

## ESIC SSO Manager Phase-I Memory Based Paper (Solutions)

### S1. Ans.(a)

**Sol.** There is an error in the part (A) of the sentence. There is no plural form of 'sheaf'. So, 'sheafs' is erroneous.

Hence, option (a) is the correct answer.

### S2. Ans.(c)

**Sol.** The sentence is erroneous. In the part (C), instead of 'was', 'were' should be used because the subject of the sentence 'Those athletes' is PLURAL in Number.

Hence, option (c) is the correct answer.

### S3. Ans.(b)

**Sol.** The sentence is erroneous. There is an error in the part (B). Instead of 'has', 'had' used be used because the event mentioned in the part (A) is an event of Past while the event mentioned in (B) is the Past of the Past. So, the event mentioned in the part (B) should be in Past Perfect Tense.

Hence, option (b) is the correct answer.

### S4. Ans.(d)

**Sol.** The sentence is erroneous. There is an error in the part (D) of the sentence. Instead of 'more', 'most' should be used because when more than two things or men are compared with a thing or men, then we use adjective of Superlative Degree.

Hence, option (d) is the correct answer.

### S5. Ans.(e)

**Sol.** The given sentence is grammatically correct and contextually meaningful.

Hence, option (e) is the correct answer.

### S6. Ans.(b)

**Sol.** The passage above discusses some recent changes where hindi films now show that 'character actors' no longer have a secondary status. To put forward these changes, the writer has used the context of Zoya Akhtar's Gully Boy, which will enable new story telling in hindi films.

Arranging the sentences given above logically will give the following arrangement:

**(D)** For a very long time, Hindi cinema used character actors as comic relief, or they essayed prototypical aunts, uncles, parents or friends.



**BILINGUAL**

**ESIC SOCIAL SECURITY OFFICER (SSO)**

**Phase I + Phase II + Phase III**

**Complete Target Batch**

Starts Mar 21, 2022 10 AM to 5:30 PM

**(C)** Very few received an independent storyline or back story unless it impacted the hero or the heroine of the film.

**(B)** A new crop of Hindi films is, however, attempting to change that portrayal.

**(F)** In many recent films, 'character actors' successfully eclipsed the main lead and attracted more attention for their performance.

**(E)** In this context, Zoya Akhtar's Gully Boy stands out for many reasons: its nuanced storytelling and effort in finding other stories of Dharavi beyond the known and the obvious.

**(A)** It also excels in bringing to the forefront a bunch of 'character actors' who make every bit of their screen time memorable.

Therefore, the correct sequence of sentences will be **DCBFEA**.

Hence, the correct answer is option (b).

### **S7. Ans.(d)**

**Sol.** The passage above discusses some recent changes where hindi films now show that 'character actors' no longer have a secondary status. To put forward these changes, the writer has used the context of Zoya Akhtar's Gully Boy, which will enable new story telling in hindi films.

Arranging the sentences given above logically will give the following arrangement:

**(D)** For a very long time, Hindi cinema used character actors as comic relief, or they essayed prototypical aunts, uncles, parents or friends.

**(C)** Very few received an independent storyline or back story unless it impacted the hero or the heroine of the film.

**(B)** A new crop of Hindi films is, however, attempting to change that portrayal.

**(F)** In many recent films, 'character actors' successfully eclipsed the main lead and attracted more attention for their performance.

**(E)** In this context, Zoya Akhtar's Gully Boy stands out for many reasons: its nuanced storytelling and effort in finding other stories of Dharavi beyond the known and the obvious.

**(A)** It also excels in bringing to the forefront a bunch of 'character actors' who make every bit of their screen time memorable.

Therefore, the correct sequence of sentences will be **DCBFEA**.

Hence, the correct answer is option (d).

### **S8. Ans.(c)**

**Sol.** The passage above discusses some recent changes where hindi films now show that 'character actors' no longer have a secondary status. To put forward these changes, the writer has used the context of Zoya Akhtar's Gully Boy, which will enable new story telling in hindi films.

Arranging the sentences given above logically will give the following arrangement:

**(D)** For a very long time, Hindi cinema used character actors as comic relief, or they essayed prototypical aunts, uncles, parents or friends.

**(C)** Very few received an independent storyline or back story unless it impacted the hero or the heroine of the film.

**(B)** A new crop of Hindi films is, however, attempting to change that portrayal.

**(F)** In many recent films, 'character actors' successfully eclipsed the main lead and attracted more attention for their performance.

**(E)** In this context, Zoya Akhtar's Gully Boy stands out for many reasons: its nuanced storytelling and effort in finding other stories of Dharavi beyond the known and the obvious.

**(A)** It also excels in bringing to the forefront a bunch of 'character actors' who make every bit of their screen time memorable.

Therefore, the correct sequence of sentences will be **DCBFEA**.

Hence, the correct answer is option (c).

**S9. Ans.(c)**

**Sol.** The passage above discusses some recent changes where hindi films now show that 'character actors' no longer have a secondary status. To put forward these changes, the writer has used the context of Zoya Akhtar's Gully Boy, which will enable new story telling in hindi films.

Arranging the sentences given above logically will give the following arrangement:

**(D)** For a very long time, Hindi cinema used character actors as comic relief, or they essayed prototypical aunts, uncles, parents or friends.

