

## Question

**Directions (1-8):** In the questions given below, there is a sentence in which one part is given in bold. The part given in bold may or may not be grammatically correct. Choose the best alternative among the four given which can replace the part in bold to make the sentence grammatically correct. If the part given in bold is already correct and does not require any replacement, choose option (e), i.e. "No replacement required" as your answer.

Q1. Nobody can deny the fact that Indian economy **is very different than** American economy.

- (a) are very different than
- (b) is so much different than
- (c) are very different from
- (d) is very different from
- (e) No replacement required

Q2. Accurate **statistics with regards to** the area occupied in different forms of cultivation are difficult to obtain.

- (a) statistic with regards to
- (b) statistics with regard to
- (c) statistic with regard to
- (d) statistics in regards to
- (e) No replacement required

Q3. **Seldom if ever** was there any training or instructions in such tactics for either the tank crews or the infantry formations.

- (a) Seldom or never
- (b) Seldom if never
- (c) Seldom or ever
- (d) Seldom has ever
- (e) No replacement required

Q4. As soon as I opened the front door of my house, **than I smelled** the distinctive aroma of fresh coffee.

- (a) then I smelled
- (b) that I smelled
- (c) I smelled
- (d) I smell
- (e) No replacement required

Q5. Although he had fewer supporters among the governing class, **but he was able** to get the popular vote.

- (a) he was able
- (b) and he was able
- (c) else he was able
- (d) or he was able
- (e) No replacement required

Q6. The party explicitly **denies that they are not** involved in mainstream politics.

- (a) denied that they are not
- (b) denies that they were
- (c) denied that they are
- (d) deny that they are not
- (e) No replacement required

Q7. I would rather be a poor man in a garret with plenty of good books to read than a king **who did not loved** reading.

- (a) who do not loved
- (b) who did not love
- (c) whom did not loved
- (d) whom did not love
- (e) No replacement required

Q8. The relatively static lattice in a diamond ensures that the scattering is at a minimum and the thermal conductivity **is exceptional** good.

- (a) are exceptional
- (b) was exceptional
- (c) are exceptionally
- (d) is exceptionally
- (e) No replacement required

**Directions (9-13): Select the phrase/connector (it must be at the start) from the given three options which can be used to form a single sentence from the two sentences given below, implying the same meaning as expressed in the statement sentences.**

**Q9. We see ourselves repeating our ordinary routine. We realize how much wealth surrounds our life.**

- (i) When we see ourselves .....
  - (ii) Our ordinary routine.....
  - (iii) Realizing how much wealth.....
- (a) Only (i)
  - (b) Both (ii) and (iii)
  - (c) Only (iii)
  - (d) Only (ii)
  - (e) None of these

**Q10. There is a growing influence of the Indian Diaspora on Capitol Hill. Trump will certainly see the advantages of doing business with India.**

- (i) As there is a growing influence of...
- (ii) The growing influence of the Indian...
- (iii) With the growing influence of the Indian..
- (a) Only (i) is correct
- (b) Only (iii) is correct
- (c) Both (i) and (ii) are correct
- (d) Both (i) and (iii) are correct
- (e) All are correct

**Q11. There was no democracy in British India. The rulers could take bold decisions fearlessly without bothering about repercussions.**

- (i) As there was no democracy in British India...
- (ii) Since there was no democracy in British...
- (iii) With the rulers taking bold decisions...
- (a) Only (i) is correct
- (b) Only (ii) is correct
- (c) Both (i) and (ii) are correct
- (d) Both (ii) and (iii) are correct
- (e) All are correct

**Q12. Twelve million youth enter the Indian work force every year. Eighty per cent of these youth are unskilled.**

- (A) While eighty per cent .....
- (B) Since twelve million .....
- (C) Of the twelve million .....
- (a) Only (A)
- (b) Only (C)
- (c) Only (A) and (C)
- (d) All (A), (B) and (C)
- (e) None of these

**Q13. Scientists build climate models—computer simulations of the climate system. They are doing this to further explore the causes and effects of global warming**

- (i) To further explore...
- (ii) Scientists are building...
- (iii) Predicting effects of global warming...
- (a) Only (i) is correct
- (b) Only (ii) is correct
- (c) Only (iii) is correct
- (d) Both (i) and (ii) are correct
- (e) All are correct

**Directions (14-19):** Given below the sentences each of which has been divided into five parts out of which the first part has been marked bold. Each of the questions is then followed by the five options which give the sequence of the rearranged parts. You must choose the option which gives the correct sequence of the parts. If the sentence is already arranged or the correct sequence doesn't match any of the given sequence, mark (e) i.e. "None of the above" as your answer.

**Q14. The apex court had ordered that the/** of the biometric scheme and the enabling law(A)/ deadline be extended till the five-judge constitution(B)/ on petitions challenging the validity(C)/ bench delivers its judgment(D)

- (a) ACDB
- (b) BCAD
- (c) BDCA
- (d) CADB
- (e) None of the above

**Q15. Repealing the law that safeguards/** the floodgates of poaching(A)/ and it would lead to(B)/ marginalisation of the indigenous people(C)/ the indigenous people would open(D)

- (a) DCBA
- (b) DABC
- (c) ACBD
- (d) BACD
- (e) None of the above

**Q16. My thoughts are with the families/** in this unfortunate accident(A)/ recovery of the injured(B)/ of those who have lost their loved ones(C)/ I pray for the speedy(D)/

- (a) BCAD
- (b) DACB
- (c) ACBD
- (d) CADB
- (e) None of the above

**Q17. Several people became leaders/** remained where they were(A)/ and Ministers after that(B)/ rally but the people(C)/ belonging to the community(D)

- (a) ABCD
- (b) BCDA
- (c) CABD
- (d) DACB
- (e) None of the above

**Q18. He also directed the department/** to develop the new schools as model(A)/ completion of construction work(B)/ construction technology for early(C)/ institutions and engage modern(D)

- (a) ADCB
- (b) ABCD
- (c) DACB
- (d) CADB
- (e) None of the above

**Q19. The U.S. is a/** to its being an open society(A)/ nation of immigrants(B)/ in the present global order(C)/ and owes its predominant position(D).

- (a) ADCB
- (b) ABCD
- (c) BDCA
- (d) CADB
- (e) None of the above

**Directions (20-25): Read the following passage carefully and answer the questions given below it. Certain words are given in bold to help you locate them while answering some of the questions.**

Have you heard that the economy is like a car? It's the most popular **analogy** in financial reporting and political discourse. The American people are repeatedly told by financial pundits and politicians that consumption is an 'engine' that 'drives' economic growth because it makes up 70% of GDP. One notable Nobel-winning economics pundit with a penchant for bizarre growth theories even recently noted that an economy can be 'based on purchases of yachts, luxury cars, and the services of personal trainers and celebrity chefs.' Conversely, other economists including Nobel-winner Joseph Stiglitz claim that our economy is stuck in 'first gear' due to inequality: too much income is concentrated among too few rich people who tend to save larger share of their income and thus have a lower 'marginal propensity to consume'. The Keynesian message is clear: if you want to put the economic pedal to the metal, get out there and consume!

Not so fast, Speed Racer. The systematic failure by Keynesian economists and pundits to distinguish between consuming and producing value is the single most damaging fallacy in popular economic thinking. If the economy were a car, consumer preferences would surely be the steering wheel, but real savings and investment would be the engine that drives it forward.

Economic growth (booms) and declines (bust) have always been led by changes in business and durable goods investment, while final consumer goods spending has been relatively stable through the business cycle. Booms and busts in financial markets, heavy industry and housing have always been leading indicators of recession and recovery.

As John Stuart Mill put it two centuries ago, 'the demand for commodities is not the demand for labor.' Consumer demand does not necessarily translate into increased employment. That's because 'consumers' don't employ people. Businesses do. Since new hires are a risky and costly investment with **unknown** future returns, employers must rely on their expectations about the future and weigh those decision very carefully. As economic historian Robert Higgs' pioneering work on the Great Depression suggests, increased uncertainty can depress job growth even in the face of booming consumption. As recent years have demonstrated, consumer demand that appears to be driven by temporary or unsustainable policies is unlikely to induce businesses to hire.

