

IBPS SPECIALIST OFFICER PRELIMS-2021. ISP-2021-110021 HINTS & SOLUTIONS

ANSWER KEY

1. (4)	21. (1)	41. (4)	61. (1)	81. (2)	101. (5)	121. (4)	141. (3)
2. (4)	22. (4)	42. (2)	62.(2)	82. (1)	102. (3)	122. (1)	142. (4)
3. (4)	23. (2)	43. (4)	63. (4)	83. (1)	103. (3)	123. (3)	143. (1)
4. (3)	24. (1)	44. (5)	64. (2)	84. (3)	104. (2)	124. (5)	144. (3)
5. (4)	25. (4)	45. (2)	65. (1)	85. (1)	105. (1)	125. (4)	145. (4)
6. (1)	26. (3)	46. (1)	66. (1)	86. (5)	106. (4)	126. (1)	146. (5)
7. (2)	27. (2)	47. (3)	67. (3)	87. (1)	107. (2)	127. (1)	147. (4)
8. (5)	28. (2)	48.(1)	68. (2)	88. (3)	108. (5)	128. (3)	148. (2)
9. (4)	29. (1)	49. (2)	69. (1)	89. (4)	109. (3)	129. (4)	149. (2)
10. (3)	30. (3)	50. (5)	70. (3)	90. (5)	110. (3)	130. (4)	150. (5)
11. (4)	31. (2)	51. (5)	71. (2)	91. (1)	111. (5)	131. (1)	
12. (1)	32. (5)	52. (4)	72. (1)	92. (2)	112. (3)	132. (2)	
13. (2)	33. (1)	53. (5)	73. (5)	93. (3)	113. (5)	133. (5)	
14. (4)	34. (1)	54. (5)	74. (2)	94. (4)	114. (4)	134. (2)	
15. (1)	35. (3)	55. (4)	75. (4)	95. (3)	115. (5)	135. (3)	
16. (2)	36. (3)	56. (5)	76. (2)	96. (1)	116. (2)	136. (2)	
17. (2)	37. (2)	57. (2)	77. (1)	97. (1)	117. (4)	137. (3)	
18. (5)	38. (2)	58. (2)	78. (3)	98. (1)	118. (3)	138. (4)	
19. (4)	39. (2)	59. (3)	79. (2)	99. (2)	119. (4)	139. (1)	
20. (1)	40. (2)	60. (4)	80. (2)	100. (1)	120. (2)	140. (2)	



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- 1. (4) All other options except (4), are not correctly structured to bring out the correct and meaningful sentence. Other options change the complexion and meaning of the sentences given in the question. They also violate the rules of grammar and thus frame contextually different sentence. Hence (4) is the only option that frames the sentence both grammatically and contextually correct.
- 2. (4) There are errors in all three parts of the sentence and at the same time none of the options is correct enough to make the sentence grammatically correct.

The correct sentence after correcting the required grammatical errors is –

"The latest resolution bans the export of coal, iron, lead and seafood products, representing one-third of last year's exports and estimated to be worth \$ one billion."

It is to be noted that the sentence is in Present Tense as it can be verified from the phrase "The latest resolution", thus in the first part of the sentence, "bans" is the correct usage. In the second part, the use of determiner "which" is incorrect and in the third part, the use of "of" after "worth" is superfluous as the word "worth" itself means having income or property amounting to a specified sum. Hence (4) is the correct option.

- 3. (4) The phrasal verb "to open out" means become wider or extend its reach; to develop. Thus among the given three statements, both (II) and (III) explain the meaning of the phrase correctly without altering the meaning of the sentence. Hence (4) is the correct option.
- 4. (3) As mentioned in the question, if (C) is the first sentence then the correct order of other sentences after rearrangement is FAEDB.
- 5. (4) If sentence (D), "The most important of these is reduced stress for women, who suffer silently in its absence." is the last sentence of the paragraph, then we can infer that sentences EACFD are forming a coherent paragraph. Sentence (B) does not form a part of the coherent paragraph. The paragraph is about meeting sanitation goals through the policies like 'Swachh Bharat Mission'. The sentences talk about the survey after building toilets in rural areas while in sentence (B) the word 'his' has been used which is unrelated to other sentences. Hence option (4) is the correct choice.
- 6. (1) The only option (1) among the given options forms a meaningful and grammatically correct sentence. Other options are structurally incorrect and form contextually meaningless statements which make no harmony with the meaning of the sentences given in the question. Moreover, there are grammatical errors in sentences (2), (3) and (4), for example, there is a determiner 'a' or 'the' is missing before 'right'.

Hence (1) is the correct option.

7. (2) The first part of the sentence doesn't require any correction as the sentence is trying to bring out a generalized view. In the second part, the use of "are" suggests that the noun it defines must be plural. In this case, the phrase "life problem" should be replaced by "life's problems" to make the sentence grammatically correct. In the third part of the sentence, the infinitive "to" should be followed by the first form of the verb i.e. "facilitate" which means make (an

- action or process) easy or easier. Hence both the second and the third parts of the sentence require corrections to make the sentence grammatically correct.
- 8. (5) All the three paragraphs explain the problems that the Indian farmers are facing today along with the remedial measures that may help in diversifying the agricultural sector, especially the use of technology in agriculture can bring a revolution that would accelerate its growth. Thus all these factors comply with the required inference i.e. "Technology and its access is a critical factor for diversified agriculture." Hence (5) is the correct option.
- 9. (4) 'Premature, reminiscent' fits the two sentences most appropriately.

Premature means occurring or done before the usual or proper time; too early.

Reminiscent means tending to remind one of something. Both the sentences are giving the reference of some other scenario of different times, therefore, the word reminiscent is appropriate. Since the steps are taken without much of a thought, therefore, the word premature is correct.

