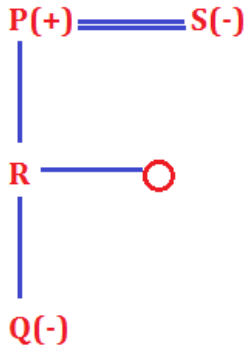


RBI Grade B Phase-1 (Solutions)

Solutions (1-5):

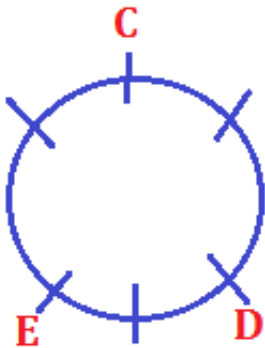
S1. Ans.(e)

Sol. From both statement I and II.



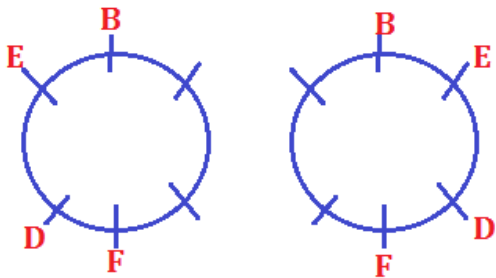
S2. Ans.(a)

Sol. From I:



C is second to the left of E. Thus I alone is sufficient to answer the question.

From II:



Hence II alone is not sufficient to answer the question.

S3. Ans.(e)

Sol. Both The statement is sufficient to answer the question.

S4. Ans.(e)

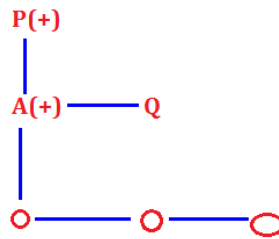
Sol. From I: $A=B>C$

From II: $E>D>C$

Hence both $E>D>A=B>C$, are sufficient to answer the question.

S5. Ans.(d)

Sol.



Both statements I and II are not sufficient to answer the questions.

Solutions (6-10)

S6. Ans.(b)

S7. Ans.(a)

S8. Ans.(c)

S9. Ans.(e)

S10. Ans.(b)

S11. Ans.(d)

Sol. Statement I cannot, be concluded from the given statement. While ideas are always derived from impressions, it does not follow that all impressions will give rise to ideas.

S12. Ans.(d)

Sol. I is implicit in the deadline given. II is implicit in the notice given to the residents to move out.

S13. Ans.(a)

Sol. I. $B = Q \leq P < J \leq Y$ (TRUE)

II. $X < A \geq B = Q \leq P < J$ (FALSE)

S14. Ans.(e)

Sol. I. $Z \geq A \geq B = Q$ (FALSE)

II. $Z \geq A \geq B = Q$ (FALSE)

S15. Ans.(d)

Sol. I. $G < R = A \leq S$ (TRUE)

II. $S \geq A = R > T$ (TRUE)

S16. Ans.(b)**Sol.** I. $M < K \leq I \geq C$ (FALSE)II. $N < I \geq K > M > U = P$ (FALSE)**S17. Ans.(c)****Sol.** I. $D \geq P = U < M < K$ (FALSE)II. $I \geq K > M > U = P$ (TRUE)**S18. Ans.(b)**

Sol. The statement is saying about the benefits for the soil but the assumption I describes the benefits of burying the leaves for reducing air pollution. Hence, it is not implicit. But assumption II is implicit. That is why the notice stresses on the leaves instead of burning it.

S19. Ans.(a)**Sol.** Assumption I is implicit.**S20. Ans.(d)**

Sol. I is not implicit. II is not implicit because the PM only assumes that law and order affects the common man more than prices do.

Solutions (21-25):

(i)- By using given conditions, V got appointment in the month which has odd days. That means V got appointment either in March or in April. There were four persons got appointment between V and S. P got appointment before S. That means the possibility of V got appointment in the April has been cancelled. there are two possible cases. Case-1: V got appointment on 10th of March. Case-2: V got appointment on 15th of March.