**Q20. Choose the word which is **MOST SMILAR** to the word given in passage**

**UNKNOWN**

- (a) Recognize
- (b) Perceived
- (c) Unpredictable
- (d) Unruly
- (e) Uncanny

**Q21. Which of the following is the most suitable title for the passage above?**

- (a) Recession and Recovery
- (b) Consumer: The driving force for Economy
- (c) Economy: a Distant Dream?
- (d) Is Consumption necessary for economic Growth?
- (e) None of the Above

**Q22. In the statement "consumer preferences would surely be the steering wheel, but real savings and investment would be the engine that drives it forward", what can we infer from the line "consumer preferences would surely be the steering wheel"?**

- (a) Consumer likings regulate the economy individually.
- (b) If you want to regulate the economy, consumption is the only force.
- (c) The Penchant of the consumers controls the economy.
- (d) The consumer preferences are not at par with savings and economy in driving the economy.
- (e) None of the Above

**Q23. Which of the following statements is/are correct in context with the passage?**

- (a) Economists fail to distinguish between consuming and producing value and form a mistaken belief.
- (b) Economic growth and declines have always been led by changes in business and durable goods investment.
- (c) Income distribution is evenly distributed among the rich and is compatible with the tendency to consume.
- (d) Only (a)
- (e) Both (a) and (b)

**Q24. Which of the following is/are likely to induce businesses to hire?**

- (a) Consumer Demand
- (b) Consumer Spending
- (c) Increased certainty in future returns.
- (d) Makeshift policies
- (e) Both (b) and (c)

**Q25. Choose the word which is MOST OPPOSITE to the word given in passage**

**ANALOGY**

- (a) Similarity
- (b) narrative
- (c) Contrast
- (d) Reciprocate
- (e) Variance

**Directions (26-30):** In the following questions two columns are given containing three sentences/phrases each. In first column, sentences/phrases are A, B and C and in the second column the sentences/phrases are D, E and F. A sentence/phrase from the first column may or may not connect with another sentence/phrase from the second column to make a grammatically and contextually correct sentence. Each question has five options, four of which display the sequence(s) in which the sentences/phrases can be joined to form a grammatically and contextually correct sentence. If none of the options given forms a correct sentence after combination, mark (e), i.e. "None of these" as your answer.

**Q26.**

**Column (1):**

- (A) As the head of the family, he ensures that
- (B) Ravi is such a disorganized fellow that
- (C) The boy next door nags his parents because
- (a) C-E and B-F
- (b) A-F
- (c) B-E
- (d) A-D
- (e) None of these

**Column (2):**

- (D) he runs around like a headless chicken
- (E) he succeeds to make everyone laugh
- (F) he goes out and earns a living for his family

**Q27.**

**Column (1):**

- (A) Some rich guy from Boston
- (B) People tend to raise their voices when they
- (C) As soon as the herd heard the gunshots, they
- (a) C-F
- (b) A-D
- (c) B-E
- (d) B-D
- (e) None of these

**Column (2):**

- (D) are losing an argument
- (E) all were fatally injured
- (F) just bought the house next to mine

**Q28.**

**Column (1):**

- (A) Tom always drinks at least
- (B) If he had taken his doctor's advice
- (C) I can still remember the time when
- (a) C-E
- (b) B-F
- (c) A-D
- (d) C-F
- (e) None of these

**Column (2):**

- (D) he might still be alive.
- (E) went on a picnic together.
- (F) three cups of coffee in the morning.

**Q29.**

**Column (1):**

- (A) It seems like yesterday, but it's actually
- (B) I can't believe Vijay is still talking about
- (C) The only thing that really matters is
- (a) A-D
- (b) B-E
- (c) C-E
- (d) A-F
- (e) None of these

**Column (2):**

- (D) whether or not you are happy.
- (E) nearly ten years since we first met.
- (F) what happens two years ago.

**Q30.**

**Column (1):**

- (A) After school, Jack usually sticks around as long as
- (B) We're planning on doing the sights
- (C) Even the repairman couldn't figure out what
- (a) A-F and B-D
- (b) B-E and C-F
- (c) B-F and C-D
- (d) A-D and C-E
- (e) None of these

**Column (2):**

- (D) had gone wrong with the microwave.
- (E) he can because he doesn't want to go home.
- (F) of the city tomorrow morning.

**Directions (31-35): Study the following information carefully and answer the questions given below:**

Seven boxes A, B, C, D, E, F, G are kept one above the other containing different number of chocolates ranging from 10-90. Not more than Four boxes are kept above A. Two boxes are kept between A and the box containing 41 chocolates, which is kept below Box A. D contains thrice number of chocolates than box B. Box C contains 50 number of chocolates and is not kept at the top. The number of chocolates in box G is a cube of a number. Only one box is kept between box containing 41 chocolates and 39 chocolates. Box D has less number of chocolates than box A. One of the boxes contain 78 chocolates. Five boxes are kept between box containing 64 chocolates and Box C. Box G is immediately above box E. Box D is not kept immediately above or below box B. Three boxes are kept between box D and box F. Box D is above box F.

**Q31. Which among the following box/boxes is kept exactly between Box D and Box B?**

- (a) G, E
- (b) B, C
- (c) B, A
- (d) F, C
- (e) none of these

**Q32. How many chocolates are kept in box E?**

- (a) 50
- (b) 13
- (c) 78
- (d) 41
- (e) none of these

**Q33. Which among the following boxes contains the maximum and minimum number of chocolates respectively?**

- (a) G, E
- (b) B, D
- (c) C, A
- (d) F, B
- (e) none of these

**Q34. Which of the following combination is not true?**

- (a) 50-D
- (b) 13-B
- (c) 41-E
- (d) 64-A
- (e) none of these

**Q35. Which among the following boxes is kept immediately below box B?**

- (a) G
- (b) C
- (c) A
- (d) F
- (e) none of these

**Direction (36-40): Study the following information carefully to answer the given questions.**

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

**Input:** 91 53 72 14 39 24 85 76 61 67

**Step I:** 15 91 53 72 39 85 76 61 67 25

**Step II:** 40 15 91 72 85 76 61 67 25 54

**Step III:** 62 40 15 91 72 85 76 25 54 68

**Step IV:** 73 62 40 15 91 85 25 54 68 77

**Step V:** 86 73 62 40 15 25 54 68 77 92

**Step V, is the last step**

**Input:-** 58 40 99 28 63 84 16 34 71 87

**Q36. How many numbers are there between 59 and the one which 3<sup>rd</sup> to left of 85 in step V?**

- (a) One
- (b) More than three
- (c) Three
- (d) None
- (e) Two

**Q37. How many numbers are there between the one which is 2<sup>nd</sup> from the left end and 99 in step II?**

- (a) One
- (b) More than three
- (c) Three
- (d) None
- (e) Two

**Q38. What is the position of 35 from the left end in second last step?**

- (a) First
- (b) Fifth
- (c) Second
- (d) Third
- (e) Sixth

**Q39. Which of the following number is 6<sup>th</sup> to the left of 29 in the III step?**

- (a) 35
- (b) 59
- (c) 17
- (d) 99
- (e) None of these

**Q40. Which of the following number is 5<sup>th</sup> from the right end in step V?**

- (a) 35
- (b) 59
- (c) 17
- (d) 29
- (e) None of these

**Direction (41-42): Study the following information carefully and answer the given question.**  
Point Q is 15m south of point P. Point R is 10m east of point Q. Point S is 5m north of point R. Point T is 5m west of point S.

