RBI Asst Pre 2023 Memory Based Paper

Directions (1-6): In the following questions, a sentence is divided into four parts. Choose the part of the sentence which may contain a grammatical error in it. If all the parts of the sentence are grammatically correct and contextually meaningful, choose option "no error" as your answer choice.

Q1. One of the student (A)/ delivered an insightful analysis (B)/ in class, showing a (C)/ strong grasp of the material. (D)
(a) A
(b) B
(c) C
(d) D
(e) No error

Q2. Sarah barely managed (A)/ to reaches the station (B)/ just in time before (C)/ the train departed. (D)
(a) A
(b) B
(c) C
(d) D
(e) No error

Q3. In the bookstore, (A)/ she found a intriguing (B)/ novel that immediately (C)/ captured her attention. (D)
(a) A
(b) B
(c) C
(d) D
(e) No error

Q4. Sam enjoy spending his (A)/ evenings sitting and talking (B)/ with friends, finding (C)/ joy in conversations. (D)
(a) A
(b) B
(c) C
(d) D
(e) No error

Q5. Nancy danced (A)/ across the stage (B)/ graceful, captivating the (C)/ audience with her elegant performance. (D)
(a) A
(b) B
(c) C
(d) D
(e) No error

Q6. After finishing the (A)/ marathon, she treated himself (B)/ to a delicious meal (C)/ to celebrate her accomplishment. (D)
(a) A
(b) B
(c) C
(d) D
(e) No error

Directions (7-11): In each of the questions below four words are highlighted in the sentences. One of these four words printed in bold may be either wrongly spelt or inappropriate in the context of the sentence. Find out the word which is wrongly spelt or inappropriate, if any. If all the words printed in bold are correctly spelt and also appropriate in the context of the sentence, mark option 'All are correct' as your answer.

Q7. The village **preist**, respected by all, often provided **counsel** to those seeking **guidance** in times of **trouble**.
(a) preist
(b) counsel
(c) guidance
(d) trouble
(e) All are correct

Q8. As the **national** flag **unfurlled** in the gentle **breeze**, a sense of pride and **patriotism** swept over the crowd.
(a) national
(b) unfurlled
(c) breeze
(d) patriotism
(e) All are correct

Q9. The teacher **encouraged** her **students** to **except** constructive **criticism** as a valuable tool for growth.
(a) encouraged
(b) students
(c) except
(d) criticism
(e) All are correct

Q10. The thoughtful **complement** about her **artistic** skills inspired her to create more, **fuelled** by the **recognition** of her talent.
(a) complement
(b) artistic
(c) fuelled
(d) recognition
(e) All are correct

Q11. Rather **then** going to the **crowded** city, they decided to spend their weekend in a **tranquil** countryside **retreat**.
(a) then
(b) crowded
(c) tranquil
(d) retreat
(e) All are correct

Directions (12-16): Rearrange the following sentences in the proper sequence to form a meaningful paragraph; then answer the questions given below them.
(A) Finally, he convinced his daughter to return to the city, assuring her that he would visit the village again.
(B) Lily also desires to go to the village with her father as well. Her father agreed to take her.
(C) Lily's father, Jack lives in a bustling city.
(D) After finishing his tasks, he decided to return to the city, leaving Lily feeling sad.
(E) One day, her father had to visit a village for some work.
(F) She felt joyful and thrilled while observing cattle and farming activities in the village.

Q12. Which of the following should be the THIRD sentence after rearrangement?
(a) D
(b) A
(c) B
(d) E
(e) C

Q13. Which of the following should be the FIRST sentence after rearrangement?
(a) A
(b) F
(c) E
(d) B
(e) C

Q14. Which of the following should be the FIFTH sentence after rearrangement?
(a) C
(b) E
(c) D
(d) A
(e) F

Q15. Which of the following should be the SECOND sentence after rearrangement?
(a) B
(b) E
(c) D
(d) C
(e) A

Q16. Which of the following should be the LAST sentence after rearrangement?
(a) C
(b) B
(c) E
(d) A
(e) F

Directions (17-25): Read the following passage and answer the given questions.

Once upon a time, in a quaint little town, there lived a boy named Jack. His parents, both passionate archaeologists, traveled the world in pursuit of ancient mysteries, leaving Jack under the care of his uncle and aunt. Although his parents were absent from his daily life, his uncle and aunt made sure Jack received the best education, sending him to a prestigious boarding school.

Under the loving guidance of his aunt, Jack developed a keen interest in Physics. His aunt, who herself was a physics enthusiast, encouraged Jack to explore the wonders of the scientific world. They often discussed theories and experiments, and Jack found himself fascinated by the subject.

The family had a close friend named Dr. Brown, a brilliant scientist working on a mysterious **project** involving a time machine. Despite his usual **reservation** to share details about his project, Dr. Brown saw potential in Jack's enthusiasm and answered all his queries. Slowly, Jack became a regular visitor to Dr. Brown's home, delving into the intricate world of time travel and the scientific marvels associated with it.

As Jack spent more time at Dr. Brown's, he formed a close friendship with the scientist's daughter, Emily. Both passionate about physics, they started studying together, exploring concepts ranging from LED lights to the complexities of theoretical physics. The boy was very _____ of lights, in particular which grew into a fascination that fueled his curiosity.

One fateful day, high-intensity lights began emitting from Dr. Brown's home, casting an otherworldly glow over the neighborhood. Concerned neighbors, unaware of the scientific endeavors within, approached the house, demanding an explanation. However, to their surprise, the house was empty, and there was no trace of the mysterious time machine.

Informed about the time machine, Jack discovered that Dr. Brown and Emily had traveled successfully to the future, leaving the neighbors baffled. This realization confirmed that the time machine worked, and his friends were now happily living in a different time. The once-worried neighbors, now puzzled and amazed, had to accept the mysterious turn of events. Grateful for the knowledge and friendships, Jack continued his studies, holding the secrets of time travel and a deep appreciation for physics.

Q17. Which of the following statement is TRUE in regards to the information provided in the passage?
(a) Jack's interest in physics was sparked by his mother's achievements.
(b) Jack's parents made the decision to enroll him in a boarding school.
(c) Jack's parents lived with him.
(d) Jack's parents pursued a career in archaeology.
(e) Jack did not find LED lights fascinating.

Q18. What event led to the concerned neighbours approaching Dr. Brown's house?
(a) The unsettling occurrence of an earthquake that rattled the neighborhood
(b) The remarkable emission of high-intensity lights from Dr. Brown's house.
(c) The disconcerting and persistent sounds of loud noises emanating from Dr. Brown's home,
(d) The astonishing and perplexing demonstration of time travel conducted by Dr. Brown
(e) An engaging and enlightening lecture on physics and its notable achievements.

Q19. What was the neighbors' response to the disappearance of Dr. Brown and Emily?
(a) They remained composed, considering the disappearance could be clarified by a well-planned vacation.
(b) The neighbors expressed frustration and anger over the unexpected disappearance.
(c) The vanishing was perceived as a routine event in the neighborhood.
(d) The neighbors quickly dismissed the disappearance as a prank.
(e) The neighbors found themselves in a state of astonishment due to the unexplained vanishing.