- 10. (3) Passage (1) focuses on possible injuries that a child may suffer in sports, more specifically the brain damage that can cause severe mental disabilities and hamper one's growth. Similarly, passage (2) describes the effects of concussions and TBI that can be fatal to one's growth both physically and mentally. Thus both these paragraphs generate the same inference i.e. "Sports injury may cause damage to a child's mental growth." Whereas, passage (3) talks about the same issue but it is to be noted that it focuses only on the physical strain that a child's body undergoes before he/she attains maturity. Hence (3) is the correct option.
- 11. (4) Among the given options, only (4) forms the correct sentence which is correct and meaningful both in terms of grammar and context. Options (1), (2) and (3) do not follow the correct grammar structure to come out with the contextually correct sentence. In all these options, there are grammatical errors that make the sentence contextually meaningless. Hence (4) is the correct choice.
- 12. (1) In the first part of the sentence, "strength" should be replaced by its plural "strengths" as the noun following the phrase "one of the" is always a plural noun. Other two parts of the sentence are grammatically correct. Hence (1) is the correct option.
- 13. (2) **Terse** means sparing in the use of words; abrupt. Terse is generally used in cases of speech and both structurally and grammatically it is fitting both the sentences.

Belied means fail to fulfill or justify (a claim or expectation). It also fits both the sentences perfectly as in first sentence 'his' terse tone and sober expression were belied (failed to justify) while in the second his feelings were belied (fails to justify) by his words.

Digressive means characterized by digression; tending to depart from the subject and therefore it deviates in the context of the sentence.

14. (4) Passage (1) indicates that the problem of NPAs has already created unrest in the Indian economy which can well be inferred from the government's decision to bring the bankruptcy law which further requires the aid in the form of better reforms in this sector to acknowledge the ailing



- economy of the country. Similarly, paragraph (3) have rightly pointed out to the disaster which is looming over the economy because of NPAs.
- 15. (1) 'disempowerment, predates' fits the two sentences most appropriately.

Disempowerment means make (a person or group) less powerful or confident.

Predates meaning exist or occur at a date earlier than (something).

Disempowerment is correct in the first sentence as it is used to describe how powerless many black South Africans felt. The same emotion was felt by the people before the arrival of Narendra Modi, therefore, it is the correct choice.

These two sentences are comparing the scenario from two different timelines and therefore for the one which is in the past, we must use a word like predate.

The combination of disempowerment and predates is perfect.

- 16. (2) Here 'stepping stone' means an action or event that helps one to make progress towards a specified goal. Hence here the author has used this phrase which indicates that it is very crucial for university athletes to perform in Universiade so that they can participate in Major events. According to this, we see that only sentence (2) is correct. All the other explanations are not exactly correct.
- 17. (2) Referring to the second paragraph of the passage, we see that only sentence (II) is correct. Sentence (I) is wrong as here it is mentioned that Universiade will bring investments which is not mentioned in the paragraph. Sentence (III) is wrong as according to the paragraph, Taiwan has its diplomatic ties with the small countries; hence there is no need to build it. Hence only sentence (2) is correct.
- 18. (5) All of the above statements are true. All of the given statements contribute to make Taiwan as its own identity as a nation.
- 19. (4) Only sentence (4) is not linked to the fourth paragraph. All the other sentences can be inferred from the paragraph 4.It's about the Taiwan's challenges as a small nation.
- 20. (1) The author here is argumentative as his main issue here is regarding Taiwan and its challenges and efforts to make its own identity. Hence option (1) is the correct choice.
- 21. (1) 'As', 'since' or 'because' will be used in place of 'for' because 'for' is not used in starting of the sentence in the form of conjunction of reason.
- 22. (4) The use of 'with' is superfluous as the meaning of 'bag and baggage' itself is with bag and baggage. Hence 'with' is not be used before 'bag and baggage'.
- 23. (2) Use 'as' before 'to'. 'so... as' is the correct way to use it in a sentence.Ex. He is not so good as I expected.
- 24. (1) 'recovered' will be used in place of 'recover' as 'were' indicates that the incident happened in past tense. Hence 'recovered' is used.
- 25. (4) Use 'well- drawn' in place of 'well- drawned' as the past form of 'draw' is 'drew' and past participle form is 'drawn'. Hence there is no need to add 'ed' in 'drawn'.
- 26. (3) Use 'had' in place of 'has' because past perfect is used for past form of incident.
- 27. (2) The use of 'all' is superfluous as 'monthly expenses' includes all types of expenses.
- 28. (2) 'expire' will be used in place of 'will expire' as for future fixed programme, simple present tense is used. Ex. The college re- opens on Monday.

- 29. (1) Use 'had' in place of 'as' as the syntax 'Hardly+ had+ Subject+ V3', 'when + Subject + V2' is used.

 Ex. Hardly had I gone out when a friend of mine came.
- 30. (3) Use 'on' after 'later' as 'later' means 'after' while 'later on' means 'afterwards'.
- 31. (2) It can be easily noted that the sentence is conditional. Options (1) and (3) can be eliminated on the basis of differences in forming correct meanings; also the use of the phrase "to reject asylum seekers" makes both the sentences contextually incorrect. Option (4) is wrong as the sentence is grammatically incorrect and does not add meaning to the actual sentence. Hence among all, only the option (2) is correct enough to make the sentence both grammatically correct and contextually meaningful.
- 32. (5) The given sentence is grammatically correct. Hence it doesn't require any correction.
- 33. (1) The phrase "turn the clock back" means to try to return to the past. Thus among the three given statements, only statement (I) brings out the clear and appropriate meaning of the phrase given in bold in the sentence without altering its meaning. Other two sentences fail to express the correct meaning of the sentence. Hence (1) is the correct option.
- 34. (1) The word "condemned" means express complete disapproval of; censure. It fits into both the sentences perfectly as in the first case Myanmar deplored the recent terror attacks in India and in the second case a person criticizes an immoral act.

The other word "perpetrated" means carry out or commit (a harmful, illegal, or immoral action). Once again this word adds meaning to both the sentences. Other words given as options are irrelevant in defining the true meanings of the sentences. Hence "condemned, perpetrated" is the correct set of words.