**Q41. If Point U is 10m east of Point P, then Point S is how far and in which direction from point U?**

- (a) 10m, north
- (b) 5m, south
- (c) 15m, north
- (d) 10m, south
- (e) 5m, north

**Q42. Point P is in which direction from Point T?**

- (a) North-west
- (b) South-east
- (c) North
- (d) South-west
- (e) North-east

**Q43. V is married to W. R is the only sister of W. A is the mother of R. A has three children. G is the niece of R and P. V has no sibling. R is unmarried. Then how is P related to V?**

- (a) Mother-in-law
- (b) Sister
- (c) Brother-in-law
- (d) Brother
- (e) None of these

**Direction (44-46): Each of the questions below consists of a question and two statements numbered I and II given below it. You have 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 statements I and II together are not sufficient to answer the question.
- (e) if the data in both statements I and II together are necessary to answer the question.

**Q44. Statement: Six boys J, K, L, M, N, O are there in a classroom each of them is of different heights. Who among the following is the tallest?**

- I. M is taller than N and K. J is taller than M but not as tall as O. L is taller than K.
- II. M is taller than only three boys. J is taller than K.

**Q45. Statement: Six persons R, S, T, U, V, W lives on a six storey building such as ground floor is numbered as 1 and above it 2 floor and so on ... upto top floor numbered as 7. How many persons live between R and T?**

- I. T lives on an even numbered floor but not on top floor. Only two persons live between W and T. R lives below W.
- II. Four persons live between S and U. No one lives between S and T. V lives immediately above R.

**Q46. Statement:** Six persons A, B, C, D, E, F are sitting in row. All of them are facing north direction. Who among the following sits second from the right end?

I. B sits at end extreme end of the row. A sits second to the right of B. Only one person sits between A and C. E sits immediate right of C.

II. E sits third to the right of D. Only one person sits between E and A. F sits to the right to E. C is an immediate neighbor of E.

**Q47. In the given coding system 'Now they live for' is coded as 'gn mu sy fd' and 'go now run for' is coded as "gn sy mo lt". Which of the following statement among the given is required to code 'go there now'?**

- I. 'Give it for' is coded as 'la sa sy'.
  - II. 'Go there get ready' is coded as 'ht mo ga sx'
  - III. 'Now there fall' is coded as ' za ga gn'
- (a) Only I  
(b) Both II and III  
(c) Only II  
(d) Both I and II  
(e) Either I or II

**Directions (48-52): In these questions, relationship between different elements is shown in the statements. The statements are followed by conclusions.**

Give answer

- (a) : If only conclusion I is true
- (b) : If only conclusion II is true
- (c) : If either conclusion I or II is true
- (d) : If neither conclusion I nor II is true
- (e) : If both conclusions I and II are true

**Q48. Statements:**  $X \geq G = H$ ;  $G > J \geq L$ ;  $J \geq K < Y$

**Conclusions**

- I.  $X > L$
- II.  $K < G$

**Q49. Statements:**  $A > B = R \geq S \geq T$ ;  $X < J \leq K < T$

**Conclusions**

- I.  $A > X$
- II.  $R \geq T$

**Q50. Statements:**  $M > L \geq K \leq J$ ;  $N \geq R \geq S = M$

**Conclusion :**

- I.  $R > J$
- II.  $J \geq R$

**Q51. Statements:**  $C \geq D = E$ ;  $A = B \leq S \geq C$

**Conclusion :**

- I.  $C < A$
- II.  $D \leq B$

**Q52. Statements:**  $X \geq G > H \geq I$ ;  $M > H \geq L$

**Conclusion :**

- I.  $X > M$
- II.  $X > L$

**Directions (53-57):** Study the following information carefully and answer the questions given below:

Eight persons B, C, D, E, M, N, O, J were born in different months i.e. January, April, June, October on two different dates 16th or 24th. Only One person was born on one date. They all like different flowers i.e. lily, jasmine, hibiscus, marigold, rose, sunflower, lotus, daffodil but not necessarily in the same order.

B was born in April. Only one person was born between B and the one who like lotus, who was not born in January. One person was born between the ones who like lotus and sunflower. Five persons were born between C and N, who was born after C. N was not the youngest. E was born before O and both of them were born in the same month. No one was born before the one who likes hibiscus. The number of persons born before M is same as the number of persons born after the one who likes lotus. No one is born between B and the one who likes jasmine. D does not like jasmine. D was born before J but not immediately before. Four persons were born between the J, who likes rose and the one who likes marigold. J was born after the one who likes marigold. One of the person born in June likes Lilly.

**Q53. Who among the following likes marigold?**

- (a) D
- (b) J
- (c) N
- (d) B
- (e) none of these

**Q54. Who was born exactly between the one who likes Rose and M?**

- (a) D
- (b) J
- (c) B
- (d) O
- (e) none of these

**Q55. Which of the following flower is liked by D?**

- (a) lily
- (b) rose
- (c) daffodil
- (d) marigold
- (e) none of these

**Q56. Which among the following combination is not true?**

- (a) D- April
- (b) J- rose
- (c) N- sunflower
- (d) O- June
- (e) none of these

**Q57. How many persons were born before O?**

- (a) two
- (b) six
- (c) five
- (d) seven
- (e) none of these

**Directions (58-61): Study the information and answer the following questions:**

**In a certain code language**

**"Entire Money Board Perfect" is written as " Q7 N5 F6 C5 ",**

**"Sleeve Washing World Stories" is written as " X7 T6 T7 X5 ",**

**"Moving Partly Falls Objects" is written as " N6 P7 G5 Q6 ",**

**Q58. What is the code for 'Radio' in the given code language?**

- (a) S5
- (b) R5
- (c) S4
- (d) R6
- (e) None of these

**Q59. What is the code for the word 'Rising Normal' in the given code language?**

- (a) S5 O6
- (b) O5 S6
- (c) O6 S6
- (d) O5 S5
- (e) None of these

**Q60. If the code for the words 'they forward \_\_\_' is coded as 'U4 G7 T5' in the coded language then what will be the missing word?**

- (a) South
- (b) Mount
- (c) Stone
- (d) Climb
- (e) Both a and c

**Q61. What is the code for 'Elegant' in the given code language?**

- (a) G7
- (b) D7
- (c) F6
- (d) F7
- (e) None of these

**Directions (62-65): Read the following information carefully to answer the questions given below.**  
Fourteen persons i.e. A, B, C, D, E, F, G, M, N, O, P, Q, R and S are sitting in two parallel rows such that A, B, C, D, E, G and F sits in row 1 faces towards south direction and M, N, O, P, Q, R and S sits in the row 2 such that all are facing north direction. Person sitting in the row 1 faces the person sitting in row 2.

A sit third to the right of B. Either B or A sits at the end of the row. N sits third to the right of O. Neither N nor O Faces A and B. The one who faces C sits third to the right of M. None of the immediate neighbour B Faces O. C sits third to the left of F. O does not face F. One of the immediate neighbour of F Faces Q, who does not sit at the end of the row. D is not the immediate neighbour of C. G sits on the left of E but not on the immediate left. P does not face G and C. S does not face C. R and S are immediate neighbours. E does not sit at the end of the row. D does not face P.