Q20. Which of the following statement is TRUE in regards to the information provided in the passage?
(a) Jack's uncle and aunt neglected his education, leading him to an average school.
(b) Dr. Brown eagerly shared intricate details about his time machine project with everyone.
(c) Dr. Brown was engaged in a mysterious undertaking that revolved around a time machine.
(d) Jack and Emily primarily studied literature and mathematics during their joint study sessions.
(e) The concerned neighbors were fully aware of the scientific endeavors happening within Dr. Brown's home.

Q21. What did Jack realize about Dr. Brown and Emily after the high-intensity lights incident?
(a) Dr. Brown and Emily accomplished a successful journey into the future.
(b) The high-intensity lights had led to Dr. Brown and Emily's fatal fate.
(c) Dr. Brown and Emily had decided to move to a different town.
(d) The high-intensity lights were a mere illusion, and Dr. Brown and Emily were hiding at home.
(e) Dr. Brown and Emily had encountered a scientific mishap, resulting in unforeseen consequences.

Q22. What did Jack carry with him into the future, symbolizing his experiences?
(a) The blueprint of the time machine, intending to recreate and advance a new prototype.
(b) LED lights, a means of transmitting the captivating physics narrative to future generations.
(c) A wealth of knowledge and a deep appreciation for the intricacies of physics.
(d) Dr. Brown's scientific journals, with the intention of publishing a book.
(e) The comprehensive notes and study materials on physics that Jack and Emily diligently prepared.

Q23. Choose the word that is most similar in meaning to the highlighted word "PROJECT" as given in the passage.
(a) Undertaking
(b) Conceal
(c) Objective
(d) Examine
(e) Capture

Q24. Choose the word that is most similar in meaning to the highlighted word "RESERVATION" as given in the passage.
(a) Confirmation
(b) Hesitation
(c) Arrangement
(d) Accommodation
(e) Acknowledgment

Q25. Choose the most suitable word/phrase to fill the given blank in the passage.
(a) entitled
(b) reluctant
(c) fond
(d) attracted
(e) distracted

Directions (26-30): In each of the question given below, a statement has been given with a blank. Some words or phrases have been given in the options following the statement. Choose the most appropriate word or phrase that could fit in the statement to make it contextually meaningful and grammatically correct.

Q26. Biosphere reserves are_____ for the future of our planet.
(a) tired
(b) inactive
(c) unique
(d) vital
(e) inert

Q27. The loud noise outside _____ my concentration while studying.
(a) conducts
(b) repairs
(c) heals
(d) fixes
(e) disrupts

Q28. Communication is central to the way we _____climate change.
(a) fail
(b) slight
(c) blow
(d) mishandle
(e) negotiate

Q29. The example _____ the proper use of the new software feature.
(a) puzzle
(b) fogs
(c) illustrates
(d) confuse
(e) blurs

Q30. The engine_____ suddenly, prompting the need for immediate repairs.
(a) praised
(b) approved
(c) sanctioned
(d) faulted
(e) commended

Directions (31-35): In each of the following questions two equations are given. Solve these equations and give answer:
(a) if $x \geq y$
(b) if $x > y$
(c) if $x \leq y$
(d) if $x < y$
(e) $x = y$ or no relation can be established between x and y

Q31. I. $x^2 + 12x + 35 = 0$
II. $y^2 + 9y + 20 = 0$

Q32. I. $x^2 - 15x + 54 = 0$
II. $y^2 - 23y + 132 = 0$

Q33. I. $6x^2 + 5x + 1 = 0$
II. $15y^2 + 11y + 2 = 0$

Q34. I. $2x^2 - 7x + 3 = 0$
II. $4y^2 - 7y + 3 = 0$

Q35. I. $10x^2 + 13x - 14 = 0$
II. $y^2 + 5y + 6 = 0$

Direction (36-40): Read the information carefully and answer the following questions
The table given below shows the number of accounts opened by four different branches (A, B, C and D) in four different months.

Months/Branches	A	B	C	D
January	15	20	22	25
February	18	25	12	24
March	30	40	42	45
April	35	32	40	16

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Q36. In branch X, Total number of accounts opened in month of March is 25% more than the number of accounts opened by D in month of April. Find the sum of the accounts opened by X in month March and number of accounts opened by C in the month of February.
(a) 35
(b) 30
(c) 28
(d) 32
(e) 26

Q37. Find the ratio of the number of accounts opened by A and B together in January to the number of accounts opened by D in March.
(a) 5: 9
(b) 6: 5
(c) 7: 6
(d) 9: 7
(e) 7: 9

Q38. Find the difference between the number of accounts opened by A and the B in all the months.
(a) 19
(b) 25
(c) 24
(d) 18
(e) 20

Q39. Number of accounts opened by C in month of April is what percentage more/less than the number of accounts opened by D in January.
(a) 40%
(b) 20%
(c) 60%
(d) 35%
(e) 80%

Q40. Find the average number of accounts opened by C in all the months given.
(a) 20
(b) 21
(c) 25
(d) 29
(e) 23

Direction (41–52): What will come in the place of (?) mark in following question?

Q41. 30% of ? $= 38 + \dfrac{147}{3}$
(a) 281
(b) 300
(c) 290
(d) 315
(e) None of these

Q42. $\dfrac{272}{4} - 18 \times 6 + \sqrt[3]{1331} = ?$
(a) -36
(b) 36
(c) -29
(d) 29
(e) None of these

Q43. $1512 \div 36 + 44 \times 32 = ?$
(a) 1450
(b) 1350
(c) 1150
(d) 1460
(e) None of these

Q44. $32^2 - 9^3 + 29 = ?^2$
(a) 16
(b) 18
(c) 20
(d) 22
(e) None of these

Q45. $13 \times ? \times 6 = 47^2 - \sqrt{625}$
(a) 38
(b) 48
(c) 28
(d) 58
(e) None of these

Q46. $5 \times \sqrt{?} = 735 \div 3$
(a) 9
(b) 45
(c) 2401
(d) 81
(e) 7

Q47. $(2^3 + 7^2) \div 2 \times 3 = ?$
(a) 81.5
(b) 85.5
(c) 96.5
(d) 86.5
(e) None of these

Q48. $\sqrt{256} + \sqrt{784} = ? \times \sqrt{121}$
(a) 4
(b) 5
(c) 3
(d) 6
(e) 2

Q49. 19 % of 250 + ? = 2^7
(a) 80.5
(b) 82.5
(c) 83.5
(d) 81.5
(e) 84.5

Q50. $\frac{5}{8}$ of $\frac{4}{9}$ of $\frac{3}{5}$ of 654 = ?
(a) 125
(b) 127
(c) 135
(d) 109
(e) 115

Q51. $\frac{56}{?}$ + $(8)^3$ = 13% of 4000
(a) 7
(b) 8
(c) 14
(d) 28
(e) None of these

Q52. $?^3 \times 6 + \sqrt[3]{512}$ = 170
(a) 2
(b) 3
(c) 4
(d) 5
(e) 1

Q53. A train is running at a speed of 72 km/hr and crosses a platform in 20 sec and a pole in 14 second. Find the length of the platform (in meter).