- 35. (3) Passage (1) deals with the importance and the need of cyber security in mitigating the rising virtual threats in the current world. Similarly, passage (2) comes out with the effectiveness of cyber security mechanisms which is the need of the hour. It is to be noted that the inference so generated from both the paragraphs tally with the given statement. Whereas passage (3) talks about hash functions that can be used to encrypt secured passwords and thus it is totally out of context and in contrast to the required inference. Hence (3) is the correct choice.
- 36. (3) Sentence (3) is the correct meaning of the phrase " majority of one" as described in first paragraph of the passage. Hence sentence (3) is correct.
- 37. (2) Refer to the second last paragraph of the passage "Since the country has adopted a three language formula— English, Hindi and the regional—the Hindi-speaking states are happy because it is their regional language. Non-Hindi speaking states are also happy because they have English and fit into the dictates of the Union which is primarily conducting its business in English."
- 38. (2) Refer to the second last paragraph of the passage "That is the reason why a non-Hindi speaking state jealously guards its regional language and even challenges Hindi whenever the particular state feels that the rightful space of its own language has been taken by the national language." Hence only sentence (III) is correct in context of the passage.
- 39. (2) Refer the third paragraph of the passage, "he found that the non- Hindi speaking members were up in arms and vehemently opposed to use of the language in official



business." Hence we can say that only sentence is correct in context of the passage.

- 40. (2) "Hindi spread requires patience" is an appropriate theme of the passage. The passage is about government's decision over national language. It has been mentioned in the passage that ". Even the people in south India have realised that there is no getting away from the national language and their children are learning Hindi. Probably, the Modi government feels that it has to be only patient." This clearly indicates that the spread of Hindi language requires patience. All other options are not the central idea of the passage.
- 41. (4) Sentence (4) does not go in harmony with the passage as there should be no imposition of any language particularly for 'south Indians', not for 'north Indians'. Hence sentence (4) is the correct option.
- 42. (2) **Delineated** means describe or portray (something) precisely. Hence it has same meaning as **particularize**.

Diligent means hard-working, dedicated.

Digression means straying from main point.

Patronize means treat with an apparent kindness which betrays a feeling of superiority.

Abhor means to hate.

43. (4) **Consensus** means a general agreement. Hence it has same meaning as **concord**.

Brazen means bold.

Brusque means short, rude.

Prudent means careful, wise.

Dissension means disagreement that leads to discord.

44. (5) Vehemently means in a forceful, passionate, or intense manner; with great feeling. Hence it has opposite meaning as tamely.

Malignly means harmful.

Pretentious means being self important.

Prosaic means ordinary.

Inevitable means unavoidable.

45. (2) **Endorse** means declare one's public approval or support of. Hence it has opposite meaning as **dissuade**.

Impute means to assign or attribute to someone.

Opulence means wealth.

Abate means reduce or lessen.

Abdicate means give up a position.

- 46. (1) All the given options, except (1) are not in correct structure to frame a meaningful sentence as they contain errors in correct grammar usage. Moreover these sentences do not comply with the actual meaning of the sentence. Hence only option (1) frames the correct sentence that follows the required meaning of the sentences given in the question both grammatically and contextually.
- 47. (3) In the first part of the sentence, "had reached" should be replaced by "has reached" as the sentence is in Present Tense and the adjective "dire" should be replaced by the adverb "direly". The second part of the sentence is absolutely correct and is in accordance with the correct grammar usage. In part (III), "had been" should be replaced by "has been" as the sentence is in Present Tense and "America's option" should be replaced by "America's options" as the number it denotes is in plural. Hence only (I) and (III) parts of the sentence require correction, which are aptly given in corrected options.
- 48.(1) The phrase "war hysteria" as used in the sentence means a massive emotional reaction to a war, generally by the people of one of the involved parties in said war. Thus

among the given three statements only statement (II) expresses the true meaning of the phrase given in bold in the sentence without altering its meaning. Hence (1) is the correct option.

49. (2) **Redundancy** means the state of being not or no longer needed or useful. The first line of Sentence (1) is talking about reducing the heart and soul which would result in an exercise which is 'useless' therefore redundancy which means similar should be used.

Distinctive means characteristic of one person or thing, and so serving to distinguish it from others. It is an easy choice as in the second sentence you can easily see the mentioning of both the humans and machines which are different or distinctive.

- 50. (5) Option (5) is the correct choice. In option (3) refer to "duplicated many times", tape recorder means an apparatus for recording sounds on magnetic tape and afterwards reproducing them, here, reproducing means produce a "copy". Therefore in a way, the Brahmin priest was behaving like a tape recorder. The same can be said about option (2) where it says, they are supposed to keep the Veda unchanged and in the way it is again signifying that they act like a tape recorder. Option (1) is also correct as there is a reference of memorization and recitation. Therefore, option (5) is the correct choice.
 - (5) Let salesman's base salary be Rs. B, and last year commission be C

 Then total salary, $T = B + C \qquad(i)$ From (i) $1.1 T = B + 1.3C \qquad(ii)$ From (ii) $B C = \frac{50}{100}B$ $\Rightarrow B = 2C$

Using (i) and (ii) individually we can find the answer

- 52. (4) A \rightarrow first prime no. greater than 10 is 11. Numbers are 8, 10, 12 and 14 B \rightarrow smallest no.= 4x Largest no.= 7x 7x = 4x + 6 numbers are 8, 10, 12, 14 C \rightarrow Let numbers be x-3, x-1, x+1, x+3 (x 3 + x + 3)² = (x 1 + x + 1)² \Rightarrow x² = x² Using A or B, we can find the answer.
- 53. (5) Let smaller no. be x and larger no. be y. $A \rightarrow y = x + 6$ $B \rightarrow \frac{40}{100} x = \frac{30}{100} y \quad \text{or, } \frac{y}{x} = \frac{4}{3}$ $C \rightarrow \frac{y/2}{x/3} = \frac{2}{1}$ $Or, \frac{y}{x} = \frac{4}{3}$ So from A and either B are C we can find

So from A and either B or C we can find the answer.