Case-1:

Date Month	10 th	15 th
March	V	
April		
May		S
June		

Case-2:

Date Month	10 th	15 th
March		V
April		
May		
June	S	

(ii)- Q got appointment in the month which has even number of days. T got appointment in one of the months before the month in which Q got appointment. That means Q got appointment in June. Three persons got appointment between Q and T. In case-1 Q got appointment either on 10th June or 15th June and in case-2: Q got appointment on 15th June. There are two possibilities in case-1.

Case-1:

Date Month	10 th	15 th
March		V
April		T
May		
June	S	Q

Case-2:

Date Month	10 th	15 th
March	V	
April	T/	T/
May		S
June	Q/	Q/

(iii)- R got appointment before U and both of them got appointment in the month which has odd numbered days. That means in case-1, R got appointment in 15th March and in case-2, R got appointment on 10th March and U got appointment either on 10th or 15th of May. W did not get appointment on 10th of any of the month. So, in case-2: U got appointment on 10th of May. W did not get appointment just before S. By using these conditions, case-2 will be eliminated. In case-1: Q's position has been fixed on 10th of June. P got appointment before S. Hence, P got appointment on 15th of April and W got appointment on 15th of June. The final answer is-

Date Month	10 th	15 th
March	V	R
April	T	P
May	U	S
June	Q	W

- S21. Ans.(c)
 S22. Ans.(b)
 S23. Ans.(e)
 S24. Ans.(c)
 S25. Ans.(c)

Solutions (26-30):

(i) There are six numbers and six words in the input. The three numbers are placed in the beginning and the remaining three numbers are placed in the last.

(ii) The numbers are rearranged in ascending order. The six words are rearranged in alphabetical order in the middle.

Input 67 hot sun 19 best 83 ice 49 ace 77 cut 37
 Step I 19 67 hot sun best ice 49 ace 77 cut 37 83
 Step II 19 37 67 hot sun best ice 49 ace cut 77 83
 Step III 19 37 49 hot sun best ice ace cut 67 77 83
 Step IV 19 37 49 ace hot sun best ice cut 67 77 83
 Step V 19 37 49 ace best hot sun ice cut 67 77 83
 Step VI 19 37 49 ace best cut hot sun ice 67 77 83
 Step VII 19 37 49 ace best cut hot ice sun 67 77 83

- S26. Ans.(d)

Sol. Seven steps are needed to complete the arrangement.

- S27. Ans.(c)

Sol. It is Step V.

- S28. Ans.(d)

Sol. Option (d) is Step I.

- S29. Ans.(b)

Sol. Option (b) is the final arrangement.

- S30. Ans.(a)

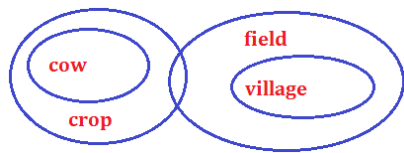
Sol. In Step IV ‘Sun’ would be seventh from the right.

Solutions (31-35):

Day	Persons	Rank	City
Monday	V	Subedar	Delhi
Tuesday	P	Major	Noida
Wednesday	Q	Lieutenant	Bengaluru
Thursday	R	Naik	Ahmedabad
Friday	U	Captain	Mumbai
Saturday	T	Colonel	Rohtak
Sunday	S	Brigadier	Hyderabad

- S31. Ans.(e)
 S32. Ans.(d)
 S33. Ans.(e)
 S34. Ans.(e)
 S35. Ans.(e)

Solutions (36-37):



- S36. Ans.(a)

- S37. Ans.(d)

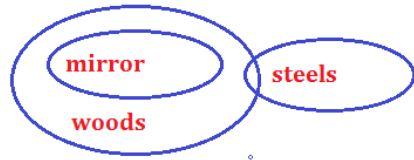
Solutions (38-39):

- S38. Ans.(b)

- S39. Ans.(e)

- S40. Ans.(a)

Sol.