(a) 120
(b) 160
(c) 140
(d) 150
(e) 100

Q54. Gappu invested Rs X at 8% simple interest for three years in a scheme and he invested the same sum for four years at 4% simple interest in another scheme. If the total interest get by Gappu from both the schemes is Rs 398, then find X.
(a) 920
(b) 935
(c) 495
(d) 995
(e) 850

Q55. The present age of Rakesh and Dheeraj is 5:4. Age of Rakesh 2 years ago was equal to the age of Dheeraj four year hence. Find the present age of Dheeraj (in years).
(a) 8
(b) 12
(c) 32
(d) 16
(e) 24

Q56. Pipe A can fill 50% of the tank in 6 hours and Pipe B can fill 100% capacity of tank in 18 hours. If Pipe C can empty the full tank in 9 hours, then find the time taken by the all the pipes to fill the tank together (in hours).
(a) 18
(b) 22
(c) 32
(d) 36
(e) 24

Q57. A mark up the good 80% above the cost price and give a discount of Rs 160. If he gets a profit of Rs 200, the find the cost price of the article (in Rs).
(a) 450
(b) 420
(c) 400
(d) 360
(e) 240

Q58. The area of circle and rectangle is 11:6 and the ratio of radius of the circle to length of the rectangle is 1:6. If the breadth of the rectangle is 7 cm, then find the circumference of the circle (in cm).
(a) 119
(b) 147
(c) 175
(d) 154
(e) 198

Q59. Three friends A, C and D entered into a partnership. A invested 1.5 times more than that of D and C invested 20% of the amount invested by A. If the overall profit at the end of the year is Rs. 2400, then find the profit share of D (in Rs.).
(a) 600
(b) 700
(c) 800
(d) 500
(e) 750

Q60. Ratio of the downstream speed of boat to the upstream speed of boat is 3: 1 and the time taken by a boat to cover 144 km in downstream is 8 hours. Find the time taken by the boat to cover same distance in still water.
(a) 10 hours
(b) 14 hours
(c) 12 hours
(d) 11 hours
(e) 8 hours

Q61. Four men and six women can complete 150% of the work in 12 days and three men and 7 women can complete half of the work in 5 days. Find the ratio of efficiency of man to woman.
(a) 3: 11
(b) 11: 1
(c) 11: 5
(d) 1: 11
(e) 2:11

Q62. A container contains mixture of milk and water in which milk is 50% more than that of water. If four liter of milk added in the vessel, then milk becomes 100% more than water in the resultant mixture. Find the initial quantity of mixture?

(a) 20 liter
(b) 24 liter
(c) 15 liter
(d) 40 liter
(e) 36 liter

Direction (63-65): Read the information carefully and answer the following questions.
Three shops (A, B and C) sold two types of watches (Analog and Digital). Ratio of number of Analog watches sold by shop A to the number of digital watches sold by B is 5: 4 and the number of Digital watches sold by A is 25% less than that of B. Number of digital watches sold by C is 40% more than that of analog by C. Number of analog watches sold by B is 30 which 25% less than that of digital watches sold by him and the total number digital watches sold by all the three shops is 140.

Q63. Find the ratio of the number of Analog watches sold by B to the number of Digital watches sold by C.
(a) 3: 7
(b) 5: 2
(c) 3: 5
(d) 1: 4
(e) 2: 5

Q64. Total number of Analog watches sold by all the three shop is how much more/less than the number of Digital watches sold by A and B together.
(a) 45
(b) 60
(c) 55
(d) 65
(e) 75

Q65. Number of the number of Digital watches sold by C is what percentage of analog watches sold by A and C together.
(a) 45%
(b) 30%
(c) 70%
(d) 40%
(e) 60%

Q66. If we form a four-letter meaningful word by using the second, third, seventh and ninth letter from the left end of the word 'FACTUALLY', then which of the following will be the 2nd letter from the left of the meaningful word thus formed. If more than one word is formed mark Z as your answer. If no meaningful word is formed, mark X as your answer?
(a) A
(b) Y
(c) C
(d) X
(e) Z

Directions (67-69): Study the following information carefully and answer the questions given below:
J is the wife of K. K is the son of O. N is the aunt of L and K's sibling. P is the granddaughter of M. Q is married to P. No single parent in the family. Q is the brother-in-law of L. Gender of M is same as P but different as L.

Q67. How many females in the family?
(a) Five
(b) Three
(c) Two
(d) Four
(e) One

Q68. How is Q related to K?
(a) Father
(b) Brother
(c) Son-in-law
(d) Daughter-in-law
(e) Son

Q69. How J is related to N?
(a) Father
(b) Sister-in-law
(c) Son-in-law
(d) Daughter-in-law
(e) Son

Directions (70-74): Study the following information carefully and answer the questions given below:

Eight persons A, B, C, D, E, F, G and H sit around a square table in such a way that four persons sit on each of the four corner of the table and other four persons sit on the middle of side. The one who sits at the corner of table faces inside and the one who sits at the middle side of table faces outwards the centre of table. Persons sitting on opposite sides are exactly opposite to each other.
B sits immediate left of A. Three persons sit between B and C. One person sits between H and C. F sits just left of H but not face outside. E sits 2nd to the left of G. D sits near G.

Q70. Who sits immediate right of F?
(a) D
(b) E
(c) B
(d) C
(e) A

Q71. Who sits exactly between D and B?
(a) E
(b) H
(c) C
(d) G
(e) A

Q72. How many persons sit between A and C when counted from the left of A?
(a) Four
(b) Two
(c) Three
(d) One
(e) None

Q73. Who sits opposite to E?
(a) D
(b) A
(c) H
(d) C
(e) F

Q74. Which of the following statement is true?
I. G faces Inside
II. C sits near E
III. D sits immediate left of G
(a) All I, II and III
(b) Only II
(c) Both I and II
(d) Only III
(e) Both I and III

Directions (75-79): Read the given number series carefully to answer the related questions:
692   318   196   486   754

Q75. What is the difference between 2nd digit of highest number and 3rd digit of 4th lowest number?
(a) 4
(b) 2
(c) 3
(d) 5
(e) None of these

Q76. If we remove even digits from each number in the series than how many prime numbers formed?
(a) Four
(b) None
(c) Three
(d) Two
(e) None of these

Q77. If we add first and third digit in each number and subtract the sum with 2nd digit than which is the highest number?
(a) 692
(b) 318
(c) 486
(d) 196
(e) 754

Q78. If we arranged all digits in descending order within the number than which of the following is 2nd highest?
(a) 692
(b) 318
(c) 486
(d) 196
(e) 754

Q79. What is the sum of the 2nd highest number and 2nd lowest number?
(a) 682
(b) 514
(c) 888
(d) 1010
(e) None of these

Q80. If in the given word **"QUALITY"** all the vowels are changed to the just succeeding letter and all the consonants are changed to the just preceding letter according to the alphabetical series then which among the following letter is repeated after the arrangement?
(a) V
(b) B
(c) P
(d) J
(e) None

Directions (81-85): Study the following information carefully and answer the questions given below:
Eight persons buy different things one after other. Two persons buy between M and L who buys immediately before Q. O buys two persons before Q. As many persons buy between O and Q as between L and K. K buys before O. Two persons buy between K and P. J buys before N and after P.

