

## IBPS CLERK MAINS GRAND TEST – ICM171202

### ANSWER KEY

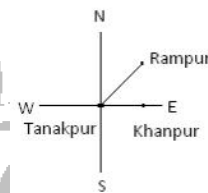
1. (2)	21. (2)	41. (1)	61. (2)	81. (5)	101. (3)	121. (3)	141. (2)	161. (5)	181. (1)
2. (2)	22. (2)	42. (3)	62. (5)	82. (3)	102. (5)	122. (2)	142. (1)	162. (1)	182. (2)
3. (4)	23. (1)	43. (1)	63. (2)	83. (4)	103. (4)	123. (4)	143. (2)	163. (3)	183. (2)
4. (2)	24. (1)	44. (2)	64. (1)	84. (1)	104. (4)	124. (4)	144. (3)	164. (2)	184. (4)
5. (2)	25. (2)	45. (2)	65. (2)	85. (2)	105. (4)	125. (2)	145. (3)	165. (4)	185. (5)
6. (1)	26. (3)	46. (3)	66. (4)	86. (4)	106. (5)	126. (4)	146. (2)	166. (4)	186. (4)
7. (3)	27. (1)	47. (4)	67. (5)	87. (2)	107. (2)	127. (5)	147. (2)	167. (2)	187. (5)
8. (2)	28. (1)	48. (1)	68. (3)	88. (1)	108. (3)	128. (1)	148. (1)	168. (4)	188. (2)
9. (2)	29. (4)	49. (2)	69. (2)	89. (1)	109. (2)	129. (3)	149. (3)	169. (4)	189. (1)
10. (1)	30. (3)	50. (1)	70. (1)	90. (2)	110. (3)	130. (3)	150. (4)	170. (1)	190. (3)
11. (3)	31. (1)	51. (2)	71. (3)	91. (4)	111. (3)	131. (4)	151. (3)	171. (3)	
12. (5)	32. (2)	52. (1)	72. (4)	92. (4)	112. (5)	132. (5)	152. (2)	172. (4)	
13. (2)	33. (1)	53. (3)	73. (1)	93. (4)	113. (2)	133. (3)	153. (3)	173. (2)	
14. (2)	34. (3)	54. (3)	74. (2)	94. (4)	114. (1)	134. (5)	154. (2)	174. (5)	
15. (4)	35. (4)	55. (5)	75. (1)	95. (4)	115. (5)	135. (2)	155. (4)	175. (1)	
16. (4)	36. (2)	56. (4)	76. (1)	96. (3)	116. (2)	136. (1)	156. (4)	176. (2)	
17. (2)	37. (3)	57. (2)	77. (1)	97. (2)	117. (4)	137. (5)	157. (2)	177. (1)	
18. (5)	38. (4)	58. (3)	78. (4)	98. (1)	118. (3)	138. (5)	158. (2)	178. (4)	
19. (3)	39. (2)	59. (1)	79. (1)	99. (3)	119. (4)	139. (1)	159. (4)	179. (3)	
20. (4)	40. (1)	60. (5)	80. (2)	100. (4)	120. (3)	140. (4)	160. (3)	180. (2)	

### HINTS & SOLUTIONS

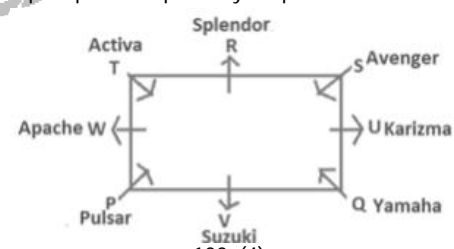
51. (2) Change 'are' to 'is'. Here the subject is Singular, hence Singular Verb (is) should be used.
52. (1) Replace group of words 'None of the student (Singular)' by 'None of the students (Plural)'
53. (3) For a person 'who' should be used as a relative pronoun. Hence, replace 'which did not blindly follow' by 'who do not blindly follow'. Here it is improper to use Past Indefinite (Negative).
54. (3) Change 'seemed' to 'seems'
55. (5) No error
56. (4) The passage seems to emphasize on the misconceptions about the aid given to the poor nations hence option (D) is the correct choice for the given question.
57. (2) Refer to the 1st paragraph of the passage, "Western officials argue that Africa simply needs to behave itself better, to allow market forces to operate without interference by corrupt rulers."
58. (3) Refer to the 1st paragraph of the passage, "During the past decade I witnessed how relatively well-governed countries in Africa, such as Ghana, Malawi, Mali and Senegal, failed to prosper, whereas societies in Asia perceived to have extensive corruption, such as Bangladesh, Indonesia and Pakistan, enjoyed rapid economic growth."
59. (1) Author has mentioned in the 1st paragraph of the passage, "well-governed countries in Africa, such as Ghana, Malawi" hence option (A) is the correct choice for the given question.
60. (5) Refer to the second paragraph of the passage, "Africa is burdened with malaria like no other part of the world, simply because it is unlucky in providing the perfect conditions for that disease high temperatures, plenty of breeding sites and particular species of malaria-transmitting mosquitoes that prefer to bite humans rather than cattle."
61. (2) According to author the remark of former U.S. Secretary of the treasury, Paul O'Neil is not factually correct.
62. (5) Obligation - the state of being forced to do something because it is your duty or because of a law etc commitment moral binding.  
So, moral binding is the word which is similar in meaning to it.
63. (2) Squander - to waste time, money etc. in a stupid or careless way. So, spend wastefully is the word which is similar in meaning to it.
64. (1) 'cited, reason' is the correct use.  
Cited means refer to as evidence for or justification of an argument or statement, especially in a scholarly work.
65. (2) 'accept, revolves' is the correct use.  
Revolves means move in a circle on a central axis.
66. (4) 'behaviour, conclusion' is the correct use.
67. (5) 'escape, innocent' is the correct use.
68. (3) 'match, challenge' is the correct use.

