 11 64 22 will it

Step III : an 98 but 64 11 22 will it

Step IV : an 98 but 64 it 11 22 will

Step V : an 98 but 64 it 22 11 will

Step VI : an 98 but 64 it 22 will 11

40. (a) **Input** : 32 now 20 gift 53 box 62 at

Step I : at 32 now 20 gift 53 box 62

Step II : at 62 32 now 20 gift 53 box

Step III : at 62 box 32 now 20 gift 53

Step IV : at 62 box 53 32 now 20 gift

41. (d) **Input** : pay by 18 36 nose ear 72 54

Step I : by pay 18 36 nose ear 72 54

Step II : by 72 pay 18 36 nose ear 54

Step III : by 72 ear pay 18 36 nose 54

Step IV : by 72 ear 54 pay 18 36 nose

Step V : by 72 ear 54 nose pay 18 36

Step VI : by 72 ear 54 nose 36 pay 18

42. (b) **Step III** : damn 96 flag 87 78 14 saint put

Step IV : damn 96 flag 87 put 78 14 saint

Step V : damn 96 flag 87 put 78 saint 14

Step V is the last step. Therefore, penultimate step is step IV.

43. (d) Previous steps cannot be determined .

44. (b) '17' cannot be before 'sky'

45-48 :

From Statement A :-Yellow was the only colour used in all the four rooms. It was used at least once for walls, carpets and curtains

From statement B, Dining and bed room have same set of colours.

	Walls	Carpet	Curtain
Living Room			
Study Room			

From statement C, The same colour was chosen for the curtains in the bedroom, the carpet in the living room and the

walls in the dining room. And that colour is not used in Study Room, hence that colour must not be yellow as it is used in all the four rooms. And must not be grey as it is used only twice and that too for curtains (From statement E)

	Walls	Carpet	Curtain
	////		
			////
Living Room		////	
Study Room			

From statement D:- The only room with both green and grey in its colour scheme had carpet of the same colour as in the dining room. If a room that has green and grey colour then its 3rd colour must be Yellow as it is used in all the rooms. That room must not be Dining and Bed room as they have same set of colours. The Carpet of this room must not be of grey colour (From statement E).

From statement F:-The study room walls were painted the same colour as the living room walls.

	Walls	Carpet	Curtain
Dining Room	////		
Bed Room			////
Living Room	XXXX	////	
Study Room	XXXX		

Now from D, E and F, we have two cases

Case (i)

Walls	Carpet	Curtain
Green /Yellow	Yellow/Green	Grey

This combination must belongs to either Living or Study rooms.

If it belongs to living rooms then

	Walls	Carpet	Curtain
Living Room	Green	Yellow	Grey

But this combination is ruled out as from condition C the common colour can not be Yellow.

	Walls	Carpet	Curtain
Living Room	Yellow	Green	Grey

But in this case from statement D Dining room will have Walls and carpet with green colour, but it is not possible as repetition of colour is not allowed.

Case (ii) So only possibility is that yellow grey green belongs to study room. And then the common colour mentioned in statement C is Orange colour, hence we have two possibilities-

	Walls	Carpet	Curtain	Explanation
Dining Room	Orange	Yellow	Grey	From statement D, Curtains colour is grey
Bed Room			Orange	
Living Room	Green	Orange	Yellow	The 3rd colour in curtain is Yellow
Study Room	Green	Yellow	Grey	

This case is ruled out as Dining and bed room has same combination hence Grey can not be used other than Curtain.

OR

	Walls	Carpet	Curtain	
Dining Room	Orange	Green	Yellow	Carpets Green colour is from Statement D, & Yellow must be present (Step 1)
Bed Room	Green	Yellow	Orange	In carpet Yellow must be used
Living Room	Yellow	Orange	Grey	(As Grey is used at least twice step 2)
Study Room	Yellow	Green	Grey	

45. (c) Using above matrix, we can say Bed room

46. (d) Green carpets:

48. (b) Dining room- yellow curtains.