**(C)** Very few received an independent storyline or back story unless it impacted the hero or the heroine of the film.

**(B)** A new crop of Hindi films is, however, attempting to change that portrayal.

**(F)** In many recent films, 'character actors' successfully eclipsed the main lead and attracted more attention for their performance.

**(E)** In this context, Zoya Akhtar's Gully Boy stands out for many reasons: its nuanced storytelling and effort in finding other stories of Dharavi beyond the known and the obvious.

**(A)** It also excels in bringing to the forefront a bunch of 'character actors' who make every bit of their screen time memorable.

Therefore, the correct sequence of sentences will be **DCBFEA**.

Hence, the correct answer is option (c).

**S10. Ans.(a)**

**Sol.** The passage above discusses some recent changes where hindi films now show that 'character actors' no longer have a secondary status. To put forward these changes, the writer has used the context of Zoya Akhtar's Gully Boy, which will enable new story telling in hindi films.

Arranging the sentences given above logically will give the following arrangement:

**(D)** For a very long time, Hindi cinema used character actors as comic relief, or they essayed prototypical aunts, uncles, parents or friends.

**(C)** Very few received an independent storyline or back story unless it impacted the hero or the heroine of the film.

**(B)** A new crop of Hindi films is, however, attempting to change that portrayal.

**(F)** In many recent films, 'character actors' successfully eclipsed the main lead and attracted more attention for their performance.

**(E)** In this context, Zoya Akhtar's Gully Boy stands out for many reasons: its nuanced storytelling and effort in finding other stories of Dharavi beyond the known and the obvious.

**(A)** It also excels in bringing to the forefront a bunch of 'character actors' who make every bit of their screen time memorable.

Therefore, the correct sequence of sentences will be **DCBFEA**.

Hence, the correct answer is option (a).

**S11. Ans.(b)**

**Sol.** To validate the answer, refer to the 1st sentence of the 2nd paragraph, "Urban voters feel that loan waiver is an abuse of tax payer's money and the practice will make the farmer complacent, who will look for waivers by successive governments. The reality is that farmers' debts have accumulated." Alternatives (I) and (III) are evidently precise according to the given context. However, these lines mentions that in spite of waiving loans, farmers' debts have still accumulated. Therefore, alternative (II) fails to act as an impediment of waiving loan. Hence option (b) is the most suitable answer choice.

**S12. Ans.(d)**

**Sol.** Considerate [adjective] means careful not to inconvenience or harm others.

Benevolent [adjective] means well meaning and kindly.

Barbaric [adjective] means savagely cruel.

Negligent [adjective] means failing to take proper care over something.

Atrocious [adjective] means horrifyingly wicked.

Refer to the last sentence of the 1st paragraph "I have met political leaders and have proposed steps to help the farm sector, but they are only interested in consolidating their votes, rather than building the nation." These lines indicate that the politicians in our country are ignorant regarding the hardships facing by the farmers. Thus, option (d) is the most suitable answer choice.

**S13. Ans.(e)**

**Sol.** None of the given statements is incorrect based on the context of the passage. All the alternatives are mentioned in the paragraphs 2<sup>nd</sup> and 3<sup>rd</sup> of the passage. Therefore, option (e) is the most suitable answer choice.

**S14. Ans.(e)**

**Sol.** Refer to the 2nd sentence of the 5<sup>th</sup> paragraph, "These bills pertain to complete debt relief and MSP to be fixed at the rate of one-and-a-half times the production cost, along with the guarantee of procurement.". After carefully reading the lines it can be understood that all the given alternatives are mentioned in these lines as agenda of the bill. Hence, option (e) is the most suitable answer choice.

**S15. Ans.(a)**

**Sol.** Since the passage is describing about the increasing impediments for farmers, it has also suggested schemes and policies that will help farmers to overcome their crop debts. Hence, option (a) is the most suitable answer choice.

**S16. Ans.(e)**

**Sol.** Complacent means showing smug or uncritical satisfaction with oneself or one's achievements. Smug means having or showing an excessive pride in oneself or one's achievements. Since they are synonymous to each other; option (e) is the most suitable answer choice.

Paradigm means a typical example or pattern of something; a pattern or model.

Fable means a short story, typically with animals as characters, conveying a moral.

Ferocious means savagely fierce, cruel, or violent.

Dubious means hesitating or doubting.

**S17. Ans.(b)**

**Sol.** Accumulated means gather together or acquire an increasing number or quantity of. Amass means gather together or accumulate (a large amount or number of material or things) over a period of time. Since they are synonymous to each other; option (b) is the most suitable answer choice.

Allay means diminish or put at rest (fear, suspicion, or worry).

Subjugate means bring under domination or control, especially by conquest.

Dissipate means (with reference to a feeling or emotion) disappear or cause to disappear.

Dwindle means diminish gradually in size, amount, or strength.

**S18. Ans.(a)**

**Sol.** Waiver means an act or instance of waiving a right or claim. Dispensation means exemption from a rule or usual requirement. Since they are synonymous to each other; option (a) is the most suitable answer choice.

Obsolete means no longer produced or used; out of date.

Vengeance means punishment inflicted or retribution exacted for an injury or wrong.