**Q62. Who among the following faces P?**

- (a) D
- (b) A
- (c) F
- (d) G
- (e) None of these

**Q63. Who among the following sits at the end of the row?**

- (a) P,C
- (b) P,D
- (c) O,G
- (d) A,S
- (e) None of these

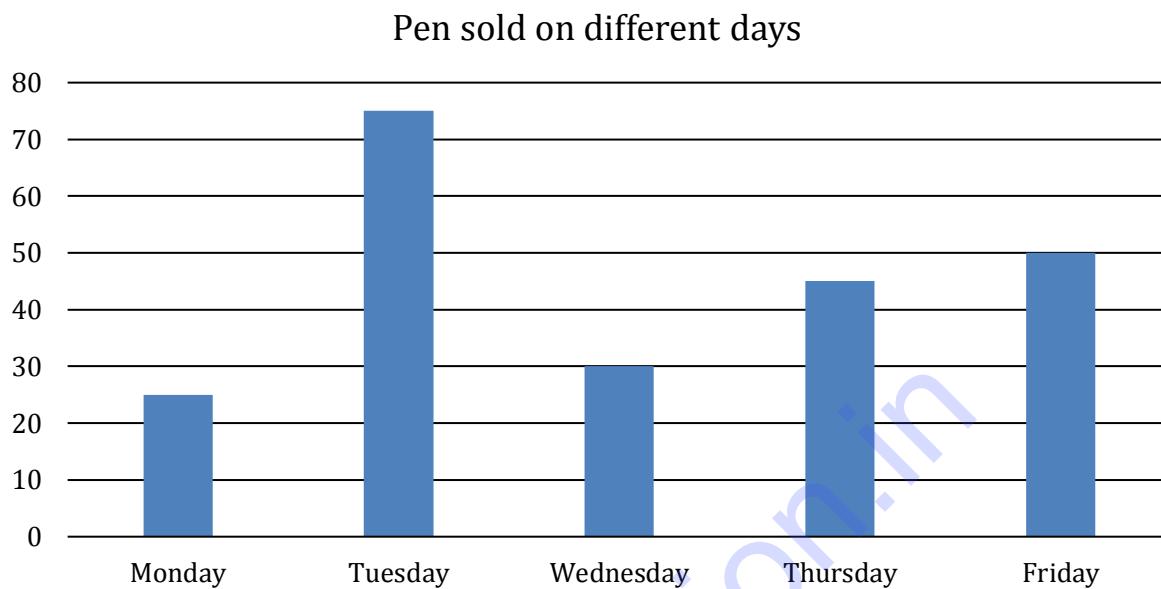
**Q64. How many persons sits to the right of B?**

- (a) Two
- (b) More than Three
- (c) Three
- (d) One
- (e) None of these

**Q65. Who among the following faces N?**

- (a) D
- (b) B
- (c) F
- (d) G
- (e) None of these

**Directions (66-70):** Bar graph given below shows pens sold by a tailor on five different days. Study the data carefully and answer the following questions



**Q66.** Find the difference between total number of pens sold on Monday and Tuesday together to total number of pens sold on Thursday and Friday together?

- (a) 15
- (b) 10
- (c) 5
- (d) 20
- (e) 0

**Q67.** Total number of pens sold on Saturday is 40% more than total number of pens sold on Wednesday. Find total number of pens sold on Friday and Saturday together?

- (a) 92
- (b) 110
- (c) 72
- (d) 108
- (e) 85

**Q68.** Total number of pens sold on Tuesday are 25% more than total number of pens sold on Sunday. Find total number of pens sold on Sunday?

- (a) 64
- (b) 50
- (c) 94
- (d) 60
- (e) 55

**Q69.** Out of total pens sold on Thursday, 20% are blue ink pen. Out of remaining 25% are red ink pen and remaining are black in pen. Find total number of blue and black ink pen sold on Thursday?

- (a) 27
- (b) 36
- (c) 45
- (d) 39
- (e) 30

**Q70.** Out of total pens sold on Tuesday ratio between total defective pens sold to total pens sold is 7 : 15. Find total number of non-defective pens sold on Tuesday by retailer?

- (a) 20
- (b) 25
- (c) 30
- (d) 35
- (e) 40

**Q71. Quantity I.** ' $x'$  :  $x^2 + x - 6 = 0$

**Quantity II.** ' $y'$  :  $y^2 + 7y + 12 = 0$

- (a) Quantity I > Quantity II
- (b) Quantity I < Quantity II
- (c) Quantity I  $\geq$  Quantity II
- (d) Quantity I  $\leq$  Quantity II
- (e) Quantity I = Quantity II or No relation

**Q72. A's efficiency is 25% more than B**

**Quantity I – 'x'** : A can do  $\frac{5}{6}$  h of total work in ' $x$ ' days

**Quantity II – 'y'** : B can do  $\frac{4}{5}$  th of total work in ' $y$ ' days

- (a) Quantity I > Quantity II
- (b) Quantity I < Quantity II
- (c) Quantity I  $\geq$  Quantity II
- (d) Quantity I  $\leq$  Quantity II
- (e) Quantity I = Quantity II or No relation

**Q73. Sum of 8 consecutive even number is  $S_1$ .**

**Quantity I** – Sum of second number and eight number in  $S_1$

**Quantity II** – Sum of third number and sixth number in  $S_1$

- (a) Quantity I > Quantity II
- (b) Quantity I < Quantity II
- (c) Quantity I  $\geq$  Quantity II
- (d) Quantity I  $\leq$  Quantity II
- (e) Quantity I = Quantity II or No relation

**Q74. An article is sold at Rs. 1500 after allowing discount of 12.5% on Marked price.**

**Quantity I -Rs.550**

**Quantity II -Mark price of article.**

- (a) Quantity I > Quantity II
- (b) Quantity I < Quantity II
- (c) Quantity I  $\geq$  Quantity II
- (d) Quantity I  $\leq$  Quantity II
- (e) Quantity I = Quantity II or No relation

**Q75. If a speed of boat is 500% more than the speed of a current.**

**Quantity I -'x'** : If boat can travel a distance of 63 km in 3 hr, in downstream then 'x' is the speed of the boat in upstream (km/hr).

**Quantity II - 15 km/hr**

- (a) Quantity I > Quantity II
- (b) Quantity I < Quantity II
- (c) Quantity I  $\geq$  Quantity II
- (d) Quantity I  $\leq$  Quantity II
- (e) Quantity I = Quantity II or No relation

**Direction (76-80): What number is wrong according to given number series pattern: -**

**Q76. 1, 3, 9, 31, 128, 651, 3913**

- (a) 9
- (b) 1
- (c) 128
- (d) 31
- (e) 3913

**Q77. 291, 147, 75, 39, 22, 12, 7.5**

- (a) 22
- (b) 291
- (c) 147
- (d) 75
- (e) 7.5

**Q78. 26, 27, 34, 58, 106, 186, 306**

- (a) 26
- (b) 34
- (c) 58
- (d) 106
- (e) 27

**Q79.** 5.9, 6, 6.1, 6.4, 7.9, 18.5, 112.9

- (a) 6
- (b) 5.9
- (c) 6.1
- (d) 18.5
- (e) 112.9

**Q80.** 330, 80, 280, 120, 250, 130, 240

- (a) 330
- (b) 130
- (c) 280
- (d) 240
- (e) 80

**Q81.** Sum of volume of cylinder (S) and volume off cone (C) is  $2190 \text{ cm}^2$  & height of both cylinder and cone is same i.e, 10 cm. If radius of cone is 15 cm then find the ratio of radius of S to radius of C?

- (a) 1 : 2
- (b) 3 : 4
- (c) 2 : 5
- (d) 4 : 5
- (e) 3 : 5

**Q82.** In a box there are 6 blue ball, X red balls & 10 green balls. Probability of choosing one red ball from the given box is  $\frac{1}{3}$ . Then find the sum of red and blue balls in the box?

- (a) 20
- (b) 12
- (c) 14
- (d) 18
- (e) 16

**Q83.** Sum of A's and B's age 6 years ago is 88. A's age 18 yrs ago is equal to B's age 6 years ago. Find the age of A two year hence?

- (a) 58 yrs
- (b) 64 yrs
- (c) 42 yrs
- (d) 52 yrs
- (e) 48 yrs

**Q84.** Train A of length 120 m can cross a platform of length 240 m in 18 second the ratio of speed of train A and Train B is 4 : 5. Then find the length of Train B if train B can cross a pole in 12 seconds.