69. (2) In the paragraph framing of GST is discussed ,therefore the paragraph should be followed by(b).
70. (1) Only option (A) "This view—that the government influences the savings and investment balances of households, businesses, and foreign trading partners—took center stage in trade-deficit economies during the austerity debate that followed the 2008 financial crisis." gives reasonable follow up to the paragraph.
71. (3) In the given paragraph protest by the native tribes are being discussed so option(C) completes the paragraph.
72. (4) Economic policies are being discussed and the criticism made by rating agencies is evident in the paragraph. hence option (D) is most suitable follow up to the paragraph.
73. (1) option (B) and option (D) are based on the language formula . option (C)and option (E) are about reaction of the government and parents .So option (A) is the solution.
74. (2) Only (ii) is correct  
While the withdrawal of high-denomination notes can hardly be expected to trigger a political realignment anywhere, political parties seem to be rising above mundane political calculations while reacting to the demonetization.
75. (1) Only (i) is correct  
(i) About 100 journalists from state media organizations have been fired, and the government, until Tuesday, was proposing to ban most journalists from entering the lower house of Parliament in 2017.
76. (1) All are correct  
(i) The U.S. media did not detect the sub-prime crisis till the housing bubble burst although they had some of the best- trained financial journalists and resources.  
(ii) The sub-prime crisis till the housing bubble burst was not detected by the U.S media even after having some of the best- trained financial journalists and resources.  
(iii) The U.S. media, despite having some of the best-trained financial journalists and resources, did not detect the sub-prime crisis till the housing bubble burst.
77. (1) All are correct.  
(i) Addressing a meeting with officials held here on Thursday, he said the Madurai Bench of the Madras High Court had issued an order directing 13 district administrations to remove the trees in their respective areas.  
(ii) The Madurai Bench of the Madurai High Court had issued an order directing 13 district administrations to remove the trees in their respective areas, the Collector said while addressing a meeting with officials held in this connection here on Thursday.  
(iii) In a meeting with officials held here on Thursday, the Collector said the Madurai Bench of the Madras High Court had issued an order directing 13 district administrations to remove the trees in their respective areas.
78. (4) Both (i) and (ii) are correct.  
(i) By slashing fares of Delhi Transport Corporation (DTC) buses – both low-floor and cluster – by 75 per cent from January 1, the Delhi government aims to encourage more residents to use public transport.  
(ii) In a bid to encourage more residents to use public transport, the Delhi government has decided to slash fares of Delhi Transport Corporation (DTC) buses – both low-floor and cluster – by 75 per cent from January 1.

79. (1) Replace 'inhibiting blood clots' with 'inhibits blood clots'
80. (2) Replace 'main function of' with 'main functions of'
81. (5)
82. (3) Replace 'brought at an' with 'bought in an'
83. (4) Replace 'has always been' with 'have always been'
84. (1) Refer to the first sentence of the second paragraph "In the 21st century, a government that cannot protect its citizens' right to privacy cannot credibly maintain a democratic regime of equal treatment under the law."
85. (2) 'Aadhaar and the right to privacy' is the most appropriate title.
86. (4) Right to adequate standard of living.
87. (2) Refer to the first sentence of the last paragraph "The government's most basic obligation is to protect its citizens' rights — both their right to sustenance and their right to the privacy that enables freedom — equally."
88. (1) Refer to the fourth line of the first paragraph "In the 20th century, governments that recognised no private sphere of thought, expression, and action outside their reach and the ruling party's reach were called "totalitarian"."
89. (1) Interim means in or for the intervening period. So, Provisional is the word which is similar in meaning to it.
90. (2) Simultaneous means occurring, operating, or done at the same time. So, Coexisting is the word which is similar in meaning to it.
91. (4) From I & II



92. (4) from I & II we cannot determine the day on which Divya visited the Zoo
93. (4) From I and II also we cannot determine the Gender of Krishna.
94. (4) From I and II we cannot determine the code of clever.
95. (4) Both from I & II, gender of I is not known.
96. (3) SmartArt is a feature of MS Word 2007.
- 97: (2) Operating system is a type of system software.
98. (1) ClipArt places ClipArt in your presentation in slide.
- 99-103.