Heinous means (of a person or wrongful act, especially a crime) utterly odious or wicked.

Accomplish means achieve or complete successfully

**S19. Ans.(b)**

**Sol.** Among the given highlighted words, the spellings “voilin” and “lesons” are incorrect. The correct spellings are “violin” and “lessons”. The other highlighted words have the precise spelling of the words. Hence, option (b) is the most suitable answer choice.

**S20. Ans.(c)**

**Sol.** Among the given highlighted words, the spellings “humbel”, “snoty” and “superclious” are incorrect. The correct spellings are “humble”, “snotty” and “supercilious”. The other highlighted words have the precise spelling of the words. Hence, option (c) is the most suitable answer choice.

Snotty means having or showing a superior or conceited attitude.

Supercilious means behaving or looking as though one thinks one is superior to others.

**S21. Ans.(b)**

**Sol.** Among the given highlighted words, the spellings “althuogh” and “increduluos” are incorrect. The correct spellings are “although” and “incredulous”. The other highlighted words have the precise spelling of the words. Hence, option (b) is the most suitable answer choice.

Incredulous means (of a person or their manner) unwilling or unable to believe something.

**S22. Ans.(b)**

**Sol.** Among the given highlighted words, the spellings “reaserchers” and “bugos” are incorrect. The correct spellings are “researchers” and “bogos”. The other highlighted words have the precise spelling of the words. Hence, option (b) is the most suitable answer choice.

**S23. Ans.(b)**

**Sol.** A ‘Complement’ is something that completes something else whereas a ‘Compliment’ is a nice thing to say. So in options (a), (c) the correct word should be ‘Complement’ and usage of ‘Complimentary’ in option (d) is grammatically incorrect because Complimentary is Adjective instead a Verb should be used.

**S24. Ans.(d)**

**Sol.** ‘Flaunt’ means ‘to show off’, so usage of the word in option (a), (b), (c) is not correct. Instead of ‘Flaunt’, ‘Flout’ should be used which means ‘to defy’.

Hence, option (d) is the correct answer.



TEST SERIES  
Bilingual

RBI  
ASSISTANT 2022  
**PRIME**

55+ TOTAL TESTS

**S25. Ans.(b)**

**Sol.** 'Infer' means to deduce something that hasn't been stated directly. So none of the option except option (b) is correct with respect to the correct usage of the word, instead 'Imply' should be used which means 'to hint at something without saying it directly'.

Hence, option (b) is the correct answer.

**S26. Ans.(e)**

**Sol.** The hint for the blank can be derived from the use of the words 'legal' and 'drug'. 'Non-violent drug offenses' is a coherent phrase. Among the given options, the word 'offenses' provide the correct context to the blank.

Hence, option (e) is the correct answer.

**S27. Ans.(d)**

**Sol.** Decree [noun] means '*an official order that has the force of law*';

A government can be announced officially through a presidential order.

Among the given options, the word 'decree' provides the correct context to the blank.

Hence, option (d) is the correct answer.

**S28. Ans.(b)**

**Sol.** Avid [adjective] means '*having or showing a keen interest in or enthusiasm for something*';

Avinash seems to be a writer. A writer is generally someone who also reads *enthusiastically*.

Among the given options, the word 'avid' provides the correct context to the blank.

Hence, option (b) is the correct answer.

**S29. Ans.(c)**

**Sol.** Turmoil [noun] means '*a state of great disturbance, confusion, or uncertainty*';

A mischievous is someone who creates problems or disturbances for others. If the ransom demands of his weren't met, he is likely to create disturbance or problem for the world.

Among the given options, the word 'turmoil' provides the correct context to the blank.

Hence, option (c) is the correct answer.

**S30. Ans.(a)**

**Sol.** Tyrant [noun] means '*a cruel and oppressive ruler*';

The hint for the answer can be derived from the phrase 'the threat of terrorists' and the fact that the blank is connected with the mentioned phrase through 'and'. The blank should be filled by a negative word.

Among the given options, the word 'tyrants' provides the correct context to the blank.

Hence, option (a) is the correct answer.

**Solutions (31-35):**

Word	Code
Blanket	xy
Bed	in
Pillow	gy
Radio	pq
Chair	mn
Lamp	ab

**S31. Ans.(d)**

**S32. Ans.(c)**

**S33. Ans.(e)**

**S34. Ans.(a)**

**S35. Ans.(d)**

**Solutions (36-40):** Four boxes are placed between C and E and neither of them is on top or bottom of the stack. There are two boxes between C and H. So from this there are two possible cases----

Case-1      Case-2

Box	Box
E	C
H	
	H
C	E



There are as many boxes between A and E as between A and F. D is not placed just below or just above E. G is not placed just below or just above H. So, B is placed immediately above H in case1 and immediately below H in case2.