- (a) 280 m
- (b) 300 m
- (c) 320 m
- (d) 350 m
- (e) 240 m

**Q85.** What is the probability of forming word from the letters of word “IMPEACH” such that all vowels come together?

- (a)  $\frac{8}{35}$
- (b)  $\frac{1}{7}$
- (c)  $\frac{3}{35}$
- (d)  $\frac{17}{35}$
- (e)  $\frac{2}{7}$

**Direction (86-90):** Find the value of (?) in following approximation questions:

**Q86.** ? = . . . ÷ . . . × . . . ÷ . .

- (a) 7
- (b) 3
- (c) 4
- (d) 5
- (e) 8

**Q87.**  $\frac{?}{\cdot} = \sqrt{\cdot} + \sqrt{\cdot}$

- (a) 17
- (b) 20
- (c) 10
- (d) 34
- (e) 40

**Q88.** 34.02% of  $550.09 \div ? = 297.07 \div \sqrt{\cdot}$

- (a) 14
- (b) 21
- (c) 8
- (d) 27
- (e) 17

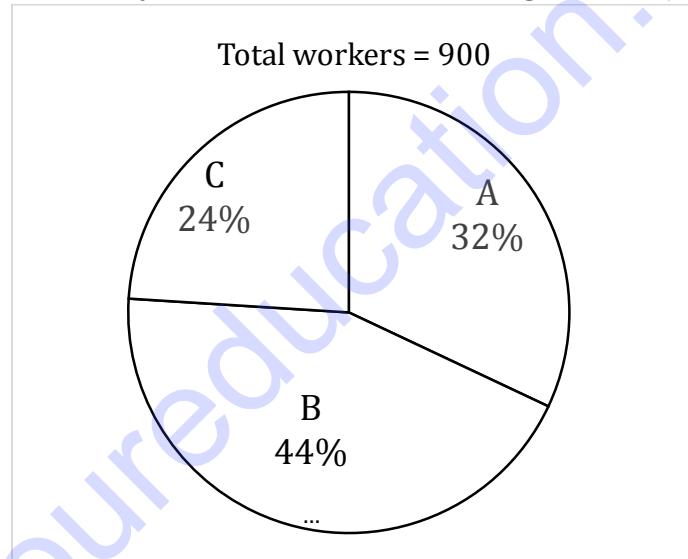
**Q89.**  $(? \div 9.97) \times 12.08 = 20.12\% \text{ of } 1319.97$

- (a) 220
- (b) 240
- (c) 260
- (d) 280
- (e) 200

**Q90.**  $? \% = \sqrt{(\quad) + (\quad) + \quad} \%$

- (a) 80
- (b) 60
- (c) 40
- (d) 20
- (e) 10

**Direction (91-95):** Pie chart given below shows total number of workers in three different companies. Table given below shows ratio between officers and workers working in these companies. Study the data carefully and answer the following questions



| Company | Officers : Workers |
|---------|--------------------|
| A       | 1 : 16             |
| B       | 1 : 18             |
| C       | 1 : 12             |

Note: - Total employees = Officers + Workers

**Q91.** Find the ratio between total number of workers in company A and C together to total number of officers in company A and C together?

- (a) 16 : 1
- (b) 12 : 1
- (c) 14 : 1
- (d) 18 : 1
- (e) 20 : 1

**Q92.** Total number of employees in company 'B' is how much more than total number of employees in company 'C'.

- (a) 174
- (b) 194
- (c) 204
- (d) 214
- (e) 184

**Q93.** Total number of officers in company 'A' is how much less than total number of officers in company 'B'?

- (a) 4
- (b) 2
- (c) 0
- (d) 6
- (e) 8

**Q94.** Total number of officers and workers in company D is 50% and 25% more than total number of officers and workers in company 'C' respectively. Find total number of employees in company 'D'?

- (a) 279
- (b) 297
- (c) 342
- (d) 324
- (e) 306

**Q95.** Find the difference between total number of workers in company 'A' and total number of workers in company 'B' and 'C' together?

- (a) 432
- (b) 396
- (c) 360
- (d) 324
- (e) 288

**Direction (96-100):** There are three persons A, B and C who each invested in two different scheme  $S_1$  and  $S_2$ . A invested Rs 80,000 for 2 yr in scheme  $S_1$  and 30,000 for 4 years in scheme  $S_2$ . B invested Rs 30,000 for 3 year in  $S_1$  and he did not invest in scheme B. B also obtained a profit of 10,000 by selling his car. C invested Rs 50000 for 5 years in scheme  $S_1$  and 10000 for 3

year in scheme S<sub>2</sub>. Total profit obtained from scheme S<sub>1</sub> is 2 lakh and scheme S<sub>2</sub> is 90,000.

**Q96.** What is the ratio of total profit obtained by B and profit obtained by C from scheme S<sub>1</sub>

- (a) 23 : 47
- (b) 54 : 47
- (c) 36 : 43
- (d) 23 : 50
- (e) 27 : 50

**Q97.** Profit obtained by A from scheme S<sub>1</sub> is what percent of profit obtained by C from scheme S<sub>2</sub>.

- (a)  $346\frac{7}{9}\%$
- (b)  $347\frac{8}{9}\%$
- (c)  $356\frac{7}{9}\%$
- (d)  $345\frac{4}{9}\%$
- (e)  $355\frac{5}{9}\%$

**Q98.** If sum of investment of A in both schemes and total profit obtained by A from both scheme is invested at compound Interest at the rate of 20% p.a. then find the total compound interest obtained in 2 yr

- (a) 108240
- (b) 104206
- (c) 105208
- (d) 109280
- (e) 106220

**Q99.** What is the average of profit attained by A from scheme S<sub>1</sub> and profit of C obtained from scheme S<sub>2</sub>.

- (a) 41000
- (b) 42000
- (c) 44000
- (d) 55000
- (e) 40000

**Q100.** If A had invested his sum at Simple Interest for 3 yr at the rate of R% p.a. instead in scheme S<sub>1</sub> and B has invested his sum at compound Interest at (R + 5%) p.a. for 1 year and difference in interest obtained is 30,000 then find value of R%.

- (a) 10%
- (b) 9%
- (c) 15%
- (d) 18%
- (e) 12%

### S1. Ans. (d)

**Sol.**

The most appropriate phrase to replace the phrase given in bold is “is very different from”. In the given sentence, ‘than’ should be replaced with ‘from’ because ‘different’ is followed by ‘from’. Also keep in mind that, ‘than’ is used after ‘different’, but only in the cases where ‘different’ is followed by a noun. For example, I read a different novel than this. Since option (d) is in the precise grammatical syntax, it becomes the most suitable answer choice.

### S2. Ans. (b)

**Sol.**

The most appropriate phrase to replace the phrase given in bold is “statistics with regard to”. It is to be noted that ‘Statistics’, when used as a subject, always takes a singular verb. For example, Statistics is not an easy subject. But, whenever ‘statistics’ denotes some statistical facts or data, the very following it is always plural, which is the case here. Since option (b) is in the precise grammatical syntax, it becomes the most suitable answer choice.

### S3. Ans. (e)

**Sol.** The phrase given in sentence is grammatically correct and does not require any replacement. Hence, option (e) i.e. “No replacement required” is the correct answer.

### S4. Ans. (c)

**Sol.** The most appropriate phrase to replace the phrase given in bold is “I smelled”. It is to be noted that after ‘As soon as, As long as, So long as’, we don’t use ‘than/then’. Since option (c) is in the precise grammatical syntax, it becomes the most suitable answer choice.

### S5. Ans. (a)

**Sol.** The most appropriate phrase to replace the phrase given in bold is “he was able”. It is to be noted that ‘Although/Though’ is followed by ‘yet’ and not ‘but/and/or/else’. And in writing, many a times, ‘yet’ is replaced by a ‘comma’, which is the case here. Since option (a) is in the precise grammatical syntax, it becomes the most suitable answer choice.

### S6. Ans. (c)

**Sol.** The most appropriate phrase to replace the phrase given in bold is “denied that they are”. It is to be noted that ‘not’ will not be used after ‘deny’ because deny already means refuse to admit. Since option (c) is in the precise grammatical syntax, it becomes the most suitable answer choice.

### S7. Ans. (b)

**Sol.** The most appropriate phrase to replace the phrase given in bold is “who did not love”. It is to be noted that after ‘did’ we always use the first form of the verb i.e. V1. Since option (b) is in the precise grammatical syntax, it becomes the most suitable answer choice.

### S8. Ans. (d)

**Sol.** The most appropriate phrase to replace the phrase given in bold is “is exceptionally”. It is to be noted that ‘good’ is an adjective, so ‘exceptional’ should be replaced by ‘exceptionally’. ‘Exceptional’ is itself an adjective and we all know that an adjective never defines another adjective, but an adverb does. Since option (d) is in the precise grammatical syntax, it becomes the most suitable answer choice.