49. (c) How many goals scored → 5397 ... (1)

Many more matches → 982 ... (2)

He scored five → 163 ... (3)

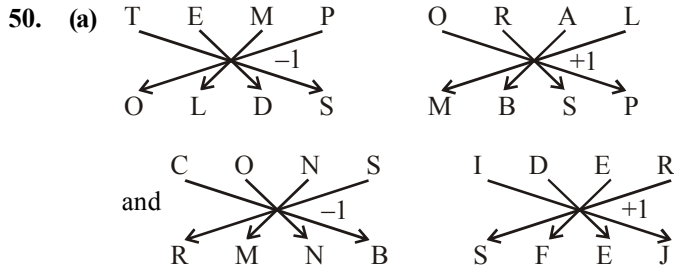
From (1) & (2)

Many $\rightarrow 9$

From (1) & (3)

scored $\rightarrow 3$

\therefore goals can be 5 or 7.



51. (c) Ratio of milk in the containers are,

$$5 \times \frac{1}{6} : 4 \times \frac{3}{8} : 5 \times \frac{5}{12} = \frac{5}{6} : \frac{3}{2} : \frac{25}{12}$$

and the ratio of water in the containers are,

$$5 \times \frac{5}{6} : 4 \times \frac{5}{8} : 5 \times \frac{7}{12} = \frac{25}{6} : \frac{5}{2} : \frac{35}{12}$$

Ratio of mixture of milk and water in the containers

$$= \left(\frac{1}{6} \times 5 + \frac{3}{8} \times 4 + \frac{5}{12} \times 5 \right) : \left(\frac{5}{6} \times 5 + \frac{5}{8} \times 4 + \frac{7}{12} \times 5 \right)$$

$$= 106 : 230 = 53 : 115$$

52. (a) % change in rate $= \frac{27-24}{24} \times 100 = \frac{100}{8} \%$

For fixed expenditure, % change in consumption

$$= \frac{\% \text{ change in rate}}{100 + \% \text{ change in rate}} \times 100$$

$$= \frac{100/8}{100 \left[1 + \frac{1}{8} \right]} \times 100 = \frac{100}{9} \% = 11\frac{1}{9} \%$$

53. (b) $L \times B \times 2 = 48$

$$\Rightarrow L \times B = 24$$

$$\text{Now, } 6 - 6 \times 10\% = 5.4,$$

$$5 - 5 \times 10\% = 4.5 \text{ and}$$

$$\text{Therefore, } 5.4 \times 4.5 = 24.3$$

$$\text{Clearly, } 5 < L < 5.5$$

54. (d) Let the original rate be $R\%$. Then, new rate $= (2R)\%$.

$$\therefore \left(\frac{725 \times R \times 1}{100} \right) + \left(\frac{362.50 \times 2R \times 1}{100 \times 3} \right) = 33.50$$

$$\Rightarrow (2175 + 725)R = 33.50 \times 100 \times 3 = 10050$$

$$\Rightarrow R = \frac{10050}{2900} = 3.46\%$$

55. (a) For first year, S.I. = C.I.

Now, ₹ 10 is S.I. on ₹ 100.

$$\therefore \text{ ₹ 16 is S.I. on ₹ } \left(\frac{100}{10} \times 16 \right) = \text{ ₹ 160.}$$

So, S.I. on principal for 1 year at 10% is ₹ 160

$$\therefore \text{ Principal} = \text{ ₹ } \left(\frac{100 \times 160}{10 \times 1} \right) = \text{ ₹ 1600.}$$

Amount for 2 years compounded half yearly

$$= \text{ ₹ } \left[1600 \times \left(1 + \frac{5}{100} \right)^4 \right] = \text{ ₹ 1944.81.}$$

$$\therefore \text{ C.I.} = \text{ ₹ } (1944.81 - 1600) = \text{ ₹ 24.81.}$$

$$\text{S.I.} = \text{ ₹ } \left(\frac{1600 \times 10 \times 2}{100} \right) = \text{ ₹ 320.}$$

$$\therefore (\text{C.I.}) - (\text{S.I.}) = \text{ ₹ } (344.81 - 320) = \text{ ₹ 24.81.}$$

56. (d) Let the principal be ₹ P and rate of interest be $R\%$ per annum.