- 54. (5) A → Runs scored till 30 matches = 30 × 56= 1080 B → Runs scored till 32 matches = 32 × 38 = 1216 C → nothing can be inferred More information required.
- 55. (4) $A \rightarrow C: T = 3:8 \\ B \rightarrow B: T = 5:3 \\ C \rightarrow C + 2T = 6000 \\ Using A and B, \\ C: T: B = 9: 24: 40 \\ Using C, \\ 9x + 2 \times 24x = 6000 \\ \Rightarrow x = \frac{6000}{57}$



56. (5)
$$x = 7$$

$$2y^2 - 9y - 56 = 0$$

$$2y^2 - 16y + 7y - 56 = 0$$

$$2y(y - 8) + 7(y - 8) = 0$$

$$y = 8, -\frac{7}{2}$$

No relation

- 57. (2) $6x^{2} + 15x + 14x + 35 = 0$ 3x(2x+5) + 7(2x+5) = 0 $x = \frac{-5}{2}, \frac{-7}{3}$ $3y^{2} + 9y + 10y + 30 = 0$ 3y(y+3) + 10(y+3) = 0 $y = -3, \frac{-10}{3}$ x > y
- 58. (2) $2x^{2} 4x \sqrt{17}x + 2\sqrt{17} = 0$ $2x(x-2) \sqrt{17}(x-2) = 0$ $x = \frac{\sqrt{17}}{2}, 2$ $10y^{2} 18y 5\sqrt{13}y + 9\sqrt{13} = 0$ $2y(5y 9) \sqrt{13}(5y 9) = 0$ $y = \frac{9}{5}, \frac{\sqrt{13}}{2}$ x > y
- 59. (3) $64x^{2} = 256$ $\Rightarrow x^{2} = 4$ $x = \pm 2$ $2y^{3} = 16 \Rightarrow y^{3} = 8$ Y = 2 $x \le y$ 60. (4) $x^{2} + 7x x 7 = 8$
- 60. (4) $x^{2} + 7x x 7 = 0$ x(x+7) 1(x+7) = 0x = 1, -741y = 123y = 3y > x
- 61. (1) Let, total no. of boxes be 35x,

Then no. of black boxes = $\frac{2}{5} \times 35x = 14x$

And no. of blue boxes = $\frac{3}{7} \times 35x = 15x$

Now,

$$14x + 15x + 18 = 35x$$

or, 6x = 18

or,
$$x = 3$$

Total no. of boxes = 35x = 105

An even sum can be obtained in three ways:

- 1. both the numbers are even
- 2. one number is even and the other is 0.
- 3. both numbers are odd.

Required probability

$$=\frac{35}{105}\times\frac{34}{104}+\frac{35}{105}\times\frac{34}{104}+\frac{35}{105}\times\frac{35}{104}=\frac{35(34+34+35)}{105\times104}=\frac{103}{312}$$

- 62.(2) Total no. of boxes = 105
- 63. (4) The amount @ 10% C.I. could become Rs. 1331. Also, Rs. 1728 depreciated at R% has to become Rs. 1331. Thus, $1728 \times \left[\frac{100-R}{100}\right]^3 = 1331 (approximately)$. The closest value of R = 8% Thus, the difference is 2%.
- 64. (2) Let the amount with him at the start of the game be Rs. A. Amounts (in Rs.) with him at the ends of the first, second and third round are 2A X, 4A 3x and 8A 7X respectively.

Given,
$$(8A - 7X) - (4A - 3X + 2A - X) = 140$$

 $2A - 3x = 140 \rightarrow (1)$
 $4A - 3X - (2A - X) = 160$
 $A - X = 80 \rightarrow (2)$
Solving (1) and (2), $X = 20$

- 65. (1) Required percentage = $\frac{180-100}{100} \times 100 = 80\%$
- 66. (1) Number of commerce graduates employees $= 30\% \ of \ 600 = \frac{30}{100} \times 600 = 180$ Number of arts graduates employees $= 28\% \ of \ 600 = 168$ $\therefore \text{ Difference} = 180 168 = 12$
- 67. (3) Average number of commerce graduate employees and science graduate employees in company Z = 338
 Total number of commerce and science graduate employees in company Z = 676
 Total number of employees in Z $= 676 \times \frac{100}{65} = 1040$
- 68. (2) Number of Arts graduate employees $= \frac{32}{100} \times 1000 = 320$ Number of science graduate and commerce graduate employees = 1000 320 = 680 $\therefore \text{ Number of commerce graduate employees in K}$ $= 680 \times \frac{7}{17} = 280$
- 69. (1) Total employees in company L in 2009 $= 600 \times \frac{120}{100} = 720$ Arts Graduate in company L in December 2009 $= \frac{20}{100} \times 720 = 144$
- 70. (3) (40% 20%) of number of employees in company Y
 = 120
 ∴ Number of employees in company Y
 = 600
 - ∴ Total number of employees in company X = 1800
 - (2) $(3^{4})^{3} \div (3^{4})^{4} \times (3^{7})^{2} = (3)^{?+6}$ $\frac{3^{12} \times 3^{14}}{3^{16}} = (3)^{?+6}$ $(3^{10} = (3)^{?+6}$? + 6 = 10 ? = 4(4) $(3^{4})^{3} \div (3^{4})^{4} \times (3^{7})^{2} = (3)^{?+6}$
- 72. (1) $\frac{120}{100} \times 1500 + \frac{40}{100} \times 2850 = 2420 + \frac{24}{100} \times ?$ $1800 + 1140 = 2420 + \frac{24}{100} \times ?$ $? = 2166.67 \approx 2168$ 73. (5) $\approx \frac{0.2}{100} \times 355 + \frac{0.8}{100} \times 780$
- 74. (2) $\simeq \frac{1400}{35} + \sqrt{1024} \times 20$ $\simeq 40 + 32 \times 20 \simeq 40 + 640$ $\simeq 680$
- 75. (4) $\simeq 52 \times 60 \simeq 120 \times ?$ $? \approx 26$
- 76. (2) Let C.P. of R = 1100 Rs.

 Then C.P. of P = 1100 + $\left(36\frac{4}{11}\right)\%$ of 1100
 = 1100 + 400
 = 1500 Rs.

 S.P. of product P = 2 × 1500 = 3000 Rs.

 M.P. of product R = $\frac{170}{100}$ × 1100 = 1870

 Required % = $\frac{3000-1870}{1870}$ × 100 ≈ 60%



- 77. (1) Let C.P. of Q = xLet C.P. of R = y x - y = 25(i) And 1.4x - 1.7y = 8 14x - 17y = 80(ii) From (i) and (ii) y = 90 Rs. x = 115 Rs.
- 78. (3) C.P. of $S = \frac{100}{160} \times 320 = 200 \text{ Rs.}$ C.P. of $T = \frac{100}{190} \times 570 = 300 \text{ Rs.}$ Profit of S = 200 Rs.Profit of $T = 2 \times 300 = 600 \text{ Rs.}$ Required average profit $= \frac{200+600}{2} = 400 \text{ Rs.}$

Required sum = 205 Rs.