Q81. How many persons buy between M and N?
(a) Five
(b) Three
(c) Four
(d) Two
(e) One

Q82. If all the persons buy things in the alphabetical order from bottom to top then the position of how many persons remains unchanged?
(a) One
(b) None
(c) Two
(d) More than three
(e) Three

Q83. Which among the following statement is not true?
(a) P buys the first among all
(b) J buys just before M
(c) Odd number of persons buys after O
(d) N buys at least before one person
(e) All are true

Q84. If P is related to K in the similar way J is related to O then who among the following is related to L?
(a) N
(b) M
(c) Q
(d) J
(e) K

Q85. The number of persons buys before M is one less than the number of persons buys after ___.
(a) L
(b) N
(c) Q
(d) K
(e) O

Directions (86-89): In each of the questions below some statements are given followed by two conclusions. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.
(a) If only conclusion I follow
(b) If only conclusion II follow
(c) If either conclusion I or II follow
(d) If neither conclusion I nor II follow
(e) If both conclusions I and II follow

Q86. Statements: Only a few story is book
All book is tale
Conclusions: I. All tale can be story
II. Some story can never be book

Q87. Statements: All machine is ATM
Only a few rupees is ATM
Some coin is rupees
Conclusions: I. Some coin is not machine
II. All machine being rupees is a possibility

Q88. Statements: Only a few rice is wheat
All wheat is grain
No grain is flour
Conclusions: I. Some rice is not flour
II. All wheat can be flour

Q89. Statements: All work is time
Some time is not progress
Only a few progress is result
Conclusions: I. Some work is not progress
II. All work is progress

Q90. How many such pairs of digits are there in the number '40585636', each of which has as many digits between them as they have in the number series (Only in backward direction)?
(a) One
(b) None
(c) Two
(d) More than three
(e) Three

Directions (91-95): Study the following information carefully and answer the questions given below:
Seven persons (A-G) work in the same organization on seven different designations (MD, CEO, SR. MGR, MGR, PO, Clerk and Typist) but not necessarily in the same order. The designations are in the decreasing order such that MD is the senior-most position and Typist is the junior-most position.
The numbers of persons senior to A is same as the numbers of persons junior to A. B is junior to A and just senior to C. E is junior to A. The numbers of persons junior to C is same as the numbers of persons designated between B and D. At most one person between G and F. F is not the senior most.

Q91. What is A's designation in the organization?
(a) MD
(b) CEO
(c) SR. MGR
(d) MGR
(e) PO

Q92. How many persons designated between D and C?
(a) Two
(b) Three
(c) Four
(d) One
(e) None of these

Q93. The numbers of persons between F and B is same as the numbers of persons between ___ and ___.
(a) G, F
(b) E, A
(c) B, C
(d) A, F
(e) None of these

Q94. Which designation does F hold in the organization?
(a) Clerk
(b) Typist
(c) PO
(d) MGR
(e) None of these

Q95. If A is related to PO, G is related to CEO in the similar way C is related to _.
(a) MGR
(b) Clerk
(c) SR. MGR
(d) Typist
(e) None of these

Directions (96-100): Study the given series of numbers, symbols and alphabets and answer the questions based on it.

2 F T % 4 Y 8 $ B 9 P M 6 # 7 V A Ω 5 I E ∞ J 9 I β 6 N 4 ϕ L K 3 μ

Q96. Which of the following is fourth element to the right of sixth element from the left end of the given series?
(a) B
(b) 9
(c) #
(d) ∞
(e) M

Q97. How many such consonants are there in the given series each of which is immediately preceded by a number and immediately followed by a letter?
(a) One
(b) Four
(c) Three
(d) None
(e) More than four

Q98. How many symbols are there in the given series each of which is immediately followed and immediately preceded by a number?
(a) One
(b) Four
(c) Two
(d) Three
(e) None

Q99. What is the sum of the numbers which are between the fifth element from the left end and 12th element from the right end in the given series?
(a) 39
(b) 42
(c) 33
(d) 35
(e) 43

Q100. If the symbols are dropped from the given series then which among the following element is 3rd to the left of 2nd even number from right end?
(a) 9
(b) 5
(c) P
(d) J
(e) I

Solutions

S1. Ans.(a)
Sol. The error lies in the Part (A). The error in the sentence is in the first clause, "One of the student". The correct form should be "One of the students".
The use of the singular noun "student" after "one" creates a grammatical error because it implies that only one student exists, while the intended meaning is to emphasize the existence of multiple students.
Thus, the correct sentence formed will be "One of the **students** delivered an insightful analysis in class, demonstrating a strong grasp of the material"
By replacing "student" with "students", we maintain grammatical agreement between the singular subject "one" and the plural verb "delivered". This ensures that the sentence is grammatically correct and conveys the intended meaning clearly.

S2. Ans.(b)
Sol. The error lies in the Part (B). The error is in the use of "reaches" after "to".
The error is in the use of the verb after "managed to." When "to" is used after "managed," the following verb should be in its base form, not the third person singular form. The correct base form of "reaches" is "reach."
Thus, the correct sentence formed will be "Sarah barely managed to **reach** the station just in time before the train departed."
In this corrected sentence, "to reach" is the infinitive phrase, and "reach" is in its base form. This adheres to the grammatical rule that when to use "to" after certain verbs like "managed," the next verb should be in the base form.

S3. Ans.(b)
Sol. The error lies in the Part (B). The indefinite article "a" should be changed to "an" before the word "intriguing".
In the sentence, the word "intriguing" starts with a vowel sound ('i'). Therefore, the correct article to use is "an" rather than "a."

The use of "a" before "intriguing" creates a grammatical error because it implies that the novel is unspecified and there could be multiple novels, while the intended meaning is to describe a specific novel as intriguing.
Thus, the correct sentence formed will be" In the bookstore, she found **an** intriguing novel that immediately captured her attention."
Replacing "a" with "an" aligns the indefinite article with the singular noun "novel". This maintains grammatical agreement and ensures the sentence's correctness.

S4. Ans.(a)
Sol. The error lies in the Part (A). The error in the sentence lies in the verb form "enjoy" which should be "enjoys".
The error in the original sentence is a subject-verb agreement issue. The subject "Sam" is singular, so it requires the singular form of the verb. The correct form of the verb is "enjoys" instead of "enjoy" to match the singular subject.
Thus, the correct sentence formed will be "Sam **enjoys** spending his evenings sitting and talking with friends, finding joy in conversations."
The change from "enjoy" to "enjoys" ensures grammatical agreement between the subject and the verb. This maintains the sentence's grammatical correctness and enhances its overall clarity.

S5. Ans.(c)
Sol. The error lies in the Part (C). The adverb "graceful" should be modified to "gracefully".

The error in the original sentence lies in the adverb used to describe how Nancy danced. The adverb "graceful" should be "gracefully" to correctly modify the verb "danced." Adverbs are used to describe how an action is performed, and in this case, "gracefully" is the appropriate adverb to convey the manner in which Nancy danced.

Thus, the correct sentence formed will be "Nancy danced across the stage **gracefully**, captivating the audience with her elegant performance."

The revised sentence effectively eliminates the grammatical error and maintains grammatical consistency. It accurately conveys the manner in which Nancy danced and the impact her performance had on the audience.

S6. Ans.(b)
Sol. The error lies in the Part (B). The error is in the pronoun agreement. Since the subject is "she," the pronoun should be "herself" instead of "himself."