### S9. Ans.(a)

**Sol.**

(i) When we see ourselves repeating our ordinary routine, we realize how much wealth surrounds our life.

### S10. Ans. (e)

**Sol.** (i) As there is a growing influence of the Indian Diaspora on Capitol Hill, Trump will certainly see the advantages of doing business with India.

(ii) The growing influence of the Indian Diaspora on Capitol Hill will certainly allow Trump to see the advantages of doing business with India.

(iii) With the growing influence of the Indian Diaspora on Capitol Hill, Trump will certainly see the advantages of doing business with India.

### S11. Ans. (c)

**Sol.** (i) As there was no democracy in British India, the rulers could take bold decisions fearlessly without bothering about repercussions.

(ii) Since there was no democracy in British India, the rulers could take bold decisions fearlessly without bothering about repercussions.

### S12. Ans.(b)

**Sol.** Option (b) is correct because while indicates a contrast and because of the given requirement of the statement it cannot start the sentence.

### S13. Ans. (d)

**Sol.** Both (i) and (ii) are correct

(i) To further explore the causes and effects of global warming, scientists build climate models – computer simulations of the climate system.

(ii) Scientists are building climate models – computer simulations of the climate system to further explore the causes and effects of global warming and to predict future warming.

**S14. Ans.(c)**

**Sol. BDCA;** (The apex court had ordered that the deadline be extended till the five-judge constitution bench delivers its judgment on petitions challenging the validity of the biometric scheme and the enabling law)

**S15. Ans.(b)**

**Sol. DABC;** (Repealing the law that safeguards the indigenous people would open the floodgates of poaching and it would lead to marginalisation of the indigenous people)

**S16. Ans.(d)**

**Sol. CADB;** (My thoughts are with the families of those who have lost their loved ones in this unfortunate accident. I pray for the speedy recovery of the injured)

**S17. Ans.(b)**

**Sol. BCDA;** (Several people became leaders and Ministers after that rally but the people belonging to the community remained where they were)

**S18. Ans.(a)**

**Sol. ADCB;** (He also directed the department to develop the new schools as model institutions and engage modern construction technology for early completion of construction work)

**S19. Ans.(c)**

**Sol.** Option (c) **BDCA** is the correct choice for the given question

The U.S. is a nation of immigrants and owes its predominant position in the present global order to its being an open society.

**S20. Ans.(e)**

**Sol.** Unknown: not known or familiar.

Uncanny: strange or mysterious

**S21. Ans.(d)**

**Sol.** The most appropriate title for the passage above is “Is Consumption necessary for economic Growth?”

**S22. Ans.(c)**

**Sol.** The meaning of the line above is that consumer preferences control the economy but savings and investment are the push to drive it forward. Hence option c is the correct choice here.

**S23. Ans.(e)**

**Sol.** Both statements (a) and (b) are correct. Refer the following lines

Option(a): The systematic failure by Keynesian economists and pundits to distinguish between consuming and producing value is the single most damaging fallacy in popular economic thinking.

Option(b): Economic growth (booms) and declines (bust) have always been led by changes in business and durable goods investment, while final consumer goods spending has been relatively stable through the business cycle.

**S24. Ans.(c)**

**Sol.** Option (c) is the correct choice. Refer last paragraph of the passage, “increased uncertainty can depress job growth even”

**S25. Ans.(e)**

**Sol.** Option (e) is the correct choice

**Analogy** means a comparison between one thing and another, typically for the purpose of explanation or clarification.

**Variance** means the fact or quality of being different, divergent, or inconsistent.

**S26. Ans (b)**

**Sol.** Out of all the given options, only combination of sentences (A) and (F) makes a grammatically and contextually correct sentence. Hence, option (b) is the correct answer.

**S27. Ans (d)**

**Sol.** Out of all the given options, only combination of sentences (B) and (D) makes a grammatically and contextually correct sentence. Hence, option (d) is the correct answer.

**S28. Ans (a)**

**Sol.** Out of all the given options, only combination of sentences (C) and (E) makes a grammatically and contextually correct sentence. Hence, option (a) is the correct answer.

**S29. Ans (e)**

**Sol.** Out of all the given options, none of the combinations of sentences makes a grammatically and contextually correct sentence. Hence, option (e) is the correct answer.

**S30. Ans (c)**

**Sol.** Out of all the given options, combination of sentences (B) and (F) together as well as combination of sentences (C) and (D) together makes a grammatically and contextually correct sentence. Hence, option (c) is the correct answer.

**Directions (31-35):**

| <b>Boxes</b> | <b>Number of chocolates</b> |
|--------------|-----------------------------|
| A            | 64                          |
| D            | 39                          |
| G            | 27                          |
| E            | 41                          |
| B            | 13                          |
| F            | 78                          |
| C            | 50                          |

**S31.Ans.(a)**

**S32.Ans.(d)**

**S33.Ans.(d)**

**S34.Ans.(a)**

**S35.Ans.(d)**

**Direction (36-40):**

**Sol.** In this input output question numbers are arranged in ascending order from both the ends such as lowest number is first arranged from the left end and the second lowest number is arranged from the right end. And also all the numbers which are getting arranged is added by 1.

Input:- 58 40 99 28 63 84 16 34 71 87

Step I: 17 58 40 99 63 84 34 71 87 29

Step II: 35 17 58 99 63 84 71 87 29 41

Step III: 59 35 17 99 84 71 87 29 41 64

Step IV: 72 59 35 17 99 87 29 41 64 85

Step V: 88 72 59 35 17 29 41 64 85 100

**S36. Ans. (e)**

**S37. Ans. (a)**

**S38. Ans. (d)**

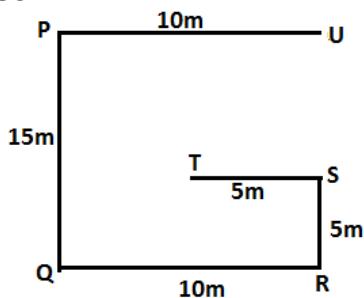
**S39. Ans. (a)**

**S40. Ans. (d)**

**Direction (41-42):**

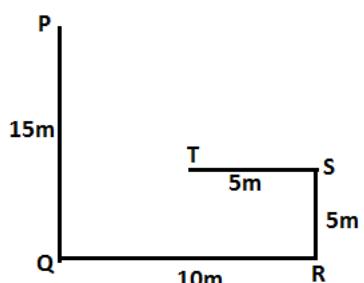
**S41. Ans. (d)**

**Sol.**



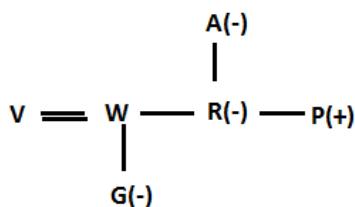
**S42. Ans. (a)**

**Sol.**



**S43. Ans.(c)**

**Sol.**



**Direction (44-46):**

**S44.Ans. (e)**

**Sol.**

From I-M> N, K, O>J>M and L> K

From II- M>\_>\_>\_ and J> K

From both I and II we get that O>J>M>N/L>L/N>K/N

So, O is the tallest boy.

**S45. Ans. (e)**

**Sol.** From I,

| Floors | Persons |
|--------|---------|
| 6.     |         |
| 5.     | W       |
| 4.     | R/      |
| 3.     | R/      |
| 2.     | T       |
| 1.     | R/      |

**From II,**

| Floors | Persons |
|--------|---------|
| 6.     | S/U     |
| 5.     | V/T     |
| 4.     | R/V     |
| 3.     | V/R     |
| 2.     | R/T     |
| 1.     | S/U     |

**From both I and II,**

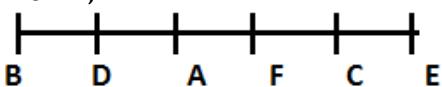
| Floors | Persons |
|--------|---------|
| 6.     | U       |
| 5.     | W       |
| 4.     | V       |
| 3.     | R       |
| 2.     | T       |
| 1.     | S       |

So, No one lives between R and T.