- 79. (2) Let S.P. of R = 750 Let S.P. of S = 1500 Rs. \therefore C.P. of R = $\frac{100}{250} \times 750 = 300$ And, CP of S = $\frac{100}{200} \times 1500$ = $\frac{1500}{2} = 750$ Rs. Required ratio = $\left(\frac{170}{100} \times 300\right) : \left(\frac{160}{100} \times 750\right)$ = $(17 \times 30) : (16 \times 75)$ = 17 : 40 80. (2) Profit % of S = 100%
- 80. (2) Profit % of S = 100% Profit % of T = 200% Required % = $\frac{200-100}{200} \times 100$ = $\frac{100}{200} \times 100 = 50\%$ 81. (2) Ratio of Abhishek and Sudin for 3
- 81. (2) Ratio of Abhishek and Sudin for 3 years $= (50,000 \times 36) + (30,000 \times 24) : (70,000 \times 24) \\ = (18,00,000 + 7,20,000) : 16,80,000 = 3 : 2 \\ \text{Hence share of Sudin in the profit earned from the business.} \\ = \frac{87,500}{(3+2)} \times 2 = Rs \ 35,000$
- 82. (1) Let us assume his CP/1000 gm = Rs 100 So, his SP/kg (800 gm) = Rs 126 So, his CP/800 gm = Rs 80 So, profit = Rs 46 So profit percentage = 46/80 × 100 = 57.5%
- 83. (1) Work done by the waste pipe in 1 minutes $= \frac{1}{20} \left(\frac{1}{12} + \frac{1}{15}\right) = -\frac{1}{10} [-\text{ve sign means emptying}]$ $\therefore \text{ Waste pipe will empty the full cistern in 10 minutes}$
- 84. (3) Suppose they meet x hrs after 8 a.m. then, (distance moved by first train in x hrs) + [Distance moved by second train in (x 1) hrs] = 330 \div 60x + 75 (x 1) = 330 \Rightarrow x = 3 So, they meet at (8 + 3), i.e. 11 a.m.
- 85. (1) Considering the two vowels E and A as one letter, the total no. of letters in the word 'EXTRA' is 4 which can be arranged in 4P_4 , i.e. 4! Ways and the two vowels can be arranged among themselves in 2! Ways. \therefore reqd. no. = $4! \times 2! = 4 \times 3 \times 2 \times 1 \times 2 \times 1 = 48$
- 86. (5) $\frac{12 \times 48}{x 6} = \frac{14 \times 24}{15 + 5} \times \frac{6}{7}$ x 6 = 40x = 46 km/hr
- 87. (1) $\frac{16 \times 48}{x 5} = \frac{14 \times 24}{x + 5} + 27\frac{1}{5}$ By option if we put x = 25Then L.H.S. = R.H.S.

88. (3) Given

Speed of boat in still water on

Saturday = 27 km/hr

and Speed of boat in still water on

Wednesday = 27 + 18

 $=45 \, \text{km/hr}$

Now,
$$\frac{12 \times 48}{45 - 6} = \frac{18 \times 24}{27 + x} \times \frac{16}{13}$$

solving

x = 9 kmph

- 89. (4) Speed of boat in still water on Saturday = 21 km/hrSpeed of boat in still water on Sunday = 21 + 6 = 27 km/hr $\frac{10 \times 48}{21 x} = \frac{5}{2} \times \frac{12 \times 24}{27 + 3}$ 21 x = 20 x = 1 km/hr
- Required time = $\frac{125}{21-1} = \frac{125}{20}$ = 6 hrs 15 min 90. (5) $\frac{14 \times 48}{17-1} = 30 + \frac{11 \times 24}{21-2}$
- 90. (5) $\frac{17-1}{x+6} = 30 + \frac{1}{x+6}$ x+6 = 22 x = 16 kmUpstream speed on Wednesday = 16-6 = 10 km/hr
- 91. (1) Time taken by P to cross the tunnel = $\frac{900}{72 \times \frac{5}{18}} = 45$ seconds

 Time taken by Q to cross the tunnel = $\frac{1200}{90 \times \frac{5}{18}} = 48$ seconds
 - ∴ P exits the tunnel first. When P exits, Q will have travelled a distance of $\frac{90 \times \frac{5}{2} \times 45 = 1125 \text{ m}}{2}$
 - $90 \times \frac{5}{18} \times 45 = 1125 \, m.$
 - ∴ 75 m of Q would still be inside the tunnel.
- 92. (2) The rear ends of the trains will cross each other when the trains completely cross each other.

This will happen after.
$$\frac{1500}{(72+90)^{\frac{5}{18}}}$$
 seconds. (Relative distance = 600 + 300 + 600 = 1500) = $\frac{100}{3}$ seconds

Distance travelled by the slower train in this time $= \frac{100}{3} (72) \left(\frac{5}{18} \right) = 666 \frac{2}{9} m$

Distance between the point where the rear ends of the trains cross each other and the point of entry of the slower train

$$=666\frac{2}{3}-300=366\frac{2}{3}$$
 meter

93. (3) Let, Mohit's estimated expenses on accommodation, food and travel be Rs. 9x, Rs. 7x and Rs. 5x respectively,

Then

$$\frac{4}{10} \times 9x + \frac{4}{7} \times 7x + \frac{1}{8} \times 5x = 8225$$

or,
$$3.6x + 4x + 0.625x = 8225$$

or,
$$8.225x = 8225$$

or,
$$x = 1000$$

Required answer= 1125

- 94. (4) Total salary=21x=21000
- 95. (3) Let shopkeeper have Rs. 100. He buys goods worth: $1.2 \times 100 = \text{Rs.} 120$. He sells goods worth; $\frac{125}{100} \times 120 = \text{Rs.} 150$ \therefore Profit % = 50%



96. (1) Circumference = 44

$$r = 7 cm$$

∴ diameter = 14 cm = edge of square

Area of square = $14^2 = 196 \, \text{cm}$

Area of circle =
$$IIr^2 = \frac{22}{7} \times 7 \times 7$$

 $= 154 cm^2$

Area of triangle EGF = $\frac{1}{2} \times 14 \times 14$

 $= 98 cm^2$

Area of EHF =
$$\frac{98}{2}$$
 = 49 cm²

∴ Area of shaded region

$$=\frac{1}{2}[Area\ of\ semicircle-Area\ of\ EFH]$$

 $+\frac{1}{4}$ [Area a of square – Area of circle]

$$=\frac{1}{2}[77-49]+\frac{1}{4}(196-154)$$

$$=\frac{1}{2}\times 28+\frac{1}{4}\times 42$$

Quantity II = $24.5 cm^2$

Quantity I \rightarrow 27.5 cm²

Quantity I > Quantity II

97. (1) Quantity I
$$\rightarrow$$
 SI = $\frac{16000 \times 30}{100} = 4800$

Now, amount =
$$20800 \times \left(1 + \frac{12}{100}\right)^2$$

$$=20800\times\frac{28}{25}\times\frac{28}{25}$$

= 26091.52 (Amount)

$$A-P = 26091.52 - 20800$$

= 5291.52

After four years, interest = 5291.52 + 4800

= 10091.52

Quantity II = Let the sum of money lent by

Sumit to Mohit be Rs. x.