The problem is with the pronoun "himself." The subject of the sentence is "she," so the reflexive pronoun should be "herself" to maintain proper agreement. Reflexive pronouns like "myself," "yourself," "himself," "herself," etc., are used when the subject and the object of the verb are the same person. In this case, since the subject is "she," it should be "she treated herself," not "she treated himself."

Thus, the correct sentence formed will be "After finishing the marathon, she treated **herself** to a delicious meal to celebrate her accomplishment."

S7. Ans.(a)
Sol. The word "priest" is misspelt in the sentence as "preist".

A "priest" is a religious leader, and the corrected sentence uses the accurate spelling to convey the intended meaning.
The other highlighted words are:

(b) **Counsel:** Professional guidance or advice, typically provided by someone with expertise in a particular field.
(c) **Guidance:** Assistance, advice, or direction provided to help navigate or make decisions in a particular situation.
(d) **Trouble:** Difficulty, distress, or problems that cause distress or concern.

S8. Ans.(b)
Sol. The word "unfurled" is misspelt in the sentence as "unfurlled".

The word "Unfurled" means opened or spread out from a rolled or folded state, often used to describe flags, sails, or scrolls and the corrected sentence uses the accurate spelling to convey the intended meaning.
The other highlighted words are:
(c) **Breeze:** A gentle or light wind, typically refreshing and pleasant.
(d) **Patriotism:** Devotion and love for one's country, often expressed through pride, support, and loyalty.

S9. Ans.(c)
Sol. The word "except" is used inappropriately in the sentence and should be replaced with the word "accept".

The correction involves replacing the word "except" with "accept." In the context of the sentence, "accept" is the appropriate term because it conveys the idea that the teacher is encouraging students to receive or embrace constructive criticism.

On the other hand, "except" is a different word that is used to exclude something or indicate an exclusion, and it doesn't fit the intended meaning in this context.
The other highlighted words are:
(a) **Encouraged:** To inspire, motivate, or give support to someone, fostering confidence or a positive attitude.
(d) **Criticism:** The analysis, evaluation, or judgment of the merits and faults of a literary or artistic work or an individual's behavior; often constructive feedback intended for improvement.

S10. Ans.(a)
Sol. The word "complement" is used inappropriately in the sentence and should be replaced with the word "compliment".
The word "Compliment" refers to a polite expression of praise or admiration. In the sentence, it's used to convey that someone praised or admired her artistic skills, providing positive feedback.
On the other hand, the word "Complement" refers to something that completes or goes well with something else. It wouldn't make sense in this context because the sentence is about receiving praise for artistic skills, not about how those skills complete or go well with something else.
The other highlighted words are:
(c) **Fuelled:** Provided with the necessary energy or encouragement to continue or develop, often metaphorically.
(d) **Recognition:** The acknowledgment or identification of someone or something, often involving appreciation or approval for achievements or qualities.

S11. Ans.(a)
Sol. The word "then" is used inappropriately in the sentence and should be replaced with the word "than".
"Than" is used to compare, while "then" is used to indicate a sequence of events. In this sentence, the intention is to express a choice or preference between going to the city or spending the weekend in the countryside, so "than" is the appropriate word to use.
The other highlighted words are:
(c) **Tranquil:** Calm, peaceful, and free from disturbance or turmoil.
(d) **Retreat:** A quiet or secluded place to which one can withdraw or retire, often for relaxation or reflection.

S12. Ans.(c)
Sol. Sentence **(C)** introduces Lily's father, Jack, and sets the stage by mentioning that he lives in a bustling city. Sentence **(E)** provides the reason for Jack's visit to the village, which is for some work. Sentence **(B)** introduces Lily's desire to go to the village with her father and her father's agreement to take her. Sentence **(F)** describes Lily's experience in the village, feeling joyful and thrilled while observing activities. Sentence **(D)** indicates the conclusion of Jack's visit to the village, as he finishes his tasks and decides to return to the city, leaving Lily feeling sad. Sentence **(A)** concludes the paragraph by stating that Jack eventually convinces his daughter to return to the city, assuring her that he would visit the village again.
This sequence, **CEBFDA** maintains a logical flow and coherence in the narrative.

S13. Ans.(e)
Sol. Sentence **(C)** introduces Lily's father, Jack, and sets the stage by mentioning that he lives in a bustling city. Sentence **(E)** provides the reason for Jack's visit to the village, which is for some work. Sentence **(B)** introduces Lily's desire to go to the village with her father and her father's agreement to take her. Sentence **(F)** describes Lily's experience in the village, feeling joyful and thrilled while observing activities. Sentence **(D)** indicates the conclusion of Jack's visit to the village, as he finishes his tasks and decides to return to the city, leaving Lily feeling sad. Sentence **(A)** concludes the paragraph by stating that Jack eventually convinces his daughter to return to the city, assuring her that he would visit the village again.
This sequence, **CEBFDA** maintains a logical flow and coherence in the narrative.

S14. Ans.(c)
Sol. Sentence **(C)** introduces Lily's father, Jack, and sets the stage by mentioning that he lives in a bustling city. Sentence **(E)** provides the reason for Jack's visit to the village, which is for some work. Sentence **(B)** introduces Lily's desire to go to the village with her father and her father's agreement to take her. Sentence **(F)** describes Lily's experience in the village, feeling joyful and thrilled while observing activities. Sentence **(D)** indicates the conclusion of Jack's visit to the village, as he finishes his tasks and decides to return to the city, leaving Lily feeling sad. Sentence **(A)** concludes the paragraph by stating that Jack eventually convinces his daughter to return to the city, assuring her that he would visit the village again.

This sequence, **CEBFDA** maintains a logical flow and coherence in the narrative.

S15. Ans.(b)

Sol. Sentence **(C)** introduces Lily's father, Jack, and sets the stage by mentioning that he lives in a bustling city. Sentence **(E)** provides the reason for Jack's visit to the village, which is for some work. Sentence **(B)** introduces Lily's desire to go to the village with her father and her father's agreement to take her. Sentence **(F)** describes Lily's experience in the village, feeling joyful and thrilled while observing activities. Sentence **(D)** indicates the conclusion of Jack's visit to the village, as he finishes his tasks and decides to return to the city, leaving Lily feeling sad. Sentence **(A)** concludes the paragraph by stating that Jack eventually convinces his daughter to return to the city, assuring her that he would visit the village again.

This sequence, **CEBFDA** maintains a logical flow and coherence in the narrative.

S16. Ans.(d)

Sol. Sentence **(C)** introduces Lily's father, Jack, and sets the stage by mentioning that he lives in a bustling city. Sentence **(E)** provides the reason for Jack's visit to the village, which is for some work. Sentence **(B)** introduces Lily's desire to go to the village with her father and her father's agreement to take her. Sentence **(F)** describes Lily's experience in the village, feeling joyful and thrilled while observing activities. Sentence **(D)** indicates the conclusion of Jack's visit to the village, as he finishes his tasks and decides to return to the city, leaving Lily feeling sad. Sentence **(A)** concludes the paragraph by stating that Jack eventually convinces his daughter to return to the city, assuring her that he would visit the village again.

This sequence, **CEBFDA** maintains a logical flow and coherence in the narrative.