Difference of C.I. and S.I. for 3 years

$$= \left[P \times \left(1 + \frac{R}{100} \right)^3 - P \right] - \left(\frac{P \times R \times 3}{100} \right) = \frac{PR^2}{10^4} \left(\frac{300 + R}{100} \right).$$

$$\text{Difference of C.I. and S.I. for 2 years} = P \left(\frac{R}{100} \right)^2$$

$$\therefore \frac{\frac{PR^2}{10^4} \left(\frac{300 + R}{100} \right)}{\frac{PR^2}{10^4}} = \frac{25}{8} \Rightarrow \left(\frac{300 + R}{100} \right) = \frac{25}{8}$$

$$\Rightarrow R = \frac{100}{8} = 12\frac{1}{2} \%$$

57. (b) Let x additional men employed.

117 men were supposed to finish the whole work in $46 \times 8 = 368$ hours.

But 117 men completed $\frac{4}{7}$ of the work in 33×8

$$= 264 \text{ hours}$$

\therefore 117 men could complete the work in 462 hours.

Now $(117 + x)$ men are supposed to do $\frac{3}{7}$ of the work,

working 9 hours a day, in $13 \times 9 = 117$ hours, so as to finish the work in time.

i.e. $(117 + x)$ men are supposed to complete the whole

work in $117 \times \frac{7}{3} = 273$ hours.

$$\therefore (117 + x) \times 273 = 117 \times 462$$

$$\Rightarrow (117 + x) \times 7 = 3 \times 462$$

$$\Rightarrow x + 117 = 3 \times 66 = 198 \Rightarrow x = 81$$

\therefore Required number of additional men to finish the work in time = 81.

58. (a) Let A and B together work for x minutes then amount

$$\text{of water filled in the period} = x \left(\frac{1}{30} + \frac{1}{40} \right) = \frac{7x}{120}$$

$$\text{Remaining part} = 1 - \frac{7x}{120} = \left(\frac{120 - 7x}{120} \right)$$

$$\text{Work done by A in } (10 - x) \text{ minutes} = \frac{120 - 7x}{120}$$

$$= 1 - \frac{7x}{120}$$

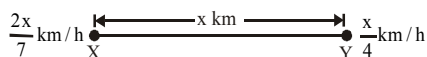
$$\frac{7x}{120} + \frac{10 - x}{30} = 1 \text{ or } 7x + 40 - 4x = 120$$

$$3x = 120 - 40 = 80$$

$$x = 26\frac{2}{3} \text{ min}$$

59. (b) Let the distance between X and Y be x km. Then, the

speed of A is $\frac{x}{4}$ km/h and that of B is $\frac{2x}{7}$ km/h.



Relative speeds of the trains

$$= \left(\frac{x}{4} + \frac{2x}{7} \right) = \frac{15x}{28} \text{ km/h}$$

Therefore the distance between the trains at 7 a.m. =

$$x - \frac{x}{2} = \frac{x}{2} \text{ km}$$

Hence, time taken to cross each other

$$= \frac{\frac{x}{2}}{\frac{15x}{28}} = \frac{x}{2} \times \frac{28}{15x} = \frac{14}{15} \times 60 = 56 \text{ min}$$

Thus, both of them meet at 7 : 56 a.m.