Then, simple interest paid by Mohit after 1 year

$$= \frac{x \times 5 \times 1}{100} = Rs. \frac{5x}{100}.$$

Also, the simple interest received by Mohit

from Birju after 1 year

$$=\frac{x \times \frac{17}{2} \times 1}{100} = Rs. \frac{17x}{200}.$$

Given:
$$\frac{5x}{100} + 350 = \frac{17x}{200}$$

$$\Rightarrow 1700x - 1000x = 7000000$$

Or, 700x = 7000000

Or,
$$x = \frac{7000000}{700} = Rs. 10,000.$$

Thus, the sum of money lent by Sumit

to Mohit is Rs. 10,000.

Quantity I > Quantity II

98. (1) Probability of one red ball $\rightarrow \frac{1}{3}$

Probability of one blue ball $\rightarrow \frac{1}{2}$

Let total no. of balls in the bag = 21

∴ Red \rightarrow 7

Blue $\rightarrow 3$

 $Yellow \rightarrow 1$

: White
$$\rightarrow 21 - (7 + 3 + 1)$$

= 10

Quantity $I \rightarrow$ probability of selecting three white

Ball =
$$\frac{10}{21} \times \frac{9}{20} \times \frac{8}{19} = \frac{12}{133}$$

Quantity II \rightarrow probability of selecting one yellow ball

$$=\frac{1}{21}$$

∴ Quantity I > Quantity II

9. (2) Quantity I

Let the v liters of acid were drawn off

$$\frac{24}{54} = \left(1 - \frac{v}{54}\right)^2$$

$$\frac{4}{9} = \left(1 - \frac{\mathbf{v}}{54}\right)$$

$$\frac{2}{3} = 1 - \frac{v}{54}$$

$$\frac{v}{54} = \frac{1}{3}$$

v = 18 Litres

Quantity II

Cost price of Blended tea = $\frac{100}{110} \times 30.25$

$$= 27.5$$



Amount tea of Rs 25 per kg = 30 kg

Quantity I < Quantity II

100.1 Quantity I

Let C.P. of radio be 'x'.

$$\frac{97.5x}{100} + 100 = \frac{107.5x}{100}$$

$$\Rightarrow x = 1000$$

S.P. to get 12.5% gain = $1000 \times 1.125 = 1125$

Quantity I

C.P. for jobber = $24 - \frac{1}{6} \times 24 = 21$

$$\frac{4}{3} \times 21 = \frac{80}{100} \times M.P.$$

$$\Rightarrow$$
 M.P. = $\frac{28 \times 10}{8} = 35$



101. (5) From statement I, II king III, Smart \rightarrow Kot, good \rightarrow mit, prince \rightarrow hyt, of \rightarrow zot, king \rightarrow rut, queen \rightarrow tot, its \rightarrow fet of its smart \rightarrow zot fet kot Hence, beauty → pit

102. (3) From I - Anshika's rank is 10th from the bottom.so (45-10+1)= 36th from the top.

> From II and III- Sonakshi's rank from top =30th Anita's rank from top= 45-4+1= 42nd Now, Anshika's rank = (30+42)/2 = 36th from top

103. (3) II and III are required to answer the question.

2, 8, 18, 20 - X, E, A, P 104. (2)

Word formed is APEX. So third letter - E

24 - U

105. (1) 4 is D so 2 letters between 4 and 14. D+ 2 = A, G but A is already written. We cannot repeat any letter. So D + 2 = Gso against 14 is G

Now 10 is K. 14 is G. So between them is only 3 letters in English alphabetical series.

106-110. Step1: From the given definite conditions: - U lives on 3rd floor and wears a Red color shirt, More than three persons lives below the one who likes pizza, who does not lives on the top floor so from this condition there will be two possible cases in which the one who likes pizza either lives on 6th floor or on the 5th floor.

Case 1.					
Floor	Person	Food item	Shirt's		
			color		
7					
6		Pizza			
5					
4					
3	U		Red		
2					
1					

Case 2:

Floor	Person	Food item	Shirt's
			color
7			
6			
5		Pizza	
4			
3	U		Red
2			
1			

Step2: From the given definite conditions: - S does not like Idli, P, who lives on top floor lives immediately above Q and there are four person's living between S and P, who does not like Pizza. Now R does not wear Blue or pink shirt nor does he like Idli and R lives on one of the floor above S but lives below the floor on which T lives, who likes French fries and V likes Donuts and does not wear Black or Pink or Green color shirt and S wears Black color shirt, So from these statements it is clear that R lives on the 4 th floor and T lives on 5 th floor and V who likes Donuts lives on floor number 1 and hence case two will be eliminated as T likes French fries.

Case	Case 1.				
Flo	Pers	Food item	Shirt's color		
or	on				
7	P	Pizza			
6	Q	Pizza			
5	T	French			
		fries			
4	R	- Idli -	Blue/Pink		
3	U		Red		
2	S	-Idli-	Black		
1	V	Donuts	Black/Pink/Gree		

Case 2	Case 2:				
Floor	Person	Food	Shirt's color		
		item			
7	P	Pizza			
6	Q				
5	T	Pizza			
4	R	Idli	Blue/Pink		
3	U		Red		
2	S	Idli	Black		
1	V	Donuts	Black/Pink/Green		

Step3: Now it is given that two person's lives between the one who wears Blue shirt and the one who likes Idli so from this condition it is clear that U likes Idli and Q wears Blue color shirt as because S and R does not like Idli and R does not wear Blue color shirt as mentioned in step 2. Now it is given that the one who likes Burger lives above the one who likes Dhokla but below the one who likes Dosa, who wears Yellow color shirt so R likes Burger, S likes Dhokla and P likes Dosa and P wears Yellow color shirt. As, R and V does not wear Pink color shirt so T wears Pink color shirt and R wears Green color shirt and V wears White color shirt from the above statements. Hence we get our final Solution.