S17. Ans.(d)

Sol. Refer to the lines, "**Once upon a time, in a quaint little town, there lived a boy named Jack. His parents, both passionate archaeologists, traveled the world in pursuit of ancient mysteries, leaving Jack under the care of his uncle and aunt.**"

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(a) **Jack's interest in physics was sparked by his mother's achievements**. - The passage does not mention Jack's mother's achievements or their influence on his interest in physics.

(b) **Jack's parents made the decision to enroll him in a boarding school. -** The passage does not explicitly state that Jack's parents made the decision; it mentions that his uncle and aunt took care of this aspect.

(c) **Jack's parents lived with him. -** The passage does not provide information about whether Jack's parents lived with him.

(d) **Jack's parents pursued a career in archaeology. -** This statement is true based on the passage. It mentions that Jack's parents were both passionate archaeologists.

(e) **Jack did not find LED lights fascinating. -** The passage does not provide information about Jack's opinion on LED lights.

Therefore, the correct statement is:

(d) Jack's parents pursued a career in archaeology.

S18. Ans.(b)

Sol. The passage states: "**One fateful day, high-intensity lights began emitting from Dr. Brown's home, casting an otherworldly glow over the neighborhood.**" This line indicates that the emission of high-intensity lights from Dr. Brown's house is the event that led to the concerned neighbors approaching Dr. Brown's house. The unusual and otherworldly nature of these lights prompted the neighbors to seek an explanation.

S19. Ans.(e)

Sol. The correct answer is:

(e) The neighbors found themselves in a state of astonishment due to the unexplained vanishing.

Explanation: The passage mentions, **"Informed about the time machine, Jack discovered that Dr. Brown and Emily had traveled successfully to the future, leaving the neighbors baffled."**

This indicates that the neighbors were astonished and perplexed by the unexplained disappearance of Dr. Brown and Emily.

S20. Ans.(c)
Sol. The correct answer is:
(c) Dr. Brown was engaged in a mysterious undertaking that revolved around a time machine.
Explanation: The passage mentions, **"The family had a close friend named Dr. Brown, a brilliant scientist working on a mysterious project involving a time machine."** This confirms that Dr. Brown was indeed working on a project involving a time machine.

S21. Ans.(a)
Sol. The correct answer is:
(a) Dr. Brown and Emily accomplished a successful journey into the future.
Explanation: The passage mentions, **"Informed about the time machine, Jack discovered that Dr. Brown and Emily had traveled successfully to the future, leaving the neighbors baffled."** This confirms that Dr. Brown and Emily's disappearance was due to their successful time travel to the future.

S22. Ans.(c)
Sol. The correct answer is:
(c) A wealth of knowledge and a deep appreciation for the intricacies of physics.
Explanation: The passage mentions Jack's continued studies, holding the secrets of time travel and a deep appreciation for physics. There is no specific mention of him carrying a blueprint, LED lights, or scientific journals into the future.

S23. Ans.(a)
Sol. The correct answer is:
(a) Undertaking
Here are the meanings of the words:
(a) Undertaking: A task or project that one takes on or commits to.
(b) Conceal: To hide or keep something secret.
(c) Objective: A goal or aim; something aimed at or striven for.
(d) Examine: To inspect or scrutinize closely to understand or assess.
(e) Capture: To take possession or control of something; to seize or grab.

In the context of the passage, "undertaking" is the word that is most similar in meaning to "project."

S24. Ans.(b)
Sol. "reservation" is used to mean hesitation or reluctance. So, in the context of the passage, the correct synonym for "reservation" is (b) Hesitation.
Here are the meanings of the words:
(a) Confirmation: The action of confirming or the state of being confirmed; the act of establishing the truth or correctness of something.
(b) Hesitation: The act of pausing or delaying, often due to uncertainty or indecision.
(c) Arrangement: The action, process, or result of arranging or being arranged; a plan or preparation made beforehand.
(d) Accommodation: Lodging or a place to stay; adjustment or adaptation to fit a particular purpose.
(e) Acknowledgment: The act of recognizing or admitting the existence or truth of something; a statement acknowledging the receipt of something.

S25. Ans.(c)
Sol. The most suitable word to fill in the blank in the given sentence is:
(c) fond
The complete sentence would be: "The boy was very fond of lights, in particular, which grew into a fascination that fueled his curiosity."
meanings of the words:
(a) entitled: Having the right to do or have something; qualified.
(b) reluctant: Unwilling or hesitant; showing doubt or unwillingness.
(c) fond: Having a strong liking or affection for; having a great liking for someone or something.
(d) attracted: Drawn to or pulled towards; feeling a liking or interest in someone or something.
(e) distracted: Unable to concentrate or focus; having one's attention diverted or scattered.
In the context of the sentence, "fond" is the most appropriate choice, indicating a strong liking or affection for lights.

S26. Ans.(d)
Sol. The most appropriate word to fill in the blank in the given statement is: "**vital**".
So, the complete statement would be: Biosphere reserves are **vital** for the future of our planet.
The sentence is emphasizing the importance of biosphere reserves for the future of our planet.
Meanings of the options:
(a) **tired** - physically or mentally exhausted; not relevant in the context.
(b) **inactive** - not active; not relevant in the context.
(c) **unique** - one of a kind; not directly related to the importance of biosphere reserves.
(d) **vital** - essential or crucial; the most appropriate choice given the context.
(e) **inert** - lacking the ability or strength to move; not relevant in the context.

S27. Ans.(e)
Sol. The most appropriate word to fill in the blank in the given statement is: "**disrupts**".
So, the complete statement would be: The loud noise outside **disrupts** my concentration while studying.
The sentence expresses the negative impact of a loud noise from outside, stating that it interferes with the person's concentration while studying.

Meanings of the options:
(a) **conducts** - guides or directs; not relevant in the context.
(b) **repairs** - fixes something that is broken; not relevant in the context.
(c) **heals** - restores to health; not relevant in the context.
(d) **fixes** - repairs or sets right; not directly related to the disruption of concentration.
(e) **disrupts** - interrupts or disturbs the normal course of an activity; the most suitable choice given the context.

S28. Ans.(e)
Sol. The most appropriate word to fill in the blank in the given statement is: "**negotiate**".
So, the complete statement would be: Communication is central to the way we **negotiate** climate change.

The sentence highlights the pivotal role of communication in addressing and finding solutions for climate change.
Meanings of the options:
(a) **fail** - not succeed; not relevant in the context.
(b) **slight** - treat with disrespect or neglect; not directly related to communication and climate change. (c) **blow** - cause harm or damage; not directly related to the context of communication and climate change.
(d) **mishandle** - manage or deal with improperly; not as directly related to communication in the context of climate change.
(e) **negotiate** - engage in discussions to reach an agreement; the most suitable choice given the context of addressing climate change through communication.

S29. Ans.(c)
Sol. The most appropriate word to fill in the blank in the given statement is: "**illustrates**".
So, the complete statement would be: The example **illustrates** the proper use of the new software feature.
The sentence indicates that the provided example serves to clarify or demonstrate the proper use of the new software feature.
Meanings of the options:
(a) **puzzle** - causes confusion or uncertainty; opposite of the intended meaning.
(b) **fogs** - creates confusion or obscurity; not directly related to providing clarity.
(c) **illustrates** - clarifies or demonstrates through examples; the most suitable choice given the context.
(d) **confuse** - causes a lack of understanding; opposite of the intended meaning.
(e) **blurs** - makes unclear or indistinct; not directly related to providing a clear example.

