Grand Test – SPP 170205



SBI PO Preliminary Grand Test – SPP-170205 **HINTS & SOLUTIONS**

1.(4) All of the above Non mentioned in the passage 2. (5) Only (A) and (B) 3. (3) 16.(1) 4. (3) Only A and B 17.(4) borrow 5.(1) To explain that consumerist societies have their own 18. (4) banking draw-backs which are overlooked by those who are 19. (2) simpler blinded by its material glare 20. (2) gap 6.(2) People should visit the sermons more often since this is 21. (2) В the only way to achieve peace and happiness 22. (1) Ε 7.(5) The meaning of the word Shrewdly (Adverb) as used in 23. (4) D the passage is : understanding and making judgements 24. (3) С about a situation cleverly; astutely; showing good Α 25.(1) judgement. Hence, the words shrewdly and astutely are 26. (4) synonymous. 8. (3) The meaning of the word Elusive (Adjective) as used in used. the passage is : difficult to find, define or achieve; 27. (2) unachievable Look at the sentence: A solution to the problem of toxic waste is proving 28. (3) elusive. Hence, the words elusiveand unachievableare 29. (3) synonymous. 9. (4) The meaning of the word Dejected (Adjective) as used in 30. (2) the passage is : unhappy and disappointed; despondent. Look at the sentence : 31. (3) He looked so dejected when he lost the game. word Elated Of the given alternatives, the (Adjective)means : very happy and excited because of 32. (5) something good that has happened. Look at the sentence: They were elated at the result. Hence, the words dejected and elated are antonymous. 10. (5) The meaning of the word Momentary (Adjective) as x= 2y used in the passage is : lasting for a very short time; brief. Of the given alternatives, the word Perpetual (Adjective)means : continuing for a long period of time 33.(1) without interruption; continuous. Look at the sentence: We lived for years in a perpetual state of fear. *.*.. Hence, the words momentary and perpetual are antonymous. 34. (4) Period of time is evident Hence, Present Perfect 11. (3) Continuous i.e. has been arguably should be used. 12. (3) Look at the structure: (A must + be + Adjective must + be + Verb. 13. (5) 35. (5) 14. (4) Infinitive = to + V_1 Hence, is set to double should be used here. 15. (4) Here, has the potential (Noun)should be used. Look at the sentences: First we need to identify actual and potential (Adjective) problems.

The European market place offers excellent potential for increasing sales.

- depositors
- - The event shows past time. Hence, when he reached the office/when he had reached the office should be
- The event shows past time. Hence, Past Perfect should be used. Hence, had brought a much unnerving gloom should be used.
- The word threat should be followed by 'to' here. Hence, serious threats to residents should be used.
- The form of an Infinitive is : to $+ V_1$. Hence, to regulate the process of should be used.
- Here, use of double superlatives is superfluous. Hence, India's fastest growing bird sanctuary should be used.
- The data in statement I alone or in statement II alone are sufficient. We can find the ratio of profit sharing as ratio of amounts of investment can be determined
- Let the number be 10x + y. From statement I,
 - x + y = 6
 - Many such combinations are possible.
 - From statement II

Taking both the statement together,

- \therefore 3y = 6 \implies y = 2 and hence x= 4
- \therefore Number = 42
- From statement I alone, Principal = Rs. x, R = ?, S.I. = x T = 10 years.

$$R = \frac{S.I \times 100}{Principal \times Time} = \frac{x \times 100}{x \times 10} = 10\%$$

Statement I I gives no conclusion. From statement II,

A + B)'s 1 day's work =
$$\frac{1}{12}$$

A's 1 day's work is not known.

- From both the statements,
- $\frac{5x+4}{2} = \frac{17}{17}$
- x + 4 = 5
- $\Rightarrow 25x + 20 = 17x + 68$
- \Rightarrow 8x = 48 \Rightarrow x = 8
- Mother's present age = $5 \times 8 = 40$ years