Solutions (41-45):

In the given code, the number of alphabets in the given word is coded as the alphabet which has the same rank in the alphabetical series as the number of alphabets in the word. (For example: Fasting--no of words =7 so code-G) The number in the code represents the sum of the ranks of the vowels in the alphabetical series. (For example: Fasting—I, A= 9+1, so code-10)

- S41. Ans.(d)

- S42. Ans.(a)

- S43. Ans.(a)

- S44. Ans.(d)

- S45. Ans.(b)

Solutions (46-50):

Cities	Male	Company	Female	Company
Nagpur	V	Google	F	Tibco
Agra	B	Oracle	G	Oracle
Indore	N	Tibco/HCL	H/K	Wipro
Coimbatore	C	Adobe	A	Google
Surat	X	TCS	S	HCL
Ahmedabad	Z	Wipro	D	TCS
Hyderabad	M	HCL/Tibco	H/K	Adobe

- S46. Ans.(e)
 S47. Ans.(b)
 S48. Ans.(a)
 S49. Ans.(d)
 S50. Ans.(c)

S51. Ans.(b)

Sol. Clearly, providing the existing Medical Colleges with modern and more sophisticated infrastructure can help them produce more and much learned doctors, as they can then cater to more students and provide quality education. So, only argument II holds strong while I does not. Hence, the answer is (b).

S52. Ans.(d)

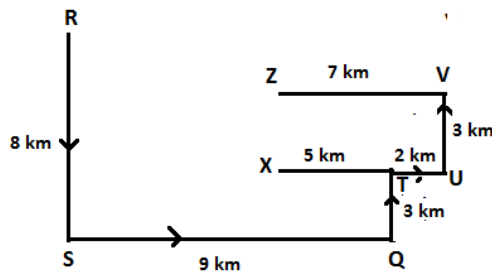
Sol. Clearly, any reform process may be changed, diverted or reversed at any stage, if it is to benefit the nation. Also, the idea of considering a process to be non-fruitful just because it has been borrowed from western countries, seems absurd. Thus, neither I nor II holds strong. Hence, the answer is (d).

S53. Ans.(e)

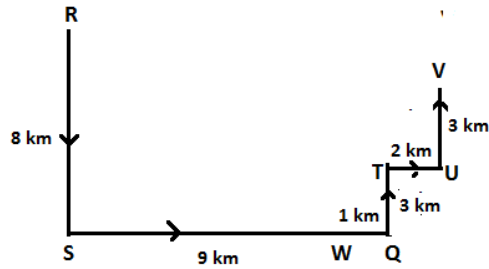
Sol. Clearly, professional jobs require quality and merit and so the students having the required talent can turn out to be better professionals than those who join the course on concession. So, argument I holds strong. However, it is these special concessions which make the professional courses affordable for certain talented students, belonging to socially and economically weaker sections, who otherwise would remain bereft of the same. So, argument II also holds strong. Hence, the answer is (e).

S54. Ans.(a)

Sol.

**S55. Ans.(d)**

Sol.



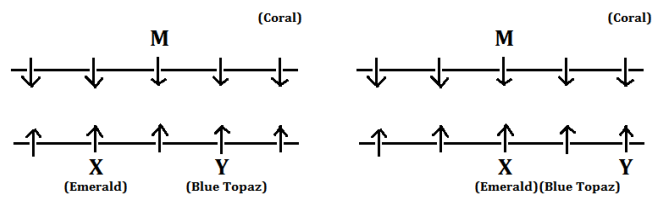
Shortest distance = $\sqrt{3^2 + 6^2} = 3\sqrt{5}$ km.