S30. Ans.(d)
Sol. The most appropriate word to fill in the blank in the given statement is: "**faulted**".
So, the complete statement would be: The engine **faulted** suddenly, prompting the need for immediate repairs.

The sentence describes a sudden malfunction in the engine, necessitating immediate repairs, with the word "faulted" conveying the idea of a defect or problem in the engine.

Meanings of the options:

(a) **praised** - admired or complimented; not relevant in the context of a sudden engine issue.
(b) **approved** - officially agreed upon; not relevant to an engine malfunction.
(c) **sanctioned** - officially permitted; not relevant in the context of a sudden engine problem.
(d) **faulted** - developed a fault or defect; the most suitable choice given the context.
(e) **commended** - praised or applauded; not relevant in the context of an engine needing repairs.

S31. Ans.(c)
Sol.
I. $x^2 + 12x + 35 = 0$
$x^2 + 7x + 5x + 35 = 0$
$(x + 7)(x + 5) = 0$
$\therefore x = -5 \; or -7$
II. $y^2 + 9y + 20 = 0$
$y^2 + 5y + 4y + 20 = 0$
$(y + 5)(y + 4) = 0$
$y = -5, -4$
$\Rightarrow x \leq y$

S32. Ans.(d)
Sol.
I. $x^2 - 15x + 54 = 0$
$x^2 - 9x - 6x + 54 = 0$
$(x - 9)(x - 6) = 0$
$\therefore x = 9 \; or \; 6$
II. $y^2 - 23y + 132 = 0$
$y^2 - 11y - 12y + 132 = 0$
$(y - 11)(y - 12) = 0$
$y = 11 \; or \; 12$
$\therefore x < y$

S33. Ans.(e)
Sol.
I. $6x^2 + 5x + 1 = 0$
$6x^2 + 3x + 2x + 1 = 0$
$3x(2x + 1) + 1(2x + 1) = 0$
$x = -\frac{1}{2} \; or -\frac{1}{3}$

II. $15y^2 + 11y + 2 = 0$
$15y^2 + 6y + 5y + 2 = 0$
$3y(5y + 2) + 1(5y + 2) = 0$
$\therefore y = -\frac{2}{5} \; or -\frac{1}{3}$

$\therefore$ no relation can be established

S34. Ans.(e)
Sol.
I. $2x^2 - 7x + 3 = 0$
$2x^2 - 6x - x + 3 = 0$
$(x - 3)(2x - 1) = 0$
$\therefore x = \frac{1}{2}, 3$
II. $4y^2 - 7y + 3 = 0$
$4y^2 - 4y - 3y + 3 = 0$
$(4y - 3)(y - 3) = 0$
$\therefore y = \frac{3}{4}, 1$

$\therefore$ no relation can be established

S35. Ans.(a)
Sol.
I. $10x^2 + 13x - 14 = 0$
$10x^2 + 20x - 7x - 14 = 0$
$(20x - 7) + 1(x + 2) = 0$
$\therefore x = 0.7 \; or -2$
II. $y^2 + 5y + 6 = 0$
$y^2 + 3y + 2y + 6 = 0$
$(y + 2)(y + 3) = 0$
$\therefore y = -2 \; or -3$
$\therefore x \geq y$

S36. Ans.(d)
Sol. Number of accounts opened by X in March = $\frac{5}{4} \times 16 = 20$
Required sum = 20 + 12 = 32

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S37. Ans.(e)
Sol. Required ratio = $\frac{15+20}{45} = \frac{35}{45} = 7:9$

S38. Ans.(a)
Sol. Number of accounts opened by A = 15 + 18 + 30 + 35 = 98
Number of accounts opened by B = 20 + 25 + 40 + 32 = 117
Required difference = 117 – 98 = 19

S39. Ans.(c)
Sol. Required percentage = $\frac{40-25}{25} \times 100 = 60\%$

S40. Ans.(d)
Sol. Required average = $\frac{22+12+42+40}{4} = 29$

S41. Ans.(c)
Sol. 30% of ? = $38 + \frac{147}{3}$
$\frac{30}{100} \times ? = 38 + 49$
$30 \times ? = 87 \times 100$
$? = 87 \times \frac{100}{30}$
$? = 290$

S42. Ans.(c)
Sol. $\frac{272}{4} - 18 \times 6 + \sqrt[3]{1331} = ?$
$68 - 108 + 11 = ?$
$? = -29$

S43. Ans.(a)
Sol. $1512 \div 36 + 44 \times 32 = ?$
$42 + 1408 = ?$
$1450 = ?$

S44. Ans.(b)
Sol. $32^2 - 9^3 + 29 = ?^2$
$1024 - 729 + 29 = ?^2$
$324 = ?^2$
$18 = ?$

S45. Ans.(c)
Sol. $13 \times ? \times 6 = 47^2 - \sqrt{625}$
$78 \times ? = 2209 - 25$
$78 \times ? = 2184$
$? = 2184 \div 78$
$? = 28$

S46. Ans.(c)
Sol. $5 \times \sqrt{?} = 245$
$\sqrt{?} = 49$
$? = 2401$

S47. Ans.(b)
Sol. $(2^3 + 7^2) \div 2 \times 3 = ?$
$? = (8 + 49) \div 2 \times 3$
$? = (57 \div 2) \times 3$
$? = 28.5 \times 3 = 85.5$

S48. Ans.(a)
Sol. $\sqrt{256} + \sqrt{784} = ? \times \sqrt{121}$
$16 + 28 = ? \times 11$
$? = \frac{44}{11} = 4$

S49. Ans.(a)
Sol. 19 % of 250 + ? = 2^7
$\frac{19}{100} \times 250 + ? = 128$
$19 \times 2.5 + ? = 128$
$47.5 + ? = 128$
$? = 128 - 47.5$
$? = 80.5$

S50. Ans.(d)
Sol. $\frac{5}{8}$ of $\frac{4}{9}$ of $\frac{3}{5}$ of 654 = ?
$\frac{5}{8} \times \frac{4}{9} \times \frac{3}{5} \times 654 = ?$
$109 = ?$

S51. Ans.(a)
Sol. $\frac{56}{?} + 512 = \frac{13}{100} \times 4000$
$\frac{56}{?} = 520 - 512$
$? = 7$

S52. Ans.(b)
Sol. $?^3 \times 6 + 8 = 170$
$?^3 \times 6 = 162$
$?^3 = 27$
$? = 3$

S53. Ans.(a)
Sol. Let the length of the platform be L meter.
Length of the train = $72 \times \frac{5}{18} \times 14 = 280$

ATQ,
$\frac{280+L}{20} = 72 \times \frac{5}{18}$
280 + L = 400
$L = 120 \ meter$

S54. Ans.(d)
Sol. ATQ,
$\frac{P \times 8 \times 3}{100} + \frac{P \times 4 \times 4}{100} = 398$
$X\left(\frac{24}{100} + \frac{16}{100}\right) = 398$
$X = 995$

S55. Ans.(e)
Sol. Let the present age of Rakesh and Dheeraj be 5x and 4x respectively.
ATQ,
5x – 2 = 4x + 4
5x – 4x = 6
6 = x
Present age of Dheeraj = 24 years.