36. (5) Total number of marbles in the urn = 4 + 5 + 2 + 3 = 14Total possible outcomes = selection of 2 marbles out of 14 marbles = ${}^{14}C_2 = \frac{14 \times 13}{1 \times 2} = 91$ Favourable number of cases = ${}^{2}C_{2} + {}^{2}C_{1} \times {}^{12}C_{2}$ $= 1 + 2 \times 12 = 25$ \therefore Required probability = $\frac{25}{01}$ Total possible outcomes = ${}^{14}C_3 = \frac{14 \times 13 \times 12}{1 \times 2 \times 3} = 364$ 37. (2) When no marble is yellow, Favourable number of cases $= {}^{11}C_3 = \frac{11 \times 10 \times 9}{1 \times 2 \times 3} = 165$ \therefore Probability that no marble is yellow = $\frac{165}{364}$: Required probability = $1 - \frac{165}{364} = \frac{364 - 165}{364} = \frac{199}{364}$ ЭF 38. (3) Total possible outcomes = ${}^{14}C_8$ $= {}^{14}C_6[:: {}^{n}C_r = {}^{n}C_{n-r}]$ $= \frac{14 \times 13 \times 12 \times 11 \times 10 \times 9}{1 \times 2 \times 3 \times 4 \times 5 \times 6} = 3003$ Favourable number of cases $= {}^{4}C_{2} \times {}^{5}C_{2} \times {}^{2}C_{2}$ $= {}^{4}C_{2} \times {}^{5}C_{2} \times {}^{2}C_{2} \times {}^{3}C_{2} = 6 \times 10 \times 1 \times 3 = 180$ \therefore Required probability $=\frac{180}{3003}=\frac{60}{1001}$ Total possible outcomes = ${}^{14}C_3 = \frac{14 \times 13 \times 12}{1 \times 2 \times 3} = 364$ 39. (5) No ball is green. : Total favourable outcomes = selection of 3 marble out 5 blue, 2 red and 3 yellow marbles $^{10}C_3 = \frac{10 \times 9 \times 8}{1 \times 2 \times 3} = 120$ \therefore Required probability = $\frac{120}{364} = \frac{30}{91}$ 40. (1) Total possible outcomes $= {}^{14}C_4 = \frac{14 \times 13 \times 12 \times 11}{1 \times 2 \times 3 \times 4} = 1001$ Favourable outcomes = ${}^{5}C_{2} \times {}^{2}C_{2} = 10 \times 1 = 10$ \therefore Required probability = $\frac{10}{1001}$ Total number of employees in administration department 41. (1) $=\frac{2500\times12}{100}=300$ Number of male employees = $\frac{7}{12} \times 300 = 175$ Total number of employees in printing department $=\frac{2500\times 6}{100}=150$ Number of male employees = $\frac{2}{3} \times 150 = 100$ ∴ Required ratio = 175 : 100 = 7 : 4

Grand Test - SPP 170205

() RACE Required difference = $2500 \times (18 - 14)\%$ 42.(3) $=\frac{2500\times4}{100}=100$ Total number of employees in HR department 43.(4) $=\frac{2500\times16}{100}=400$ \therefore Number of males = $\frac{5}{8} \times 400 = 250$ and number of females= 400- 250 = 150 Number of employees in marketing department $=\frac{2500\times15}{100}=375$ Number of males = $\frac{7}{15} \times 375 = 175$ Number of females= 375 - 175 = 200 ·· Required ratio= (250 + 175) : (150 + 200) = 425: 350 = 17 : 14 150 44.(4) 45. (2) Total number of employees in logistics department $2500 \times 11 = 275$ Number of males = $\frac{6}{11} \times 275 = 150$ Number of females= 275 - 150 = 125 ·· Required difference= 150 - 125 = 25 46. (5) Number of men visiting super-market D $\frac{55500 \times 41}{100} = 22755$ Total number of people visiting all the super-markets together = 34560 + 65900 + 45640 + 55500 + 42350 + 59650 = 303600 \therefore Required percentage = $\frac{22755}{303600} \times 100 = 7.5$ 47.(4) Number of children visiting super-market C $45640 \times 20 = 9128$ 100 Number of children visiting super-market F $=\frac{59650\times14}{100}=8351$ \therefore Required percentage = $\frac{9128}{8351} \times 100 = 109.30$ Total number of children visiting super-markets B and D 48. (3) together = $\frac{65900 \times 20}{100} + \frac{55500 \times 33}{100}$ = 13180 + 18315 = 31495 49.(1) Total number of women $= \frac{34560\times55}{100} + \frac{65900\times43}{100} + \frac{45640\times45}{100} + \frac{55500\times26}{100}$ $+\frac{42350\times70}{100}+\frac{59650\times62}{100}$ = 19008 + 28337 + 20538 + 14430 + 29645 + 36983 = 148941 \therefore Required average $=\frac{148941}{6}=24823.5$