Solutions (56-60):

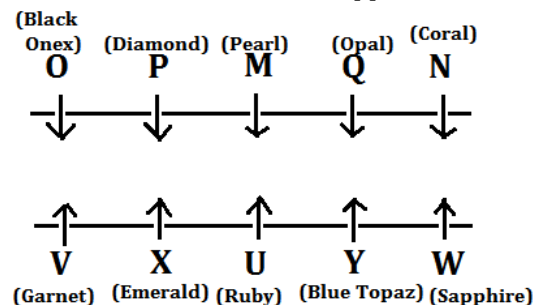
(i)- By using given conditions, Y sits second to the right of X, who likes Emerald and X doesn't sit at the extreme end. There are two possible cases- Case:1, X sits second to the left end and Case:2, X sits third to the left end. M sits to the immediate left of the person, who faces the person, who sits to the immediate right of the one who is sitting at the extreme left end of the other row. That means M sits middle of the row-1. The one who likes Coral sits second to the left of M. The one who likes Blue Topaz sits immediate right of the one who faces M.

Case-1:

Case-2:



(ii)- P faces the one who sits second to the left of the who likes Blue Topaz. That means P sits immediate right of M. Q sits opposite to the one who sits third to the right of the one who likes Garnet. In case-1, Q sits immediate left of M and in case-2, there are two possibilities Q sits either immediate left of M or second to the left of M. U sits opposite to the person, who sits second to the right of N. Immediate neighbor of N likes Opal. By using these conditions case-2 will be eliminated and thus we continued with case-1. The one who likes Ruby sits second to the left of the one who likes Sapphire. That means the one who likes Sapphire sits extreme right end of the row-2. O doesn't like Sapphire or Pearl. W doesn't like Ruby or Black onyx. Hence, O likes Black onyx, M likes Pearl, Q likes Opal, W sits extreme left end and likes Sapphire and V likes Garnet.



S56. Ans.(b)

S57. Ans.(c)

S58. Ans.(c)

S59. Ans.(e)

S60. Ans.(a)

S61. Ans.(e)

Sol. The correct answer here is option (e). Option (a) is mentioned in first paragraph of the passage. Second and third options can be deduced from paragraph 2 and 3. Option (d) is given in paragraph 4. Hence all of the given options are correct.

S62. Ans.(c)

Sol. The appropriate option is (c). Refer to paragraph 2 where it is stated that top talent outside has many options of public service. Therefore the government must proactively identify and approach executives with the desired skills and experience. "Precisely because the competition for talent is so intense, most successful corporations — even those regarded as highly desirable employers — follow this strategy."

S63. Ans.(d)

Sol. The most suitable choice here is option (d). The answer can be deduced from paragraph 1 itself where it is mentioned in the first line that most governments and CEO's are struggling with the challenge of getting the right leadership talent. Rest all of the options are wrong in context of the passage.

S64. Ans.(e)

Sol. Option (e) is the appropriate choice here. The answer can be inferred from paragraph 3 where the text is quoted as, "Government bureaucracy can be tough on outsiders; it is essential to have the ability to persevere in the face of constant pulls and pressures and aligning multiple stakeholders".

S65. Ans.(b)

Sol. Option (b) is the correct choice here. Refer to paragraph 3, second last line, "*More focused interviews should be supplemented with extensive referencing with finalist candidates. This combination of data will provide insight into a candidate's character, integrity and moral compass — all critical qualities for government roles.*" This has been mentioned in the context of how one-on-one or two-on-one interviews allow for a much more meaningful exploration of key points of a candidate's career, their mindset and approach rather than appearing before a

S66. Ans.(c)

Sol. Grappling means engage in a close fight or struggle without weapons.

Contending means the same.

Unfettering means releasing from restraint or inhibition.

Extricating means free from a constraint or difficulty.

S67. Ans.(b)

Sol. Proactively means by taking action to control a situation rather than just responding to it after it has happened.

Preemptively means taken as a measure against something possible, anticipated, or feared. Hence option (b) is the answer.

Inertly means sluggish in action or motion.

Retroactively means with effect from a date in the past.