S56. Ans.(d)
Sol. Time taken by pipe A to fill the tank = $\frac{100}{50} \times 6 = 12 \ hours$
Time taken by C to empty the tank = 9 hours
Total capacity of the tank = 36 units (LCM of 9, 18, 12)
Efficiency of tank A = $\frac{36}{12} = 3 \ unit/hour$
Efficiency of tank B = $\frac{36}{18} = 2 \ unit/hour$
Efficiency of tank C= $\frac{36}{9} = 4 \ unit/hour$ (negative)
Required time = $\frac{36}{3+2-4} = 36 \ hours$

S57. Ans.(a)
Sol. Let the cost price of the article be Rs 100x.
Marked price of the article = $\frac{180}{100} \times 100x = 180x$

ATQ,
180x – 160 = 100x + 200
80x = 360
4.5 = x
Cost price = 100x = Rs 450

S58. Ans.(d)
Sol. Let the radius of the circle and length of the rectangle is x and 6x respectively.
ATQ,
$\frac{6}{11} = \frac{6x \times 7}{\frac{22}{7} \times x \times x}$
$x = \frac{49}{2}$
Circumference of the circle = $2 \times \frac{22}{7} \times x = 2 \times \frac{22}{7} \times \frac{49}{2} = 154 \ cm$

S59. Ans.(a)
Sol. Let the investment of D be Rs. 2x
Investment of A = $2.5 \times 2x = Rs. 5x$
Investment of C = $\frac{1}{5} \times 5x = Rs. x$
ATQ,
Profit share of D = $\frac{2x}{2x+5x+x} \times 2400 = \frac{2}{8} \times 2400 = Rs. 600$

S60. Ans.(c)
Sol. Let the speed of downstream and upstream be 3x km/hr and x km/hr respectively
ATQ,
$\frac{144}{8} = 3x$
18 = 3x
x = 6
Speed of boat in downstream = 18 km/hr
Speed of boat in upstream = 6 km/hr.
Speed of boat in still water = $\frac{18+6}{2} = \frac{24}{2} = 12 \ km/hr$
Required time = $\frac{144}{12} = 12 \ hours$

S61. Ans.(b)
Sol. Let the efficiency of man and woman be m units/day and w unit/day respectively.
ATQ,
$(4m + 6w) \times \frac{100}{150} \times 12 = (3m + 7w) \times \frac{2}{1} \times 5$
16m + 24w = 15m + 35w
$\frac{m}{w} = \frac{11}{1}$

S62. Ans.(a)
Sol. Let initial quantity of milk 3x
And water = $3x \times \frac{2}{3} = 2x$

ATQ,

$$\frac{3x+4}{2x} = \frac{200}{100}$$

x = 4

So total initial quantity = 3x+2x = 5x = 20 liter

Directions (63-65):
Let the number of analog watches sold by A be 5x
Number of digital watches sold by B be 4x
Number of digital watches sold by A = $\frac{3}{4} \times 4x = 3x$

Let the number of analog watches sold by C be 5y
Number of digital watches sold by C = $\frac{7}{5} \times 5y = 7y$

Number of analog watches sold by B = $\frac{3}{4} \times 4x = 3x$

ATQ,
3x = 30
x = 10
Now,
3x + 4x + 7y = 140
30 + 40 + 7y = 140
7y = 70
y = 10

Type of watches	A	B	C	Total
Analog	50	30	50	130
Digital	30	40	70	140

S63. Ans.(a)
Sol. Required ratio = $\frac{30}{70} = 3:7$

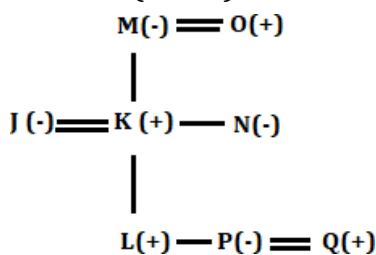**S64. Ans.(b)**
Sol. Required difference = $(130 - 70) = 60$

S65. Ans.(c)
Sol. Required percentage = $\frac{70}{100} \times 100 = 70\%$
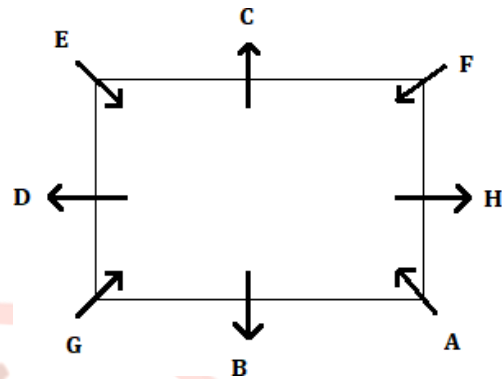
S66. Ans.(e)
Sol. Clay, Lacy

Directions (67-69)

M(-) ══ O(+)
│
J (-)══K (+) ── N(-)
│
L(+) ── P(-) ══ Q(+)

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S67. Ans.(d)
S68. Ans.(c)
S69. Ans.(b)

Directions (70-74):

S70. Ans.(d)
S71. Ans.(d)
S72. Ans.(a)
S73. Ans.(b)
S74. Ans.(a)

Directions (75-79):
S75. Ans.(c)
S76. Ans.(d)
S77. Ans.(b)
S78. Ans.(d)
S79. Ans.(d)

S80. Ans.(e)
Sol. Given word- QUALITY
After rearrangement- PVBKJSX
No letter is repeated

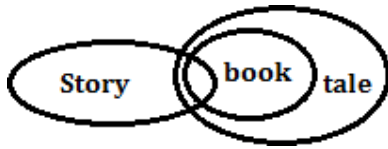**Directions (81-85):**
Final arrangement:

Persons
P
J
M
K
O
L
Q
N

S81. Ans.(c)
S82. Ans.(a)
S83. Ans.(d)
S84. Ans.(b)
S85. Ans.(e)

Directions (86-89):

S86. Ans.(e)
Sol.

S87. Ans.(b)
Sol.
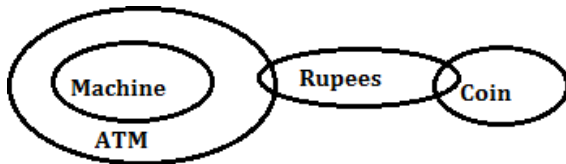
S88. Ans.(a)
Sol.

S89. Ans.(c)
Sol.

S90. Ans.(c)
Sol.

4 0 5 8 5 6 3 6
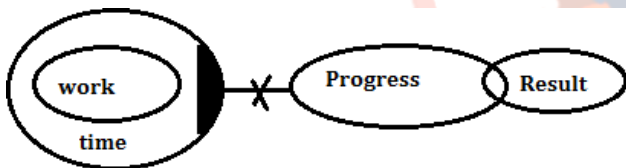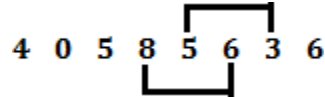
Directions (91-95):

Designation	Person
MD	G
CEO	F
SR. MGR	D
MGR	A
PO	B
Clerk	C
Typist	E

S91. Ans.(d)
S92. Ans.(a)
S93. Ans.(b)
S94. Ans.(e)
S95. Ans.(d)

Directions (96-100):
S96. Ans.(b)
S97. Ans.(c)
S98. Ans.(a)
S99. Ans.(d)
S100. Ans.(d)

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