Grand Test – SPP 170205

50. (5) Required ratio = 19008 : 20538 = 1056 : 1141 \Rightarrow x = 3 or $\frac{7}{2}$ The pattern of the number series is: 51. (1) $32 + 1^2 = 32 + 1 = 33 \neq 34$ II. 2 y^2 - 9y + 10 = 0 $33 + 2^2 = 33 + 4 = 37$ \Rightarrow 2 y² - 4y - 5y + 10 = 0 \Rightarrow 2y (y - 2) - 5 (y - 2) = 0 $37 + 3^2 = 37 + 9 = 46$ ⇒ (y - 2) (2y - 5) = 0 $46 + 4^2 = 46 + 16 = 62$ \Rightarrow y = 2 or $\frac{5}{2}$ $62 + 5^2 = 62 + 25 = 87$ The pattern of the number series is: Clearly, x > y52. (3) $7 + 1 \times 11 = 7 + 11 = 18$ $I. 3 x^2 - 14x + 15 = 0$ 58. (3) $18 + 3 \times 11 = 18 + 33 = 51 \neq 40$ \Rightarrow 3 x² - 9x - 5x + 15 = 0 \Rightarrow 3x (x - 3) - 5 (x - 3) = 0 $51 + 5 \times 11 = 51 + 55 = 106$ \Rightarrow (3x - 5) (x - 3) = 0 106 + 7 × 11 = 106 + 77 = 183 $\frac{5}{3}$ or 3 183 + 9 × 11 = 183 + 99 = 282 ⇒ x = 53. (4) The pattern of the number series is: 850 - 1 × 7 = 843 II. $2y^2 - 9y + 9 = 0$ 843 - 2 × 7 = 829 $\Rightarrow 2y^2 - 6y - 3y + 9 = 0$ $829 - 3 \times 7 = 808$ ⇒2y (y - 3) - 3 (y - 3) = 0 808 - 4 × 7 = 780 ≠ 788 > (2y - 3) (y - 3) = 0 780 - 5 × 7 = 745 \Rightarrow y = $\frac{3}{2}$ or 3 $745 - 6 \times 7 = 703$ The pattern of the number series is: 54. (5) Clearly, $x \ge y$ 33 + 288 = 321 59. (2) $1.3 x^2 - 10x + 8 = 0$ 321 + 144 = 465465 + 72 = 537 \Rightarrow 3 x² - 6x - 4x + 8 = 0 537 + 36 = 573⇒3x (x - 2) - 4 (x - 2) = 0 573 + 18 = 591 ≠ 590 \Rightarrow (3x-4) (x-2) = 0 \Rightarrow x = $\frac{4}{3}$ or 2 591 + 9 = 60055. (1) The pattern of the number series is: $37 + 1 \times 5 = 42 \neq 47$ II.2 y^2 - 11y + 15 = 0 >HINK $42 + 2 \times 5 = 52$ \Rightarrow 2 y² - 6y - 5y + 15 = 0 52 + 3 × 5 = 67 ⇒ 2y (y - 3) - 5 (y - 3) = 0 $67 + 4 \times 5 = 87$ ⇒ (y - 3) (2y - 5) = 0 87 + 5 × 5 = 112 \Rightarrow y = 3 or $\frac{5}{-}$ $112 + 6 \times 5 = 142$ 56. (3) I. 3 x^2 + 7x + 2 = 0 Clearly, y > x \Rightarrow 3 x² + 6x + x + 2 = 0 $I. x^2 = 25$ 60.(5) \Rightarrow 3x (x + 2) + 1 (x + 2) = 0 $\Rightarrow x = \sqrt{25} = \pm 5$ \Rightarrow (3x + 1) (x + 2) = 0 II. $y^2 - 6y + 9 = 0$ \Rightarrow x = - $\frac{1}{3}$ or -2 \Rightarrow $(x-3)^2 = 0 \Rightarrow x-3=0$ $\Rightarrow x = 3$ II. $y^2 + 5y + 6 = 0$ The smallest odd number = x 61. (5) \Rightarrow y² + 3y + 2y + 6 = 0 \therefore The smallest even number = x + 11 \Rightarrow y (y + 3) + 2 (y + 3) = 0 \therefore x + x + 2 + x + 4 + x + 11 + x + 13 + x + 15 = 231 \Rightarrow (y + 2) (y + 3) = 0 \Rightarrow 6 x + 45 = 231 \Rightarrow y = -2 or - 3 ⇒6 x = 231 - 45 = 186 Clearly, $x \ge y$ $\therefore x = \frac{186}{6} = 31$ $I. 2 x^{2} - 13x + 21 = 0$ 57. (1) \Rightarrow 2 x² - 7x - 6x + 21 = 0 \therefore Required sum \Rightarrow x (2x - 7) - 3 (2x - 7) = 0 = x + 4 + x + 15 \Rightarrow (2x - 7) (x - 3) = 0 $= 2x + 19 = 2 \times 31 + 19$ = 62 + 19 = 81

3