Irresolutely means lacking in resolution; undecisive.

S68. Ans.(b)

Sol. Resilience means the capacity to recover quickly from difficulties. Pliability means flexibility which means the same.

Obduracy means of the quality of being stubborn.

Frailty means the condition of being weak and delicate.

Tenacity means the quality or fact of being very determined; determination.

S69. Ans.(e)

Sol. Primed means something prepared already for a situation.

All words in the options are the synonyms of the given word.

Only option (e) is the answer as impulsive means acting or done without forethought.

S70. Ans.(c)

Sol. Leveraging means use something to maximum advantage.

Clouting means hitting someone or something hard.

Esteeming means respecting and admiring.

Dissuading means persuade (someone) not to take a particular course of action.

Hence only option (c) is the answer.

S71. Ans.(c)

Sol. There is grammatical error in part (c) of the given sentence. The use of 'result' here is incorrect because the subject of the given sentence is 'Infection' which is singular, so the verb should also be in its singular form. So the correct verb should be 'results'. Hence, the correct answer choice is (c)

S72. Ans.(e)

Sol. There is no error in the given sentence. So, the correct answer choice would be (e) i.e. No error

S73. Ans.(b)

Sol. There is grammatical error in the part (b) of the given sentence. The use of 'shoot' here is incorrect instead use 'shot' because in Passive Voice with 'be' we use V³. Hence, the correct answer choice would be (b)

S74. Ans.(d)

Sol. There is grammatical error in part (d). Replace 'start' by 'started' as part (c) of the sentence uses '**could have**'. "**Have/has/had**" is followed by V3 form of the verbs. Hence "**could have taken** and **started...**" is the correct usage. So the correct answer choice is (d)

S75. Ans.(c)

Sol. There is grammatical error in part (c) of the sentence. To make the given sentence correct Use 'when' in place of 'that' as "**Scarcely/Hardly**" is followed by '**when**' or '**before**' in a correct grammatical usage. Hence, the correct answer choice is (c)

S76. Ans.(d)

Sol. 'specific' is the correct word that fits to the blank as the word before blank (narrow) is pointing to a particular question. All other options are irrelevant.

S77. Ans.(e)

Sol. The phrase here is ".....their free time". We cannot use 'unite', 'procure', 'store' or 'gather' for time. Hence 'increase' is the correct word that fits in the blank and hence is the correct option.

S78. Ans.(a)

Sol. The observations are given in the paragraph which suggested that data are recorded and not fabricated or procrastinated (means prediction) or posted. Hence 'recorded' is the correct word that completes the sentence.

S79. Ans.(b)

Sol. The paragraph is about spending money for buying free time. Hence 'spend' is the correct word that justifies the sentence. All other options are irrelevant.

S80. Ans.(d)

Sol. This is the paragraph telling us about the study of researchers. Hence 'study' is the word that is making the sentence meaningful.

S81. Ans.(c)

Sol. A question has been asked before the blank and the response of that question is divided into half. Hence 'split' makes the sentence complete and meaningful.

S82. Ans.(d)

Sol. The given sentence is grammatically as well as contextually incorrect. To frame a meaningful sentence, 'Americans' and 'countries' should be interchanged. It should be noted that the preposition **in** is used to denote a place rather than persons. Therefore, "in foreign countries" is a more suitable phrase. Hence, by swapping words (A) and (D), option (d) becomes the most suitable answer choice.

S83. Ans.(b)

Sol. The given sentence is grammatically as well as contextually incorrect. To frame a meaningful sentence, 'spilling' and 'contains' should be interchanged. It should be noted that **spilling over** is a phrasal verb which means to reach or influence a larger area; spread. Hence, by swapping words (B) and (D), option (b) becomes the most suitable answer choice.

S84. Ans.(a)

Sol. The given sentence is grammatically as well as contextually incorrect. To frame a meaningful sentence, 'government' and 'parademics' should be interchanged. Hence, by swapping words (A) and (B), option (a) becomes the most suitable answer choice.