**Case-1 Case-2**

Box	Box
G	F
E	C
B	D
H	A
A	H
D	B
C	E
F	G

Now, it is given that the number of boxes places above H is more than that placed below H. Therefore, **case 1** will be eliminated. The final arrangement:

Box
F
C
D
A
H
B
E
G

S36. Ans.(c)

S37. Ans.(b)

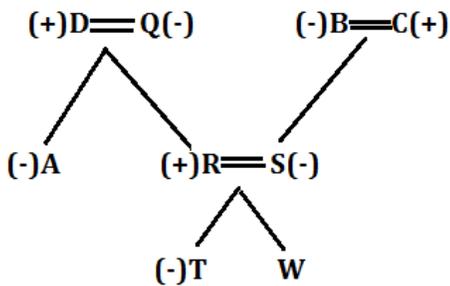
S38. Ans.(d)

S39. Ans.(a)

S40. Ans.(e)

**Solutions (41-43):**

Refer to the diagram below:



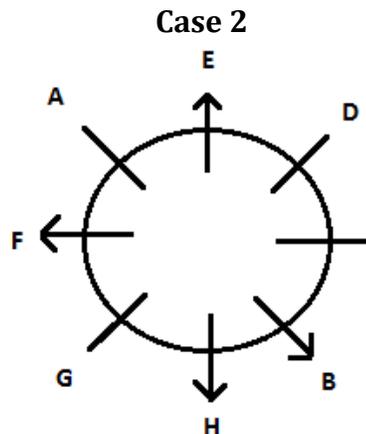
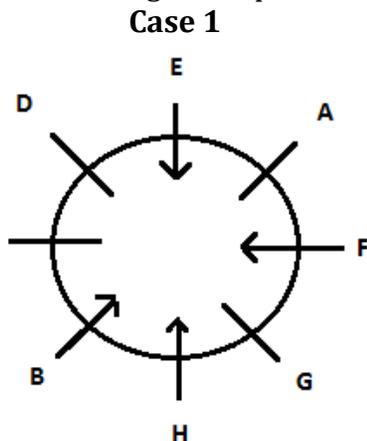
S41. Ans.(b)

S42. Ans.(d)

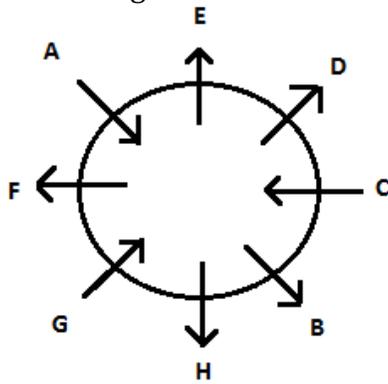
**Sol.** Since, the gender of W is not defined, it can't be determined.

S43. Ans.(e)

**Solutions (44-48):** H sits opposite to E and both faces same direction. A is an immediate neighbor of E. D sits to the immediate right of E. G sits to the immediate left of F. G is not a neighbor of A. We get two possibilities –



Now, immediate neighbors of C face same direction. Immediate neighbors of E face opposite direction. G and C face same direction as A. Not more than four people face inside. This will eliminate Case 1. So the final arrangement will be -



S44. Ans.(b)

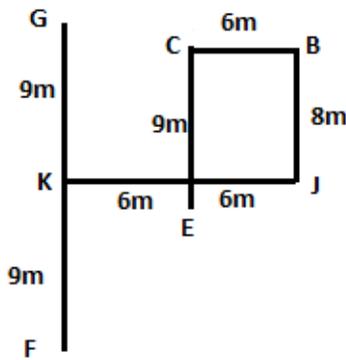
S45. Ans.(b)

S46. Ans.(d)

S47. Ans.(e)

S48. Ans.(c)

Solutions (49-50):



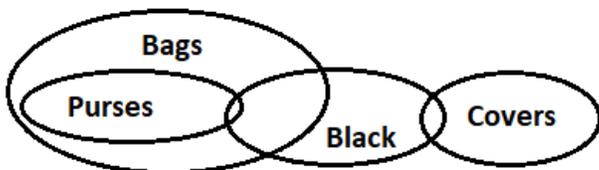
S49. Ans.(b)

S50. Ans.(d)

Solutions (51-55):

S51. Ans.(b)

Sol.



For I- Since there is no direct relation between the elements Cover and purse, therefore we cannot conclude that some covers are purses.

For II- From the venn diagram, it is clear that All purses are bags and some purses are Black. So, some bags are definitely black. Hence, the conclusion II follows.

**NRA-CET Ready**

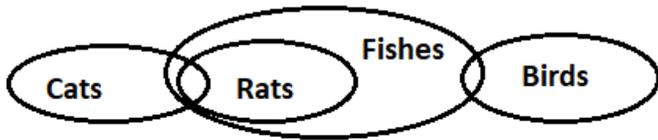
**BANK MAHA PACK**

Live Class, Video Course, Test Series, eBooks

Bilingual (with eBooks)

S52. Ans.(b)

Sol.

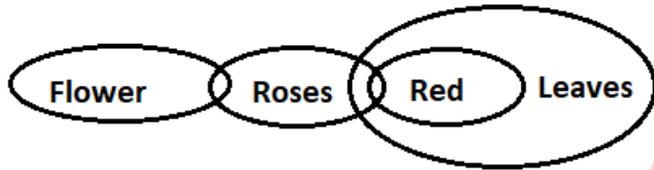


For I- From the venn diagram, it is clear that all rats are fishes. Hence, we cannot say that some fishes are not rats. So, the conclusion I does not follows.

For II- From the venn diagram, it is clear that there is no direct relation between rats and birds. Hence, the possibility case will hold true. So, conclusion II follows.