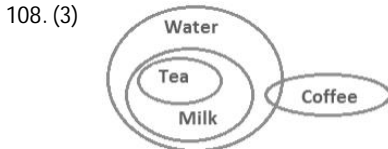
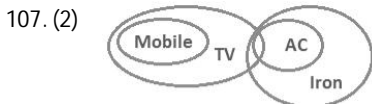


99. (3)
100. (4)
101. (3)
102. (5)
103. (4)
104. (4)



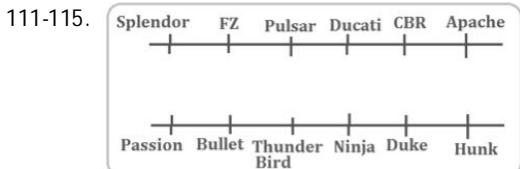
105. (4)



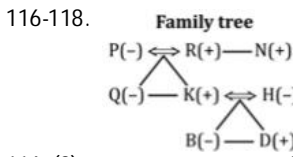


109. (2) Super Computers are also known as number crunchers. A super computer's dominant characteristic is its ability to perform large amounts of numerical computations quickly.

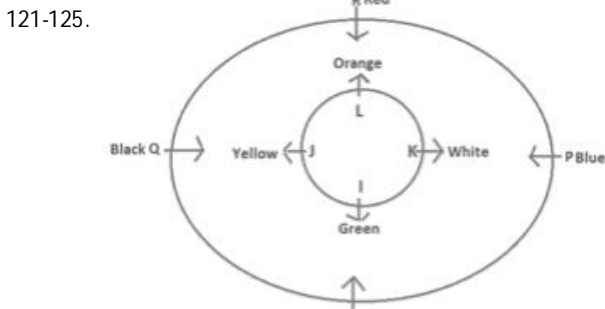
110. (3) 10 and 500 are valid minimum & maximum zoom sizes in MS word.



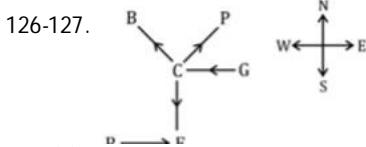
111. (3) 112. (5)  
113. (2) 114. (1)



116. (2) 117. (4) 118. (3)  
119. (4) Assembly Languages are low level programming languages.  
120. (3) Hub and Repeater are used in Layer 1: Physical Layer. And they can be used to enlarge the area covered by a single LAN segment



121. (3) 122. (2) 123. (4) 124. (4) 125. (2)



126. (4) 127. (5) Northeast  
128. (1) There is no such combination.  
129. (3) According to condition answer will be 4.  
130. (3) The seventh letter to the left of © is R.  
131. (4)

132. (5) The letter will be R.  
133. (3) Through Telnet, an administrator or another user can establish a connection to someone else's computer remotely. On the Web, HTTP and FTP protocols allow you to request specific files from remote computers, but not to actually be logged on as a user of that computer.  
134. (5) Ragged right is a text margin treatment in which all lines begin hard against the left-hand margin but are allowed to end short of the right-hand margin. On lines that do not fully fill the measure (nearly all of them), any leftover space is deposited along the right-hand margin. This creates an irregular margin along the right side of the text column.

135. (2) Ctrl + Shift + ESC can be used to open task manager

136. (1) # → ≤  
@ → ≥  
\$ → >  
% → <  
© → =  
only I is true

137. (5) # → ≤  
@ → ≥  
\$ → >  
% → <  
© → =  
only II is true

138. (5) # → ≤  
@ → ≥  
\$ → >  
% → <  
© → =  
all are wrong

139. (1) # → ≤  
@ → ≥  
\$ → >  
% → <  
© → =  
only III is true

140. (4) # → ≤  
@ → ≥  
\$ → >  
% → <  
© → =  
only III is true

141. (2) S. I after 20 years =  $\frac{2000 \times 20 \times 10}{100} = 4000$   
∴ New principle = 2000 + 4000 = 6000  
Now, Let after 't' years the interest become 14000 - 6000 = 8000  
 $8000 = \frac{6000 \times T \times 10}{100}$   
∴ Time t =  $\frac{8000 \times 100}{6000 \times 10} = \frac{40}{3}$  years.