S85. Ans.(b)

Sol. The given sentence is grammatically as well as contextually incorrect. To frame a meaningful sentence, 'global' and 'bears' should be interchanged. Hence, by swapping words (B) and (C), option (b) becomes the most suitable answer choice.

S86. Ans.(e)

Sol. The correct sequence of sentences after the rearrangement is **CEBADF**. Hence, **option (e)** becomes the

S87. Ans.(a)

Sol. The correct sequence of sentences after the rearrangement is **CEBADF**. Hence, **option (a)** becomes the most suitable answer choice.

S88. Ans.(d)

Sol. The correct sequence of sentences after the rearrangement is **CEBADF**. Hence, **option (d)** becomes the most suitable answer choice.

S89. Ans.(c)

Sol. The correct sequence of the sentences after the rearrangement is **CEBADF**. Hence, **option (c)** becomes the most suitable answer choice.

S90. Ans.(b)

Sol. The correct sequence of sentences after the rearrangement is **CEBADF**. Hence, **option (b)** becomes the most suitable answer choice.

Solutions (31-35):-

Here, total number of persons who play cricket = 43 % of 800 = 344

total number of persons who play football = 52.5 % of 800 = 420

total number of persons who play Hockey = 55 % of 800 = 440

number of persons who play both cricket and football but not Hockey = 96

number of persons who play both cricket and hockey but not football = 100

number of persons who play both hockey and football but not cricket = 88

number of persons who play all the three sports = 60

number of persons who play only cricket = 344 - (96 + 100 + 60) = 88

number of persons who play only football = 420 - (96 + 88 + 60) = 176

number of persons who play only hockey = 440 - (100 + 88 + 60) = 192

S91. Ans.(b)

Sol. number of persons who plays at least 2 sports = 100 + 96 + 88 + 60 = 344

Required percentage = $\frac{344}{800} \times 100 = 43\%$

S92. Ans.(c)

Sol. number of persons who play only football = 420 - (96 + 88 + 60) = 176

number of persons who play only hockey = 440 - (100 + 88 + 60) = 192

Required difference = 192 - 176 = 16

S93. Ans.(d)

Sol. Number of persons who plays neither football nor cricket = 800 - (88 + 100 + 60 + 96 + 88 + 176) = 800 - 608 = 192

S94. Ans.(a)

number of persons who play both cricket and football but not Hockey = 96

number of persons who play both hockey and football but not cricket = 88

Required ratio = $\frac{96}{88} = 12:11$

S95. Ans.(d)

Sol.

number of persons who play only football = 420 - (96 + 88 + 60) = 176

number of persons who play both cricket and hockey but not football = 100

Required percentage = $\frac{176 - 100}{100} \times 100 = 76\%$

S96. Ans.(d)

Sol. ? % of 25% of 40% of (144 + 6) = 2.25

? % of 25% of 40% of 150 = 2.25

? % of 25% of 60 = 2.25

? % of 15 = 2.25

? ≈ 15

S97. Ans.(a)

Sol. $(8)^3 + (8)^2 = -100 + (?)^2$

$512 + 64 + 100 = (?)^2$

? ≈ 26

S98. Ans.(e)

Sol. $\frac{33 \times 42 \times 5}{11 \times 15} + 14 = ?\% \text{ of } 280$

? ≈ 20

S99. Ans.(d)

Sol. $97 + 997 - 100 + 1000 + 6 = 400 \times ?$

? ≈ 5

S100. Ans.(e)

Sol. 10% of 300 = $(?)^3 + (?)$

$30 = (?)^3 + (?)$

? ≈ 3

S101. Ans.(e)

Sol. Let the current age of father and mother be 'x' yrs and 'y' yrs respectively.