60. (c) Let the man's upstream speed be S_u kmph and downstream speed be S_d kmph. Then,

Distance covered upstream in 8 hrs 48 min.

d = Distance covered downstream in 4 hrs.

$$\Rightarrow \left(S_u \times 8\frac{4}{5} \right) = (S_d \times 4) \Rightarrow \frac{44}{5} S_u = 4 S_d \Rightarrow S_d = \frac{11}{5} S_u.$$

\therefore Required ratio

$$= \left(\frac{S_d + S_u}{2} \right) : \left(\frac{S_d - S_u}{2} \right) = \left(\frac{16S_u}{5} \times \frac{1}{2} \right) : \left(\frac{6S_u}{5} \times \frac{1}{2} \right) = \frac{8}{5} : \frac{3}{5}$$

$$= 8 : 3.$$

61. (c) Cost of gear box = $20 \times \frac{1,00,000}{100} \times \frac{15}{100} = 3000$

62. (c) Cost of brake = $\frac{20 \times 1,00,000}{100} \times \frac{30}{100} = 6000$

$$\therefore \text{Required percentage} = \frac{6000}{1,00,000} \times 100 = 6.0\%$$

63. (a) Price of tyres = $\frac{20 \times 1,00,000}{100} \times \frac{15}{100} = 3000$

$$\text{Increased price of tyres} = 3000 \times \frac{125}{100} = 3750$$

$$\therefore \text{Price should be increased} = 3750 - 3000 = ₹750$$

64. (b) Increased transmission cost = $20,000 \times \frac{120}{100} = 24000$

$$\therefore \text{increase in transmission cost} = 24000 - 20000 = ₹4000$$

Here, this increase will reduce the profit by 4000.

65. (a) Price of clutch = 30% of 20,000 = 6,000

$$\therefore \text{Required percentage} = \frac{6000}{1,00,000} \times 100 = 6\%$$

66. (d) Total electric energy consume by 60 W bulb in whole month = $16 \times 60 \times 7 \times 30 \text{ W} = 201.6 \text{ unit}$

67. (b) Electricity consumed by all fans = $14 \times 80 \times 11 \times 30 \text{ W}$
Electricity consumed by all laptops = $9 \times 200 \times 5 \times 30$

$$\text{Required}\% = \frac{14 \times 80 \times 11 \times 30}{9 \times 200 \times 5 \times 30} \times 100 = 136.88\%$$

68. (a) Electricity consumed by all fans

$$= 14 \times 80 \times 11 \times 30 = 369600 \text{ W}$$

$$\text{Electricity consumed by all laptops}$$

$$= 9 \times 200 \times 5 \times 30 = 270000 \text{ W}$$

$$\text{Electricity consumed by all tubelights}$$

$$= 17 \times 40 \times 8 \times 30 = 163200 \text{ W}$$

$$\text{Electricity consumed by all TV's}$$

$$= 17 \times 120 \times 8 \times 30 = 288000 \text{ W}$$

Electricity consumed by 100 W bulb

$$= 11 \times 100 \times 9 \times 30 = 297000 \text{ W}$$

hence fans consumed more electricity.

69. (a) One unit cost = ₹ 2.70.

Power (used by AC's) Unit cost = ₹ 3.70

Electricity consumed by all equipment (except AC's)

$$= (201.6 + 369.6 + 270 + 163.2 + 288 + 297) \text{ unit}$$

$$= (1292.4 + 297.00) \text{ unit} = 1589.4 \text{ unit}$$

$$\text{Cost for these unit} = 1589.4 \times 2.7 = 4291.38$$

Electricity consumed by AC's

$$= 11 \times 2100 \times 9 \times 30 \text{ W} = 623700 \text{ W} = 6237 \text{ Unit}$$

$$\text{Cost for it} = 6237 \times 3.7 = 23076.9$$

$$\text{Total cost} = 23076.9 + 4291.38 = ₹ 27368$$

70. (d) Required ratio = $\frac{201.6}{297} = \frac{2}{3}$

71. (b)