S53. Ans.(d)

Sol.

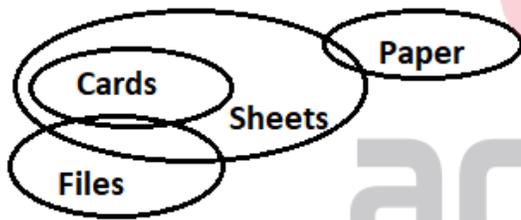


For I- Since there is no direct relation between the elements Flowers and red, therefore we cannot conclude that Some flowers can never be red.

For II- Since there is no direct relation between the elements Flowers and leaves, therefore we cannot conclude that some leaves are flower.

S54. Ans.(e)

Sol.

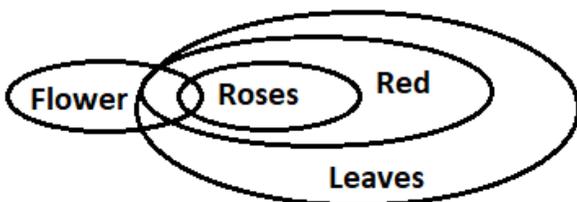


For I- Since there is no direct relation between the elements Cards and paper, therefore the possibility case will hold true. So, Conclusions I follows.

For II- Since there is no direct relation between the elements paper and files, therefore the possibility case will hold true. So, Conclusions II follows.

S55. Ans.(e)

Sol.

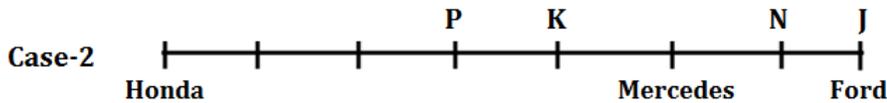
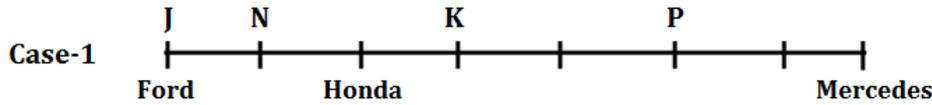


For I- From the venn diagram, it is clear that some flower is rose, all roses are red and all red are leaves. . So, conclusion I follows.

For II- From the venn diagram, it is clear that all roses are red and all red are leaves. Hence, some case will definitely follow. So, the conclusion II follows.

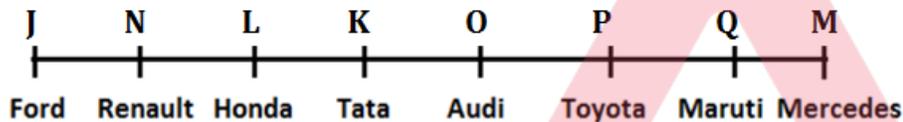
**Solutions (56-60):** P is parking his car third to the right of the one who has Honda car. Mercedes car is parked second to the right of P. J and N are parking their car adjacent to each other. Neither J nor N has either Honda or Mercedes car. Neither J nor N park their car adjacent to P. Only one person parks his car between N and K. N does not have Ford car. The one who has Ford car parks his car at the extreme end of the line.

So, there are two possible cases----



Q parks his car third to the right of the one who has Tata car. Neither J nor N has Tata car. Q does not have Mercedes car. This will eliminate Case-2 As no place is left for Q.

Now, Only two persons park their car between N and the one who has Audi car. Maruti car is parked on the immediate left of the M. L parks his car second to left of one who has Audi car. Final arrangement will be---



S56. Ans.(a)

S57. Ans.(a)

S58. Ans.(d)

S59. Ans.(d)

S60. Ans.(a)

**Solutions (61-65):**

S61. Ans.(b)

Sol. Conclusions: I.  $J < O$  (False)    II.  $M > O$  (True)

S62. Ans.(d)

Sol. Conclusions: I.  $C > H$  (False)    II.  $D > I$  (False)

S63. Ans.(e)

Sol. Conclusions: I.  $S < X$  (True)    II.  $U < Y$  (True)

S64. Ans.(a)

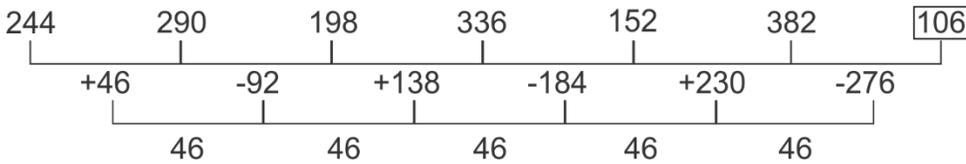
Sol. Conclusions: I.  $B < E$  (True)    II.  $A > F$  (False)

S65. Ans.(c)

Sol. Conclusions: I.  $X > B$  (False)    II.  $X = B$  (False)

**S66. Ans.(d)****Sol.** Wrong number = 110

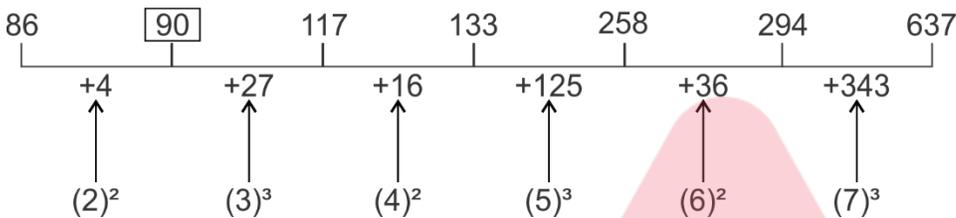
Pattern of series -



So, there should be 106 in place of 110.