Then son's present age = $(x - 28)$ yrs

Then daughter's present age = $(y - 26)$ yrs

Atq

$(x + y + x - 28 + y - 26) = 130$

$(x + y) = 92 \dots (i)$

Again after 3 yrs

$(x + 3 + y + 3 + x - 25) = 123$

$(2x + y) = 142 \dots (ii)$

On solving the above equation we get $y = 42$ years.

Mother's present age = 42 yrs.

S102. Ans.(b)

Sol. SP of article (to customer) = 3000 - 300 = Rs. 2700

$$\text{Marked price} = 2700 \times \frac{100}{90} = \text{Rs. } 3000$$

$$\text{CP of article} = 2700 \times \frac{100}{120} = \text{Rs. } 2250$$

S103. Ans.(d)

Sol. speed = $1 \times \frac{5}{18} \times 60 = \frac{50}{3} \text{ m/min}$

Time taken to reach station (time to catch train)

$$= \frac{500}{\frac{50}{3}} = 30 \text{ min}$$

Time left to catch train = 30 - 4 - 4 = 22 min

In this time, he is going back to home and has to reach station

Total distance to be covered = 500m

$$\text{Required speed} = \frac{500}{22} \times \frac{60}{1000} = 1.36 \text{ kmph}$$

S104. Ans.(c)

Sol. let radius be r cm

$$132 = 2 \times \frac{22}{7} r \Rightarrow r = 21 \text{ cm} \Rightarrow l = 42 \text{ cm}$$

Let length, breadth of rectangle be l, b cm respectively

Square is attached along breadth of rectangle, edge of square = b cm

Increase in area = area of square

$$b^2 = 144 \Rightarrow b = 12 \text{ cm}$$

$$\text{Area of rectangle} = lb = 42 \times 12 = 504 \text{ cm}^2$$

S105. Ans.(d)

Sol. We do not know the number of girls in reasoning.

So, we can't determine the no. of boys in reasoning for that years.

S106. Ans.(b)

Sol. Required percentage

$$\Rightarrow \frac{40,000}{400,000} \times 100 = 10\%$$

S107. Ans.(e)

Sol. Required number of students

$$\Rightarrow (5 + 35 + 15 + 15 + 20 + 5) \times 1000 = 95000$$

S108. Ans.(d)

Sol. Required percentage

$$\Rightarrow \left(\frac{15 + 30}{55 + 85} \right) \times 100$$

$$\Rightarrow \frac{45}{140} \times 100 \approx 32\%$$

S109. Ans.(a)

Sol. Required ratio

$$\Rightarrow (25 + 30) : (5 + 20)$$

$$\Rightarrow 55 : 25 = 11 : 5$$

S110. Ans.(c)

Sol.

$$\text{Total milk in mixture} = 384 \times \frac{15}{32} = 180 \text{ liters}$$

$$\text{Total water in mixture} = 384 \times \frac{17}{32} = 204 \text{ liters}$$

ATQ -

$$\frac{180 - X \times \frac{15}{32} + (X - 14)}{204 - X \times \frac{17}{32} + (X - 34)} = \frac{1}{1}$$

$$180 - X \times \frac{15}{32} + (X - 14) = 204 - X \times \frac{17}{32} + (X - 34)$$

$$\frac{X}{16} = (24 - 20)$$

$$X = 64 \text{ liters}$$

$$\text{Total final mixture} = 180 - 64 \times \frac{15}{32} + (64 - 14) + 204 -$$

$$64 \times \frac{17}{32} + (64 - 34)$$

$$= 200 + 200 = 400 \text{ liters}$$

$$\text{Required percentage} = \frac{180}{400} \times 100$$

$$= 45\%$$

S111. Ans.(a)

Sol. Ratio of profit of Anurag & Ravi after one year

$$= (2000 \times 8 + 2400 \times 2) : (1600 \times 12)$$

$$= 208 : 192 = 13:12$$

Let total profit = 25P Rs.