I. $2x^2 + 5x + 1 = x^2 + 2x - 1$

$$x^2 + 3x + 2 = 0$$

$$x^2 + 2x + x + 2 = 0$$

$$x(x + 2) + 1(x - 2) = 0$$

$$(x + 2)(x + 1) = 0$$

$$x = -2, -1$$

II. $2y^2 - 8y + 1 = -1$

$$2y^2 - 8y + 2 = 0$$

$$y^2 - 4y + 1 = 0$$

$$\frac{-4 \pm \sqrt{16 - 4 \times 1 \times 1}}{2 \times 1}$$

$$= 2 \pm \sqrt{12} = 2 \pm 2\sqrt{3}$$

Hence, $y > x$

72. (b)

I. $x^2 + 2x - 1 = 2$

$$x^2 + 2x - 3 = 0$$

$$x + 3x - x - 3 = 0$$

$$x(x + 3) - 1(x + 3) = 0$$

$$(x + 3)(x - 1) = 0$$

$$x = -3, 1$$

II. $2y^2 - 12y + 18 = 0$

$$y^2 - 6y + 9 = 0$$

$$(y - 3)^2 = 0$$

$$y = 3, 3$$

Hence, $y > x$

73. (b)

I. $4x^2 - 24x + 20 = 0$

$$x^2 - 6x + 5 = 0$$

$$x^2 - 5x - x + 5 = 0$$

$$x(x - 5) - 1(x - 5) = 0$$

$$(x - 5)(x - 1) = 0$$

$$x = 5, 1$$

II. $y^2 - 13y + 42 = 0$

$$y^2 - 7y - 6y + 42 = 0$$

$$y(y - 7) - 6(y - 7) = 0$$

$$(y - 7)(y - 6) = 0$$

$$y = 7, 6$$

Hence, $y > x$.

74. (a)

I. $2y^2 + 3y - 5 = 0$

$$2y^2 + 5y - 2y - 5 = 0$$

$$y(2y + 5) - 1(2y + 5) = 0$$

$$(2y + 5)(y - 1) = 0$$

$$y = \frac{-5}{2}, 1$$

II. $x^2 - 3x = 2x - 6$

$$x^2 - 5x + 6 = 0$$

$$x^2 - 3x - 2x + 6 = 0$$

$$x(x - 3) - 2(x - 3) = 0$$

$$(x - 3)(x - 2) = 0$$

$$x = 3, 2$$

Hence, $x > y$

75. (e)

I. $6x^2 + 14x = 12$

$$3x^2 + 7x - 6 = 0$$

$$(x + 3)(3x - 2) = 0$$

$$x = -3, \frac{2}{3}$$

II. $1 + 2y^2 = \frac{17}{6}y$

$$12y^2 - 17y + 6 = 0$$

$$12y^2 - 8y - 9y + 6 = 0$$

$$4y(3y - 2) - 3(3y - 2) = 0$$

$$(3y - 2)(4y - 3) = 0$$

$$y = \frac{2}{3}, \frac{3}{4}$$

Hence, $x \leq y$

76. (b) Suppose Giridhar invested ₹ x in company A .

$$\therefore \frac{x \times 14}{100} + \frac{(25000 - x) \times 13}{100} = 3340$$

$$\text{or, } \frac{14x}{100} + 3250 - \frac{13x}{100} = 3340$$

$$\text{or, } \frac{x}{100} = 90 \quad \text{or, } x = ₹ 9000.$$

77. (a) Amount of dividend received by Anuja in 2011 from company B

$$= \frac{35000 \times 19}{100} = ₹ 6650$$

Total amount invested by Anuja in 2012 in Company A
 $= 35000 + 6650 = ₹ 41650$

$$\text{Reqd amount} = 41650 \times \frac{120}{100} = ₹ 49980$$

78. (b) Total dividend $= 18000 \times \left(\frac{20}{100} + \frac{15}{100} \right) = ₹ 6300$

79. (c) Reqd ratio $= \frac{5 \times 12}{8 \times 10} = 3 : 4$

80. (d) From the graph it is obvious that Suraj will get less dividend in 2014 from company A than from B .