**S67. Ans.(e)****Sol.** Wrong number = 92

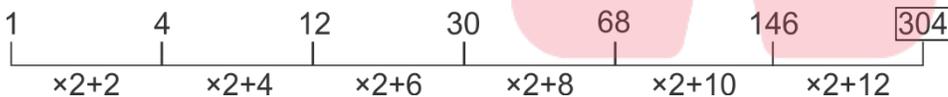
Pattern of series -



So, there should be 90 in place of 92.

**S68. Ans.(b)****Sol.** Wrong number = 306

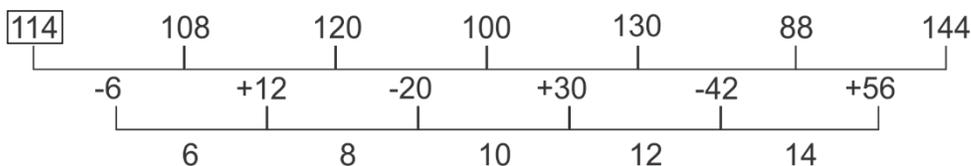
Pattern of series -



So, there should be 304 in place of 306.

**S69. Ans.(a)****Sol.** Wrong number = 110

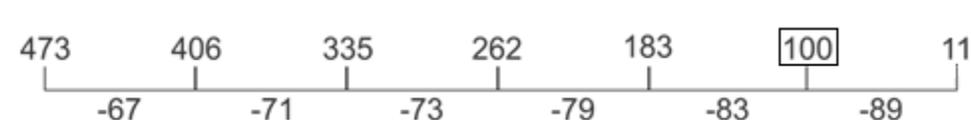
Pattern of series -



So, there should be 114 in place of 110.

**S70. Ans.(a)****Sol.** Wrong number = 99

Pattern of series -



So, there should be 100 in place of 99.

**S71. Ans.(d)**

**Sol.** Let the total work be 120 units. (LCM of 20 & 24)

Efficiency of A = 6 units/day

Efficiency of B = 5 units/day

ATQ,

$$6 \times X + 5 \times 12 = 120$$

$$\Rightarrow X = 10 \text{ days.}$$

**S72. Ans.(e)**

**Sol.** Let the investment of A, B & C be Rs. 4x, 6x & 9x respectively.

Let the period of investment of B & C be  $t_1$  &  $t_2$  months respectively.

Ratio of profit share

$$A : B : C = 4x \times 12 : 6x \times t_1 : 9x \times t_2$$

ATQ,

$$\frac{4x \times 12}{6x \times t_1} = \frac{4}{5} \Rightarrow t_1 = 10 \text{ months.}$$

$$\text{and, } \frac{4x \times 12}{9x \times t_2} = \frac{4}{6} \Rightarrow t_2 = 8 \text{ months.}$$

$$\text{Required sum} = t_1 + t_2 = 18 \text{ months.}$$

**S73. Ans.(a)**

**Sol.** Let first number and second number be x and y respectively

$$\text{Then, } 40 \times \frac{x}{100} = 30 \times \frac{y}{100}$$

$$4x = 3y \dots \dots \dots (i)$$

$$\text{And } \frac{x+y}{2} = x + 30$$

$$y - x = 60 \dots \dots \dots (ii)$$

From (i) and (ii)

$$y = 240$$

$$75\% \text{ of second number} = 180$$

**S74. Ans.(d)**

**Sol.** Let present age of B be 8x years

Then present age of A = 6x years

And present age of C = 5x years

ATQ

$$\frac{8x + 6x + 5x}{3} = \frac{95}{3}$$

$$x = 5$$

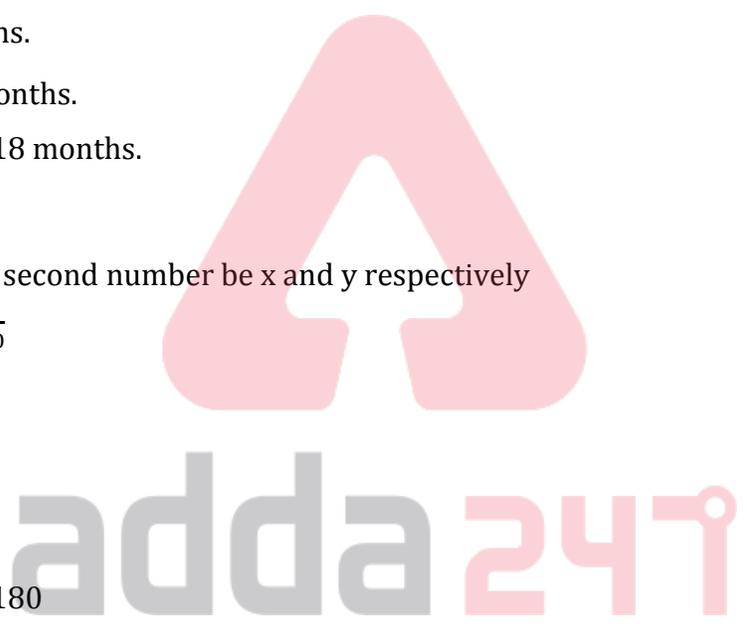
$$\text{Required sum} = 11x + 10 = 65 \text{ years}$$