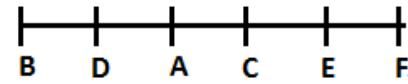
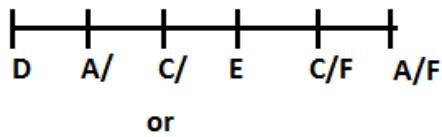
**S46. Ans. (a)**

**Sol.**

From I,



From II,



So, from only I we get that C sits second from the right end.

**S47. Ans. (b)**

**Sol.**

From II and III, the code of 'go there now' is gn ga mo.

**Directions (48-52):**

**S48.Ans(e)**

**Sol.**

I. X > L (True)      II. K < G (True)

**S49.Ans(e)**

**Sol.**

I. A > X (True)      II. R ≥ T (True)

**S50.Ans(c)**

**Sol.** I.  $R > J$  (False) II.  $J \geq R$  (False)

**S51.Ans(d)**

**Sol.** I.  $C < A$  (False) II.  $D \leq B$  (False)

**S52.Ans(b)**

**Sol.**

I.  $X > M$  (False) II.  $X > L$  (True)

**Directions (53-57):**

**Sol.**

| Dates   | 16th             | 24th            |
|---------|------------------|-----------------|
| Months  |                  |                 |
| January | C<br>(hibiscus)  | D<br>(daffodil) |
| April   | B<br>(marigold)  | M<br>(jasmine)  |
| June    | E<br>(lotus)     | O<br>(Lily)     |
| October | N<br>(sunflower) | J<br>(rose)     |

**S53.Ans.(d)**

**S54.Ans.(d)**

**S55.Ans.(c)**

**S56.Ans.(a)**

**S57.Ans.(c)**

**Directions (58-61):**

**Sol.**

MONEY =  $\boxed{N} \boxed{5}$

Letter immediate after the first letter of the word

Total number of letters in the word.

**S58.Ans(a)**

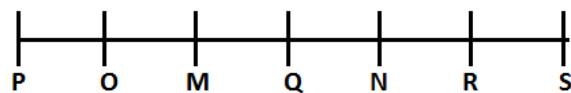
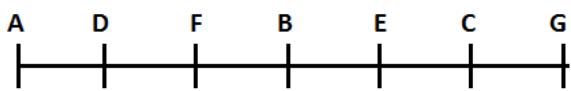
**S59.Ans(c)**

**S60.Ans(e)**

**S61.Ans(d)**

**Directions (62-65):**

**Sol.**



**S62.Ans(b)**

**S63.Ans(d)**

**S64.Ans(c)**

**S65.Ans(e)**

**Sol.**

None of these

**S66. Ans.(c)**

**Sol.**

$$\text{Required difference} = 25 + 75 - 45 - 50 = 5$$

**S67. Ans.(a)**

**Sol.**

$$\text{Total number of pens sold on Saturday} = 30 \times 1.4 = 42$$

$$\text{Total number of pens sold on Friday and Saturday together} = 50 + 42 = 92$$

**S68. Ans.(d)**

**Sol.**

$$\text{Total number of pens sold on Sunday} = \frac{75}{125} \times 100 = 60$$

**S69. Ans.(b)**

**Sol.**

$$\text{Blue ink pen sold on Thursday} = 45 \times \frac{20}{100} = 9$$

$$\text{Red ink pen sold on Thursday} = (45 - 9) \times \frac{25}{100} = 9$$

$$\text{Black ink pen sold on Thursday} = (45 - 9) \times \frac{75}{100} = 27$$

$$\text{Total number of blue and black ink pen sold on Thursday} = 9 + 27 = 36$$

**S70. Ans.(e)**

**Sol.**

$$\text{Total number of non-defective pens sold on Tuesday} = \frac{75}{15} \times 8 = 40$$

**S71. Ans.(c)**

**Sol.**

$$\text{Quantity I. } x^2 + x - 6 = 0$$

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

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

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

$$x = -3, 2$$

$$\text{Quantity II. } y^2 + 7y + 12 = 0$$

$$y^2 + 4y + 3y + 12 = 0$$

$$(y + 4)(y + 3) = 0$$

$$y = -4, -3$$

Quantity I  $\geq$  Quantity II

**S72. Ans.(b)****Sol.**

A's efficiency = 5

B's efficiency = 4

Let total work = 60

**Quantity I :** A can do  $\frac{5}{6}$  of work in  $\rightarrow \frac{50}{5} = 10$  d**Quantity II :** B can do  $\frac{4}{5}$  of work in  $\rightarrow \frac{48}{4} = 12$  d

Quantity II &gt; Quantity I

**S73. Ans.(a)****Sol.**Let numbers be  $x, x+2, x+4, x+6, x+8, x+10, x+12, x+14$ **Quantity I**  $\rightarrow x + 2 + x + 14 = 2x + 16$ **Quantity II**  $\rightarrow x+4 + x+10 = 2x + 14$ 

Quantity I &gt; Quantity II

**S74. Ans.(b)****Sol.**

SP = 1500

Let, MP = x

**Quantity I** = 550**Quantity II**

$$x \times \frac{7}{8} = 1500$$

$$x = \frac{1500 \times 8}{7}$$

$$= \frac{12000}{7}$$

Quantity II &gt; Quantity I

**S75. Ans.(e)****Sol.****Quantity I :**

Let speed of current = x

speed of boat =  $x + 5x$ downstream speed =  $7x$ 

$$\frac{63}{7x} = 3$$

$$x = 3$$

Upstream speed =  $6x - x$ 

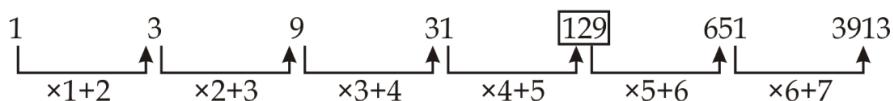
$$= 5x$$

= 15 km/hr

Quantity I = Quantity II

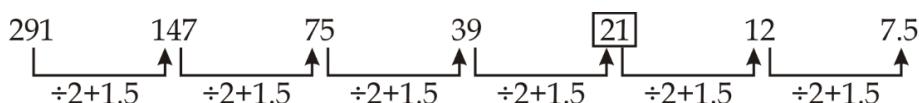
**S76. Ans.(c)**

**Sol.**



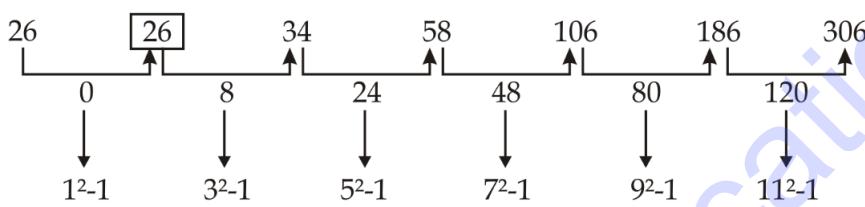
**S77. Ans.(a)**

**Sol.**



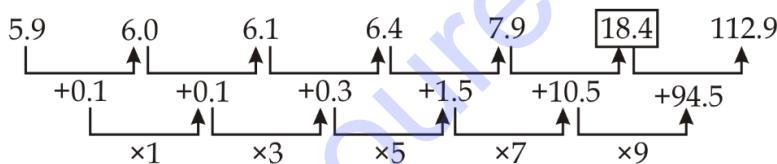
**S78. Ans.(e)**

**Sol.**



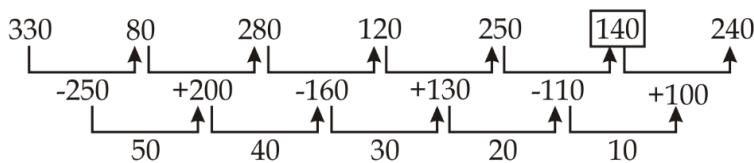
**S79. Ans.(d)**

**Sol.**



**S80. Ans.(b)**

**Sol.**



**S81. Ans.(d)**

**Sol.**

Volume of cylinder (s) =  $\pi r^2 h$   
( $r \rightarrow$  radius)

(h → height)

$$\text{Volume of cone (c)} = \frac{1}{3} \pi R^2 H$$

(R → radius)

(H → height)

$$h = H = 10 \text{ cm}$$

ATQ,

$$\pi r^2 h + \frac{1}{3} \pi R^2 h = 2190\pi$$

$$\pi \times 10 [r^2 + \frac{1}{3} \times 15 \times 15] = 2190\pi$$

$$r = 12$$

$$\therefore \frac{r}{R} = \frac{12}{15} = 4 : 5$$

**S82. Ans.(c)**

**Sol.**

Atq,

$$\frac{x}{x+16} = \frac{1}{3}$$

$$3x = x + 16$$

$$x = 8$$

$$\therefore \text{sum of red \& blue balls} = 8 + 6 = 14$$

**S83. Ans.(a)**

**Sol.**

Let present age of A be x yrs

& present age of B be y yrs.