Reqd less amount $= 3\%$ of $56000 = ₹ 1680$.

81. (b) Production of company AVC in 2012 = 360 crore units

Average production of AVC over the given years

$$= \frac{1970}{6}$$

$$\text{Hence, required percent} = \frac{360 \times 6}{1970} \times 100 = 109.64\%$$

$\approx 110\%$

82. (c) Approximate per cent increase or decrease in production from the previous year for SIO are as follows :

$$2010 = \frac{2}{85} \times 100 = 2.35\% ;$$

$$2011 = \frac{2 \times 100}{87} = 2.29\%$$

$$2012 = \frac{2 \times 100}{89} = 2.24\% ;$$

$$2013 = \frac{1 \times 100}{91} = 1.09\%$$

$$2014 = \frac{4 \times 100}{92} = 4.35\%$$

Quicker method : See the difference of produced units between two consecutive years. The difference

is maximum for 2013 to 2014, and production during all these years is almost same. Hence, in the year 2014, SIO registered maximum increase in production over the previous year.

83. (d) Sum of the productions of companies in the first three years and the last three years is as follows :

Company	First three years	Last three years
TP	358	349
ZIR	238	267
AVC	900	1070
CTU	836	852
PEN	90	127
SIO	261	279

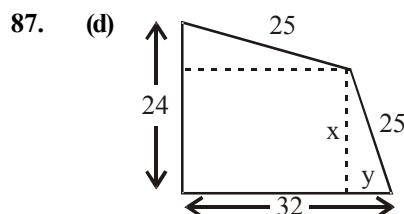
84. (c) Total production of the six companies in first two given years $= 863 + 927 = 1790$

Again, total production of the six companies in last two given years $= 989 + 991 = 1980$

$$\text{Therefore, required per cent} = \frac{1790 \times 100}{1980} = 90.40\%$$

85. (b) The required difference $= (91 - 92)$ crore units $= 1 \times 10000000 = 10000000$ units

86. (a) Net effect $= x + y + \frac{xy}{100} = -20 + 80 + \frac{(-20 \times 80)}{100}$
 $= 60 - 16 = 44\%$ increased



$$(32 - y)^2 + (24 - x)^2 = 625 \quad \dots(1)$$

$$x^2 + y^2 = 625 \quad \dots(2)$$

$$\Rightarrow (24)^2 + (32)^2 - 64y - 48x = 0 \quad (\text{From (1) \& (2)})$$

$$\Rightarrow 64y + 48x = 576 + 1024$$

$$\Rightarrow 4y + 3x = 36 + 64 = 100$$

$$\text{or } y = \left(\frac{100 - 3x}{4} \right)$$

$$\therefore x^2 + \left(\frac{100 - 3x}{4} \right)^2 = 625 \quad (\text{From (2)})$$

$$\Rightarrow -600x + 16x^2 + 10000 + 9x^2 = 625 \times 16$$

$$\Rightarrow 25x^2 - 600x + 10000 - 625 \times 16 = 0$$

$$\Rightarrow x = 24 \text{ and } y = 7$$

$$\therefore \text{Area} = (24 \times 25) + \frac{1}{2} \times 24 \times 7 = 684$$

88. (c) The word 'LEADING' has 7 different letters.

When the vowels EAI are always together, they can be supposed to form one letter.

Then, we have to arrange the letters LNDG (EAI).

Now, 5 (4 + 1 = 5) letters can be arranged in 5! = 120 ways.

The vowels (EAI) can be arranged among themselves in 3! = 6 ways.

$$\therefore \text{Required number of ways} = (120 \times 6) = 720.$$

89. (a) Let S be the sample space and E be the event of selecting 1 girl and 2 boys.