Share of Ravi = 12P

$$\text{Equivalent CI of two years at } 20\% = 20 + 20 + \frac{20 \times 20}{100} = 44\%$$

ATQ -

$$12P \times \frac{144}{100} = 6912$$

$$P = 400 \text{ Rs.}$$

$$\text{Profit share Anurag} = 10000 \times \frac{13}{25} = 5200 \text{ Rs.}$$

S112. Ans.(b)

Sol. Let the efficiency of a man be m units/day and efficiency of a woman be w units/day

ATQ

$$(8m + 10w) \times 15 = (10m + 18w) \times 10$$

$$\frac{m}{w} = \frac{3}{2}$$

$$\text{Total work} = (8 \times 3 + 10 \times 2) \times 15 = 660 \text{ units}$$

$$\text{Work done in 10 days} = (4 \times 3 + 5 \times 2) \times 10 = 220 \text{ units}$$

Let the number of more women required be x

$$\text{Then } 2 \times (5 + x) \times 11 = 440$$

$$x = 15$$

S113. Ans.(d)

Sol. ATQ -

$$2(A + B) = 6C$$

$$A + B = 3C$$

$$\text{Also given, } A + B + C = \frac{1}{9}$$

$$4C = \frac{1}{9}$$

$$C = 36 \text{ hours}$$

S114. Ans.(a)

ATQ -

$$2304 = 1600 \left(1 + \frac{R}{100}\right)^2$$

$$\frac{48}{40} = \left(1 + \frac{R}{100}\right)$$

$$R = 20\%$$

$$\text{New rate} = (20 - 8) = 12\%$$

$$\text{Required interest} = \frac{1600 \times 12 \times 2}{100} = 384 \text{ Rs.}$$

S115. Ans.(c)

Sol. Let total male & female registered voters in village -X be 10a & 10b respectively.

ATQ,

$$10a - 10b = 2000$$

$$a - b = 200 \quad \dots (i)$$

And,

$$7a + 4.5b = 6000 \quad \dots (ii)$$

On solving (i) & (ii), we get:

$$a = 600, b = 400$$

$$\text{So, total registered voters in village - X} = 10a + 10b = 10 \times (600 + 400) = 10000$$

S116. Ans.(b)**Sol.** Missing number = 450

Pattern of series -

$$\begin{array}{ccccccc} 120 & 60 & 60 & 90 & 180 & \boxed{450} \\ \hline & \times 0.5 & \times 1 & \times 1.5 & \times 2 & \times 2.5 \end{array}$$

S117. Ans.(d)**Sol.** Missing number = 178

Pattern of series -

$$\begin{array}{ccccccc} \boxed{178} & 190 & 210 & 238 & 274 & 318 \\ \hline & +12 & +20 & +28 & +36 & +44 \\ \hline & +8 & +8 & +8 & +8 \end{array}$$

S118. Ans.(e)**Sol.** Missing number = 130

Pattern of series -

$$\begin{array}{ccccccc} 112 & \boxed{130} & 166 & 238 & 382 & 670 \\ \hline & +18 & +36 & +72 & +144 & +288 \\ \hline & \times 2 & \times 2 & \times 2 & \times 2 \end{array}$$

S119. Ans.(a)**Sol.** Missing number = 354

Pattern of series -

$$\begin{array}{ccccccc} 138 & 210 & 66 & 282 & -6 & \boxed{354} \\ \hline & +72 & -144 & +216 & -288 & +360 \\ \hline & 72 & 72 & 72 & 72 \end{array}$$

S120. Ans.(b)**Sol.** Missing number = 110

Pattern of series -

$$\begin{array}{ccccccc} 72 & 80 & 71 & 135 & \boxed{110} & 326 \\ \hline & +8 & -9 & +64 & -25 & +216 \\ \hline & \uparrow & \uparrow & \uparrow & \uparrow & \uparrow \\ & (2)^3 & (3)^2 & (4)^3 & (5)^2 & (6)^3 \end{array}$$