**S75. Ans.(d)**

$$\text{Sol. Required number} = (82 \times 5) - (65 \times 2) - (100 \times 2)$$

$$= 410 - 130 - 200$$

$$= 80$$



**BILINGUAL**

**Bank Prime Test Pack**

IBPS | SBI | LIC | RBI | Others

**1200+ Total Tests**

**S76. Ans.(d)**

**Sol.** Girls playing Hot Potato & Chess together =  $800 \times \frac{10}{100} \times \frac{3}{5} + 800 \times \frac{30}{100} \times \frac{5}{12} = 48 + 100$   
 $= 148$

Boys playing Table Tennis =  $800 \times \frac{18}{100} \times \frac{25}{36} = 100$

So, required % =  $\frac{148 - 100}{100} \times 100 = 48\%$  more

**S77. Ans.(e)**

**Sol.** Average of girls playing Chess, Table Tennis and Card Games

$$= \frac{\left[800 \times \frac{30}{100} \times \frac{5}{12} + 800 \times \frac{18}{100} \times \frac{11}{36} + 800 \times \frac{24}{100} \times \frac{1}{2}\right]}{3}$$

$$= \frac{100 + 44 + 96}{3} = 80$$

Number of Boys playing Hot Potato and Card Games together

$$= 800 \times \frac{10}{100} \times \frac{2}{5} + 800 \times \frac{24}{100} \times \frac{1}{2} = 32 + 96 = 128$$

Required ratio =  $\frac{80}{128} = \frac{5}{8} = 5 : 8$

**S78. Ans.(d)**

**Sol.** Boys playing Chess and Table Tennis together =  $800 \times \frac{30}{100} \times \frac{7}{12} + 800 \times \frac{18}{100} \times \frac{25}{36}$   
 $= 140 + 100 = 240$

Girls playing Hot Potato, Treasure Hunt and Card Games together

$$= 800 \times \frac{10}{100} \times \frac{3}{5} + 800 \times \frac{12}{100} \times \frac{7}{12} + 800 \times \frac{24}{100} \times \frac{1}{2}$$

$$= 48 + 56 + 96$$

$$= 200$$

Required % =  $\frac{240}{200} \times 100 = 120\%$

**S79. Ans.(c)**

**Sol.** Number of students who leaves Carrom =  $800 \times \frac{6}{100} \times \frac{75}{100} = 36$

Numbers of girls who leaves Carrom =  $800 \times \frac{12}{100} \times \frac{7}{12} \times \frac{25}{100} = 14$

So,

Number of girls who still plays Carrom =  $800 \times \frac{6}{100} \times \frac{3}{8} - 14 = 4$

Number of boys who still plays Carrom =  $800 \times \frac{6}{100} \times \frac{5}{8} - (36 - 14)$

$$= 30 - 22$$

$$= 8$$

So, required ratio =  $\frac{8}{4} = \frac{2}{1} = 2 : 1$

**S80. Ans.(a)**

**Sol.** Percentage distribution of boys playing Treasure Hunt  $12 \times \frac{5}{12} = 5\%$

So, required angle =  $\frac{360}{100} = \frac{x}{5}$

$$= 18^\circ$$

**S81. Ans.(d)**

**Sol.** Let speed of boat in still water and speed of current be  $x$  km/hr and  $y$  km/hr respectively.

ATQ,

$$9 = \frac{60}{x+y} + \frac{35}{x-y} \quad \dots\dots\dots(i)$$

$$12 = \frac{75}{x+y} + \frac{49}{x-y} \quad \dots\dots\dots(ii)$$

From (i) and (ii)

$$x + y = 15$$

$$\& x - y = 7$$

$\therefore$  speed of current = 4 kmph

**S82. Ans.(b)**

**Sol.** Let the cost price and marked price be Rs  $3x$  and Rs  $5x$  respectively

And let the loss and discount be Rs  $y$  and Rs  $4y$  respectively

ATQ

$$3x - y = 5x - 4y$$

$$3y = 2x$$

$$\text{Marked price} = \text{Rs } \frac{15}{2}y$$

$$\text{Required discount \%} = \frac{4y}{\frac{15}{2}y} \times 100 = 53\frac{1}{3}\%$$