Then, $n(S)$ = Number ways of selecting 3 students out of 25

$$= {}^{25}C_3$$

$$= \frac{(25 \times 24 \times 23)}{(3 \times 2 \times 1)} = 2300.$$

$$n(E) = ({}^{10}C_1 \times {}^{15}C_2)$$

$$= \left[10 \times \frac{(15 \times 14)}{(2 \times 1)} \right]$$

$$= 1050.$$

$$\therefore P(E) = \frac{n(E)}{n(S)} = \frac{1050}{2300} = \frac{21}{46}$$

90. (c) Let the amount taxable purchases be Rs. x.

$$\text{Then, } 6\% \text{ of } x = \frac{30}{100}$$

$$\Rightarrow x = \left(\frac{30}{100} \times \frac{100}{6} \right) = 5.$$

$$\therefore \text{Cost of tax free items} = \text{Rs. } [25 - (5 + 0.30)] = ₹19.70$$

91. (d) The correct pattern is $+6^3, +5^3, +4^3, +3^3, \dots$

So, 521 is wrong and must be replaced by $(498 + 3^3)$ i.e. 525.

92. (c) The correct pattern is $\div 12, \div 10, \div 8, \div 6, \dots$

So, 24 is wrong and must be replaced by $(48 \div 6)$ i.e. 8.

93. (a) The terms of the series are $(2^3 - 3), (3^3 - 3), (4^3 - 3),$

$$(5^3 - 3), (6^3 - 3), (7^3 - 3), (8^3 - 3).$$

So, 27 is wrong and must be replaced by $(3^3 - 3)$ i.e. 24.

94. (c) The given sequence is a combination of two series :

I. 11, 20, 40, 74 and

II. 5, 12, 26, 54

The correct pattern in I is $+9, +18, +36, \dots$

So, 40 is wrong and must be replaced by $(20 + 18)$ i.e. 38.

95. (d) The correct pattern is $\times 2 + 1, \times 3 + 1, \times 4 + 1, \times 3 + 1 + 1, \dots$

So, 356 is wrong and must be replaced by $(129 \times 3 + 1)$ i.e. 388.

96. (d) Having a glance at the given options one can find out that the two nearest values have a difference of 300.

So round off the numbers to the nearest ten's values.

$$9228.789 \approx 9230; 5021.832 \approx 5020 \text{ and } 1496.989 \approx 1500$$

Now the equation will become

$$9230 - 5020 + 1500 = ?$$

$$? = 5710$$

But the nearest value is 5700.

97. (a) It can be rounded off to the nearest ten's places.

$$1002 \approx 1000; 49 \approx 50; 99 \approx 100 \text{ and } 1299 \approx 1300$$

Now the equation will become

$$1000 \div 50 \times 100 - 1300 = ?$$

$$20 \times 100 - 1300 = ?$$

$$2000 - 1300 = ?$$

$$? = 700$$

98. (d) The difference between two nearest values is 70 (210 and 280). So round off the numbers to the nearest integers. 29.8% of 260 \approx 30% of 260; 60.01% of 510 \approx 60% of 510 and 103.57 \approx 104

Now the equation will become

$$30\% \text{ of } 260 + 60\% \text{ of } 510 - 104 = ?$$

$$30/100 \times 260 + 60/100 \times 510 - 104 = ?$$

$$78 + 306 - 104 = ?$$

$$? = 384 - 104 = 280$$

99. (a) $(21.98)^2 \approx (22)^2$

$$(25.02)^2 \approx (25)^2$$

$$\text{and } (13.03)^2 \approx (13)^2$$

The equation will become

$$22^2 - 25^2 + 13^2 = ?$$

$$484 - 625 + 169 = ?$$

$$653 - 625 = ?$$

$$? = 28 \text{ so the nearest value is } 25$$

100. (e) $\frac{50 \times 25}{10} = \frac{1250}{10} = 125$

101. (d)

102. (b)

103. (c)

104. (b) Only (c)

105. (b) The realization of the link between food security and political stability.