Case 1:

	dube 1.				
	Floor	Person	Food item	Shirt's	
				color	
	7	P	Dosa	Yellow	
	6	Q	Pizza	Blue	
ř.	5	T	French	Pink	
₹			fries		
	4	R	Burger	Green	
2	3	U	Idli	Red	
P	2	S	Dhokla	Black	
	1	V	Donuts	White	

106. (4) 108. (5)

107. (2)

109. (3)

110. (3)

111. (5) In the above question we have to find which of the following can be concluded from the given statement.

> For I-This statement can be deduced from the given statement. It defines that social media is providing a platform to the people of the country to stay connected with public servant and vice-versa which Trump has also discussed in his statement about to hear directly from his

> For II-This statement cannot be deduced from the given statement. This statement describes the importance of social media in election campaigns for publicity and as the only way to get connected to youth whereas Trump's statement refers to the social media as a medium for the mutual connection of the citizens and their elected officials. For III-This statement also cannot be deduced from the given statement because twitter is also a part of social media but statement is concerned with the significance of twitter as people can participate in debates and discussions on this platform during political campaigns on the other hand. In the given statement it is not mentioned the



interaction of citizens & both Modi and Trump on social media takes place only during political campaigns.

112. (3) In the above question we have to find which statement nullify (make ineffective) the given statement.

For I-This statement is false. This statement is concerned with the current situation of Darjeeling which is creating problems for tourists of that area and many of them are not be able go somewhere .This is directly related to given statement which states about the current disruption in Darjeeling hills.

For II-This is true in context to the given question. As this statement refers that CM of West Bengal told media that the situation is under control in Darjeeling now which nullifies the given statement which states there is an uncertainty in that region in current scenario.

For III-This statement is also false. This statement implies that only medical shops are opened there and Internet is not working in that region which refers the fact given in the statement of indefinite shutdown.

113. (5) In the above we have to find which of the following can be assumed from the given statement.

For I-This can be inferred from the given statement as it is mentioned in given statement that no country alone can fight against terror and real efforts from all others are required to face this challenge.

For II-It cannot be inferred from the given statement as it says that no country alone can fight against terrorism but it is not mentioned that this is not possible to control terrorism and it will continue to grow. It is also mentioned they are making efforts towards fighting with this by UNCCT as given in the statement. So this is false.

For III-This also can be inferred as it describes that it is necessary to increase the capability of the countries to fight against terror as it is mentioned that to fight against terrorism whole World should coordinate.

For IV-It cannot be inferred as it is not mentioned in the given statement that on which areas this UNCCT project will focus.

114. (4) In this question we have to find out the statement which supports the remark made by Lewis against Vettel.

In statement (i), Vettel defends himself against Lewis's remarks by saying that it was Lewis who started it all. Therefore this statement does not support the remarks made by Lewis.

Statement (ii) supports the remarks made by Lewis by proving that he was indeed guilty of dangerours driving. Statement (iii) also supports the remarks made by Lewis by proving that he was indeed guilty of dangerours driving.

115. (5) In this question, we have to find out the possible reason which prompted Indian Army to stop PLA from constructing the road in its territory.

Statement (i) just gives the specifics of the incident and therefore not a right option.

Statement (ii) mentions an incident which suggests that it was PLA who started it all by damaging bunkers on Indian side of the border.

Statement (iii) is not correct as it is absurd for an army to respond to the outcome of a sports event.

Statement (iv) mentions an incident which suggests that it was PLA who started it all by refusing entry to Indian pilgrims

116-120.



The alphabets are arranged according to the directions are given for step 1.



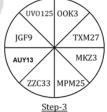
The alphabets are arranged according to the directions are given for step 2.



For Step-3:

If the numbers with the alphabets are greater than or equal to 16 and have at least one vowel in words, the letters are replaced with the next letter in alphabetical series.

If the numbers with the alphabets are less than 16 and have at most one vowel in words, the letters are replaced with previous letter in the alphabetical series.



116. (2) 117. (4)

118. (3) 119. (4) 120. (2)

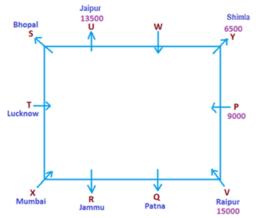
121-125. It is given that the one who belongs to Jammu sits immediate right of X, who belongs to Mumbai. X sits at one of the corner faces to the centre. X is not an immediate neighbour of P, Q and U, but sits on the immediate right of R, who is not facing the centre. The one who belongs to Raipur sits second to the left of R. S and V sit diagonally and face the opposite directions. S belongs to Bhopal and sits third to the left of the one who belongs to Shimla so V belongs to Raipur.

T, who sits at one of side where only one person sits is an immediate left of S and is not an immediate neighbor of R so S faces away from the center and V faces to the centre. The one who got second highest bonus money means who got 13500 sits fourth to the right of V. W and S are sitting on the immediate left and third to the left of Y respectively . P sits on one of the side where only one person sits and third to the right of U. T belongs to Lucknow and sits second to the left of the one who belongs to Jaipur. The one who belongs to Patna sits immediate left of the one who belongs

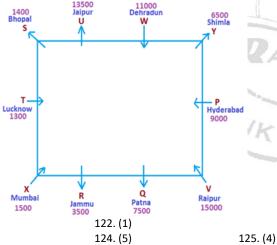


130. (4)

to Raipur. Five of them face in the same directions. Not more than two friends sitting together face the same direction so W faces to the centre and Q faces away from the centre. The one who belongs to Raipur got in bonus 5000 more than the square of 100. P's bonus money is 9000.