**S83. Ans.(e)**

**Sol.** Let the sum be Rs  $P$  and rate of interest be  $R\%$  per annum

ATQ

$$\frac{P\left[\left(1+\frac{R}{100}\right)^2-1\right]}{P\left[\left(1+\frac{R}{100}\right)^4-1\right]} = \frac{252}{556.92}$$

$$\text{Let } \left[1 + \frac{R}{100}\right]^2 = x$$

$$\text{Then } \frac{x-1}{x^2-1} = \frac{100}{221}$$

$$\frac{x-1}{(x-1)(x+1)} = \frac{100}{221}$$

$$\Rightarrow x = \frac{121}{100} \quad \text{i. e. } \left[1 + \frac{R}{100}\right]^2 = \frac{121}{100}$$

$$\Rightarrow R = 10\%$$

$$P \left[ \left(1 + \frac{R}{100}\right)^2 - 1 \right] = 252$$

$$P \left[ \left(1 + \frac{10}{100}\right)^2 - 1 \right]$$

$$\text{And } P \times \frac{21}{100} = 252 \Rightarrow P = \text{Rs } 1200$$

**S84. Ans.(d)**

$$\text{Sol. required percentage} = \frac{320+280}{320+180} \times 100$$

$$= \frac{600}{500} \times 100 = 120\%$$

**S85. Ans.(a)**

**Sol.** required difference =  $360 - 240 = 120$  runs

**S86. Ans.(d)**

**Sol.** required ratio =  $\frac{320+240+280+380+250}{360+320+220+300+180} = \frac{1470}{1380}$   
 $= \frac{49}{46}$

**S87. Ans.(b)**

**Sol.** required percentage =  $\frac{300-240}{300} \times 100$   
 $= 20\%$

**S88. Ans.(c)**

**Sol.** from graph, it is clearly visible that Australia won 3 matches i.e. third, fourth and fifth match.

**S89. Ans.(e)**

**Sol.** required average =  $\frac{360+320+220+300}{4} = \frac{1200}{4}$   
 $= 300$  runs

**Solutions (90-95):**

Marks of C =  $\frac{50}{100} \times 200 = 100$

Marks of E =  $\frac{100}{125} \times 100 = 80$

Marks of B = marks of E = 80

Marks of D =  $\frac{162.5}{100} \times 80 = 130$

Marks of A =  $\frac{12}{8} \times 80 = 120$

Marks of F =  $\frac{9}{8} \times 80 = 90$

**S90. Ans.(c)**

**Sol.** highest marks scored by D.

**S91. Ans.(a)**

**Sol.** passing marks =  $\frac{40}{100} \times 200 = 80$

Required % =  $\frac{130-80}{80} \times 100 = 62.5\%$

**S92. Ans.(e)**

**Sol.** required ratio =  $80 : 130 : 90 = 8 : 13 : 9$

**S93. Ans.(b)**

**Sol.** required average =  $\frac{120+80+100+130+80+90}{6} = 100$

**S94. Ans.(d)****Sol.** since X scores more marks than B but less than A

$$80 < X < 120$$

$$\text{or, } 40\% < X < 60\%$$

Only possible marks, 45% = 90 &amp; 54% = 108

**S95. Ans.(d)****Sol.** Required percentage =  $\frac{(80+80)-120}{120} \times 100 = 33.33\%$ **S96. Ans.(c)****Sol.**

**I.**  $x^2 + 12x + 35 = 0$

$$x^2 + 7x + 5x + 35 = 0$$

$$(x + 7)(x + 5) = 0$$

$$\therefore x = -5 \text{ or } -7$$

**II.**  $y^2 + 9y + 20 = 0$

$$y^2 + 5y + 4y + 20 = 0$$

$$(y + 5)(y + 4) = 0$$

$$y = -5, -4$$

$$\Rightarrow x \leq y$$

**S97. Ans.(d)****Sol.**

**I.**  $x^2 - 15x + 54 = 0$

$$x^2 - 9x - 6x + 54 = 0$$

$$(x - 9)(x - 6) = 0$$

$$\therefore x = 9 \text{ or } 6$$

**II.**  $y^2 - 23y + 132 = 0$

$$y^2 - 11y - 12y + 132 = 0$$

$$(y - 11)(y - 12) = 0$$

$$y = 11 \text{ or } 12$$

$$\therefore x < y$$

**S98. Ans.(e)****Sol.**

**I.**  $6x^2 + 5x + 1 = 0$

$$6x^2 + 3x + 2x + 1 = 0$$

$$3x(2x + 1) + 1(2x + 1) = 0$$

$$x = -\frac{1}{2} \text{ or } -\frac{1}{3}$$

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

$$15y^2 + 6y + 5y + 2 = 0$$

$$3y(5y + 2) + 1(5y + 2) = 0$$

$$\therefore y = -\frac{2}{5} \text{ or } -\frac{1}{3}$$

 $\therefore$  no relation can be established

**S99. Ans.(e)**

**Sol.**

**I.**  $x^2 - 3x - 28 = 0$

$$x^2 - 7x + 4x - 28 = 0$$

$$x(x - 7) + 4(x - 7) = 0$$

$$\therefore x = 7 \text{ or } -4$$

**II.**  $y^2 - y - 12 = 0$

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

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

$$\therefore y = -3 \text{ or } 4$$

$\therefore$  no relation can be established

**S100. Ans.(b)**

**Sol.**

**I.**  $x^2 - 2x - 3 = 0$

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

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

$$\therefore x = 3 \text{ or } -1$$

**II.**  $y^2 + 5y + 6 = 0$

$$y^2 + 3y + 2y + 6 = 0$$

$$(y + 2)(y + 3) = 0$$

$$\therefore y = -2 \text{ or } -3$$

$$\therefore x > y$$

TEST SERIES  
BILINGUAL



**ESIC SSO 2022  
MANAGER  
PHASE-I & II**

45 Tests | eBooks