106. (c) To make those countries more self sufficient to whom it previously provided food.

107. (c) It prompted increased investment and interest in agriculture.

108. (a) Misapprehension that it would alleviate poverty as it did in other countries.

109. (e) Only (b) and (c).

110. (c) Only (b)

111. (a) The meaning of the word **Starve (Verb)** as used in the passage is : keep deprived of : to not give something that is needed.

Hence, the words **starved** and **deprived** are synonyms.

112. (b) The meaning of the word **Slap (Verb)** as used in the passage is : impose : to order especially in a sudden or an unfair way, that something must happen or somebody must do something.

Hence, the words **slapped** and **imposed** are synonyms.

113. (a) The meaning of the word **Plow (Verb)** as used in the passage is : to invest a large amount of money in a company or project : to cultivate.

Hence, the words **plowed** and **cultivated** are synonyms.

114. (b) The meaning of the word **Pressing (Adjective)** as used in the passage is : urgent, serious, insistent, needing to be dealt with immediately.

Hence, the words **pressing** and **undemanding** are antonyms.

115. (c) The meaning of the word **Evaporate (Verb)** as used in the passage is : to disappear, especially by gradually becoming less and less.

Hence, the words **evaporated** and **grew** are antonyms.

116. (b) Q is the opening sentence, it defines the status quo, followed by S, because S illustrates about customised tailoring outfit, a subject mentioned in Q 'custom made clothing'. Thus will be followed by P, since P explains further customised tailoring industry.

117. (d) Q is the opening sentence as it introduces the subject of evaluation followed by S, which is linked with Q because, it gives conditions attached with the subject of Q.

118. (c) R is the opening sentence as it has the subject. There may be a confusion between P and R, but the subject of P- participation, is an object in R, Thus R will be the just sentence, followed Q and then P, as Q and P explain the objects of R.

119. (b) P is the opening sentence, followed by R because the 'this' in R refers to the idea stated in the opening sentence and works as a link between them. This will be followed by Q, because the pronoun subject 'it' refers to Ford Motor company.

120. (d) Q is the opening sentence, it introduces the subject. This will be followed by P which has a link with Q- Chewing gum, then will be S which has a link with P-Finish.

121. (a) Substitute between for among

122. (b) Substitute undergone

123. (b) Substitute detailed

124. (c) Substitute at least

125. (a) Delete no.

126. (d) According to this passage, regular physical activity is needed to improve one's physical as well as mental health

127. (d) In order to tone up the physical education programme the programme should be reoriented and implemented

128. (c) According to American, health education is more important than teaching any subject

129. (d) The author wants the reoriented physical education programme to be thoughtful

130. (a) In order to improve the physical education programme, we should first of all allot more time to the teaching and learning of physical activity

131. (e) 132. (d) 133. (b) 134. (b) 135. (c)

136. (c) 137. (d) 138. (a) 139. (e) 140. (b)

141. (b) 142. (b) 143. (a) 144. (a) 145. (b)

146. (a) 147. (c) 148. (e) 149. (b) 150. (b)

151. (c) 152. (c) 153. (a) 154. (c) 155. (a)

156. (d) 157. (a) 158. (d) 159. (d) 160. (c)

161. (b) 162. (c) 163. (e) 164. (a) 165. (a)

166. (c) 167. (a) 168. (b) 169. (c) 170. (d)

171. (b) 172. (c) 173. (d) 174. (e) 175. (a)

176. (d) 177. (b) 178. (a) 179. (b) 180. (c)

181. (d) 182. (a) 183. (b) 184. (d) 185. (a)

186. (b) 187. (a) 188. (c) 189. (c) 190. (c)

191. (b) 192. (c) 193. (b) 194. (b) 195. (b)

196. (c) 197. (c) 198. (b) 199. (a) 200. (c)