ATQ,

$$x + y = 88 + 12$$

$$x + y = 100 \quad \dots(i)$$

$$x - 18 = y - 6$$

$$x - y = 12 \quad \dots(ii)$$

solving (i) & (ii)

$$x = 56$$

$$\therefore \text{age of A 2 year hence} = 58 \text{ yrs}$$

**S84. Ans.(b)**

**Sol.**

Let speed of train A be S

$$S \times 18 = 360$$

$$S = 20 \text{ m/s}$$

$$A : B = 4 : 5$$

$$A : B = 4 : 5$$

$$\text{Speed of } B = 25 \text{ m/s}$$

$$\text{Length of train } B = 25 \times 12 = 300 \text{ m}$$

**S85. Ans.(b)**

**Sol.**

$$\text{Total numbers of ways} \rightarrow 7!$$

$$\text{Favorable numbers of ways} \rightarrow 5! \times 3!$$

$$\text{Probability} \rightarrow \frac{5! \times 3!}{7!} = \frac{1}{7}$$

**S86. Ans.(d)**

**Sol.**

$$2^? = 32.01 \div 128.01 \times 1023.99 \div 7.99$$

$$2^? \approx \frac{32}{128} \times \frac{1024}{8}$$

$$2^? \approx 32$$

$$2^? \approx 2^5$$

$$? \approx 5$$

**S87. Ans.(a)**

**Sol.**

$$\frac{339.99}{?} = \sqrt{143.99} + \sqrt{64.01}$$

$$\frac{340}{?} \approx \sqrt{144} + \sqrt{64}$$

$$\frac{340}{?} \approx 12 + 8$$

$$\frac{340}{20} \approx ?$$

$$17 \approx ?$$

**S88. Ans.(e)**

**Sol.**

$$34.02\% \text{ of } 550.09 \div ? = 297.07 \div \sqrt{728.95}$$

$$\frac{34 \times 550}{100} \div ? \approx 297 \div \sqrt{729}$$

$$\frac{187}{?} \approx \frac{297}{27}$$

$$? \approx 17$$

**S89. Ans.(a)**

**Sol.**

$$(? \div 9.97) \times 12.08 \approx 20.12\% \text{ of } 1319.97$$

$$(? \div 10) \times 12 \approx \frac{20 \times 1320}{100}$$

$$? \approx \frac{264}{12} \times 10 \approx 220$$

**S90. Ans.(d)****Sol.**

$$? \% \quad 179.99 = \sqrt{(24.02)^2 + (17.98)^2 + 60.01\%} \quad 659.98$$

$$? \% \quad 180 \approx \sqrt{(24)^2 + (18)^2 + 60\%} \quad 660$$

$$\frac{?}{100} \times 180 \approx \sqrt{576 + 324 + 396}$$

$$\frac{?}{100} \times 180 \approx \sqrt{1296}$$

$$? \approx \frac{36}{180} \times 100$$

$$? \approx 20$$

**S91. Ans.(c)****Sol.**

Total number of workers in company A and C together

$$= 900 \times \frac{32}{100} + 900 \times \frac{24}{100}$$

$$= 288 + 216$$

$$= 504$$

Total number of officers in company A and C together

$$= 900 \times \frac{32}{100} \times \frac{1}{16} + 900 \times \frac{24}{100} \times \frac{1}{12}$$

$$= 18 + 18 = 36$$

$$\text{Required Ratio} = \frac{504}{36}$$

$$= \frac{14}{1}$$

**S92. Ans.(e)****Sol.**

Total number of employees in company B

$$= 900 \times \frac{44}{100} \times \frac{19}{18} = 418$$

Total number of employees in company C

$$= 900 \times \frac{24}{100} \times \frac{13}{12} = 234$$

$$\text{Required difference} = 418 - 234 = 184$$

**S93. Ans.(a)****Sol.**

Total number of officers in Company 'A' =  $= 900 \times \frac{32}{100} \times \frac{1}{16} = 18$

Total number of officers in Company 'B' =  $= 900 \times \frac{44}{100} \times \frac{1}{18} = 22$

$$\text{Required difference} = 22 - 18 = 4$$

**S94. Ans.(b)****Sol.**

Total number of officers in company C

$$= 900 \times \frac{24}{100} \times \frac{1}{12}$$

$$= 18$$

Total number of workers in company C

$$= 900 \times \frac{24}{100} = 216$$

Total number of employees in company D

$$= 216 \times 1.25 + 18 \times 1.5 = 270 + 27 = 297$$

**S95. Ans.(d)****Sol.**

$$\text{Required difference} = \frac{900}{100} \times (44 + 24 - 32) = 9 \times 36 = 324$$

**Solution (96-100)**

Ratio of profit share of A, B and C in scheme S<sub>1</sub>

$$80000 \times 2 : 30000 \times 3 : 50000 \times 5$$

$$16 : 9 : 25$$

$$\text{Profit share of A from Scheme S}_1 = \frac{16}{50} \times 200,000$$

$$= 64000$$

$$\text{Profit share of B from scheme S}_1 = \frac{9}{50} \times 200,000$$

$$= 36000$$

$$\text{Profit share of C from scheme S}_1 = \frac{25}{50} \times 20,000$$

$$= 100,000$$

Ratio of profit share of A and C in scheme S<sub>2</sub>

$$30,000 \times 4 : 10,000 \times 3$$

$$12 : 3$$

$$\text{Profit share of A in scheme S}_2 = \frac{12}{15} \times 90000$$

$$= 72000$$

$$\text{Profit share of C in scheme S}_2 = \frac{3}{15} \times 90,000$$

**S96. Ans.(d)****Sol.**

$$\text{Required ratio} = (36000 + 10000) : 100,000$$

$$= 46 : 100$$

$$= 23 : 50$$

**S97. Ans.(e)**

**Sol.**

$$\text{Required \%} = \frac{64000}{18000} \times 100$$

$$= \frac{3200}{9}\%$$

$$= 355\frac{5}{9}\%$$

**S98. Ans.(a)**

**Sol.**

$$\text{Total investment of A} = 80,000 + 30,000$$

$$= 110,000$$

$$\text{Total profit of A} = 64000 + 72000$$

$$= 136000$$

Equivalent rate of Interest for 2 year at CI

$$= 20\% + 20\% + \frac{20 \times 20}{100}$$

$$= 44\%$$

$$\text{Required CI} = \frac{44}{100} (136000 + 110000)$$

$$= 108240$$

**S99. Ans.(a)**

**Sol.**

$$\text{Required average} = \frac{64000 + 18000}{2}$$

$$= 41000$$

**S100. Ans.(c)**

**Sol.**

$$\frac{80000 \times \frac{\times 3}{100}}{} - 30000 \times \left( \frac{+ 5}{100} \right) = 30,000$$

$$2400R - 300R - 1500 = 30000$$

$$8R - R - 5 = 100$$

$$7R = 105A$$

$$R = 15\%$$