It is given that the one who got 4600 more than the square of 80 as bonus money sits immediate right of U so W got 11000. S's bonus money is not divisible by 3. Q got 4000 more than the bonus money of the one who belongs to Jammu so Q got 7500 and R got 3500. S's bonus money is not divisible by 3. The one who belongs to Bhopal did not get 1300 bonus money so S got 1400. X is not the person who got lowest bonus money so X got 1500 and T got 1300 bonus money. The final arrangement is -



126-130. Step-1: E is a Muslim and plays for Chelsea. C knows Karate and belongs to club Real Madrid. A does not know Judo. B s a Christian.

121. (4)

123. (3)

Name	Club	Religious	Martial art
		Group	
A		_	Judo
В		Christian	Judo
С	Real Madrid		Karate
D			
Е	Chelsea	Muslim	
F			

Step-2:- At least one and at most two persons belong to each of the four religious groups. No two persons have the same combination of religious group and martial art. F and C belong to the same religious group and A and D belong to different religious groups. The person who belongs to club FC Barcelona knows Taekwondo. Two persons know Karate and they belong to Christian and Buddhist group. Two

persons, the one who belongs to the club MANU and B know Judo. The person who is a Buddhist does not know Judo. The persons who are belonging to the clubs Real Madrid and Sunderland know the same martial art.

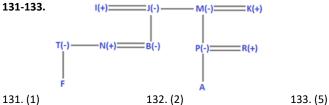
Name	Club	Religious	Martial art
		Group	
A	Sunderland	Christian	Karate
В	Manchester	Christian	Judo
С	Real Madrid	Buddhist	Karate
D	Manu	Hindu	Judo
Е	Chelsea	Muslim	Jijutsu
F	FC Barcelona	Buddhist	Taekwoundo

126. (1)

128. (3)

131. (1)

127. (1) 129. (4)



134. (2) In this question, we have to choose an option which could be the possible outcome of the incident mentioned in the statement.

> Option (i) is not an outcome as it mentions an event that could be linked with the death of Chester.

> Option (ii) is definitely possible as it is mentioned in the statement that Chester was to give a live performance recently.

> Option (iii) is not a possible outcome as it is given in the statement that the fans will be in a state of shock and grief instead of being angry and frustrated about the possibility of the event being cancelled.

> In this question, we have to choose an option which can be hypothesized from the facts given in the statement.

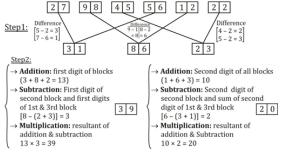
> Option (i) can be hypothesized from the statement as his religion is clearly mentioned in the title of the report which means that it might have something to do with religion.

> Option (ii) is a wrong statement as Lebanon is not a part of American subcontinent.

> Option (iii) is not a correct choice as its his job that is being referred to as forbidden in the statement.

136-140.

135. (3)





Step3:

→ Multiplication: first digits of first block with both digits of second block & same with the second digit and sum up the all values

(3 × 2 = 6, 9 × 2 = 18, 3 × 0 = 0, 6

9 × 0 = 0)

(6 + 18 = 24)

→ Addition: add the digits of the

→ Multiplication: first digit of second block with both digits of first block & same with the second digit and sum up the all values (2 × 3 = 6, 2 × 9 = 18, 0 × 3 = 0, 6 0 × 9 = 0) (6 + 18 = 24)

→ Addition: Add the digits of the resultant

[2 + 4 = 6]

Step4:

136. (2)

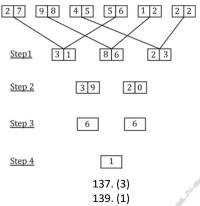
138. (4)

resultant

[2 + 4 = 6]

Divide the number of first block from second block.

So the final solution is-



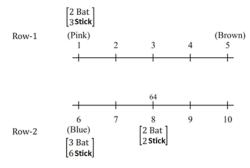
141-145. From the given conditions, the box number 8 has length 64m. There is one box between box 8 and Blue box. Hence Blue box is either second right or second left of box number 8. The Blue box contains 1 bat and 4 sticks more than that in box 8. The Pink box is just above the Blue box. The Pink box contains same number of bats as box 8 and 3 sticks. There are most boxes (which is possible) between Pink and Brown box. Hence there are three boxes between Pink and Brown box.

As per the given in the condition, **Length of each bat is 20m** and **length of each stick is 12m.**

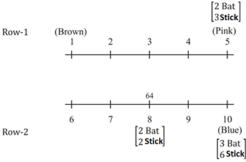
Let Box no. 8(Bat) =x and Box no. 8(Stick) =y

So 20x+12y = 64, so the possible value for Box no. 8 is Bats =2 and Sticks= 2

Case-1



Case-2

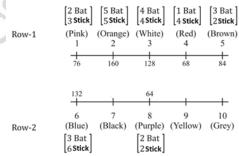


From the given conditions, the length of Brown box is 8m greater than the Pink box. Hence length of Brown box is 84m so the length of pink box is 76m. The Red box is immediate before in number to Brown box. Hence in case-2 there is no number before Brown box, so Case-2 is eliminated. Case-1 is continued. From the given conditions, The Red box contains 1 bat less than that in Pink box and 2 sticks less than that in Blue box. Hence Red box contain 1bat and 4 sticks and the length of Red box is 68m. There is one box between Red and orange box. White box is in row 1. Hence box number 3 is white box.

From the given conditions, The Black box is just below the orange box. There are two boxes between Black and Grey box. The Yellow box is just below the Red box. The length of Purple box is half the length of White box. Hence box number 8 is Purple box and length of White box is 128m. White box contains more bat than Red box. Hence White box contains 4bats and 4sticks.

From the given conditions, the orange box has 1 bat more than White box. The Orange box has same number of bats and sticks. Hence Orange box contains 5bats and 5 sticks and the length of Orange box is 160m.

Length of each bat is 20m and length of each stick is 12m. Case-1



From the given conditions, the length of White box is 20m more than the length of Yellow box. Hence length of Yellow box is 108m. The length of row-2 is 16m less than the length of row-1. Hence length of row-2 is 500m. The length of Grey box is 48m less than the length of Orange box and Grey box does not contain six sticks. Hence length of Grey box is 112m and it will contain 5bats and 1 stick. And the length of rest box number 7 is 84m. In row-2, three boxes contain same number of bats. Hence Black box contains 3bats and 2sticks.

Length of each bat is 20m and length of each stick is 12m.