∴ Total time =  $20 + \frac{40}{3} = \frac{100}{3} = 33\frac{1}{3}$  years  
Total distance = 128 + 122 = 250 meter  
And Resultant Velocity = 48 + 42 = 90 km  
 $= 90 \times \frac{5}{18} = 25$  m/s.

∴ Time to cross each other =  $\frac{250}{25} = 10$  Second

142. (1) Let speed of boat be 'v' and, of stream be 'x'  
For downstream,  $V + U = \frac{28}{7} = 4$  km/hr — (I)  
& for ups stream,  $V - U = \frac{28}{14} = 2$  km/hr — (II)

From (I) & (II),  
 $V = 3$  km/hr.  
143. (2) Let daily wage was 'x' Rs.  
∴ 150% of x = 30  
∴  $x = \frac{30 \times 100}{150} = 20$  Rs.

144. (3) Let cost price be = 'x' Rs.  
∴ S.P =  $X \times \frac{116}{100} \times \frac{125}{100} = \frac{29x}{20}$   
∴ Profit % =  $\frac{\frac{29x}{20} - x}{x} \times 100$   
 $= \frac{9x}{20 \times x} \times 100 = 45\%$

# Grand Test – ICM 171202



146. (2) Pattern is  $T_{n+1} = T_n \times 3$   
 $\therefore 15 \times 3 = 45$  Not 30
147. (2) Pattern of series is -  
 $36 \times 1.5 = 54$   
 $54 \div 3 = 18$   
 $18 \times 1.5 = 27$   
 $27 \div 3 = 9$   
 $9 \times 1.5 = 13.5 \neq 18.5$   
 $13.5 \div 3 = 4.5$
148. (1) Pattern of series is -  
 $582 + 23 = 605$   
 $605 - 17 = 588$   
 $588 + 23 = 611$   
 $611 - 17 = 594 \neq 634$   
 $594 + 23 = 617$   
 $617 - 17 = 600$
149. (3) Pattern of series is -  
 $46080 \div 12 = 3840$   
 $3840 \div 10 = 384$   
 $384 \div 8 = 48$   
 $48 \div 6 = 8 \neq 24$   
 $8 \div 4 = 2$   
 $2 \div 2 = 1$
150. (4) Pattern of series is  
 $1^3, 2^3, 3^3, 4^3, [5^3 = 125 \neq 124], 216, 343$
151. (3) Academic books published by publisher M  
 $= 28200 \times \frac{7}{10} = 19740$   
 Academic books published by publisher P  
 $= 31200 \times \frac{8}{13} = 19200$   
 Required difference =  $19740 - 19200 = 540$
152. (2) Books distributed by publisher Q  
 $= \frac{33800 \times 79}{100} = 26702$   
 $\therefore$  Required no. of books =  $\frac{26702}{25} \approx 1068$
153. (3) Published Non-Academic books  
 Publisher R  $\rightarrow 35700 \times \frac{6}{17} = 12600$   
 Publisher S  $\rightarrow 37800 \times \frac{13}{18} = 27300$   
 $\therefore$  Required average =  $\frac{12600 + 27300}{2} = 19950$
154. (2) Total books published by publisher P, Q and R  
 $= 31200 + 33800 + 35700$   
 $= 100700$   
 Total Books published by publisher M, N, O and S  
 $= 28200 + 32200 + 29700 + 37800$   
 $= 127900$   
 now, no. of books published by all there the publisher  
 $= \frac{100700 \times 130}{100} + \frac{127900 \times 80}{100} = 233230$   
 average =  $\frac{233230}{7} = 33318$
155. (4) Books distributed  
 Publisher O  $\Rightarrow 29700 \times \frac{92}{100} = 27324$   
 Publisher Q  $\Rightarrow 33800 \times \frac{79}{100} = 26702$   
 Required sum =  $27324 + 26702 = 54026$
156. (4) From I  $\rightarrow 4\% \rightarrow 20$   
 $100\% \rightarrow 500$   
 Minimum passing marks =  $\frac{38}{100} \times 500 + 8 = 198$   
 From II,  
 $5\% \rightarrow 25$   
 $100\% \rightarrow 500$
- Minimum passing marks =  $\frac{35}{100} \times 500 + 23 = 198$   
 From III,  
 We can't determine the minimum passing marks from it.  
 $\therefore$  with the help of statement I or II we can get the required value.
157. (2) From I, Total profit = 54000  
 Time = 1 year  
 From II, we will get the ratio of their investment = 3 : 4 : 2  
 From III, profit of V = profit of A + 4000  
 $4x = 2x + 4000$   
 $2x = 4000$   
 $x = 2000$   
 From II and either I or III, we can get the share of R.
158. (2) Let distance = d  
 Speed in still water = x  
 Speed of current = y  
 $\therefore \frac{d}{x} = 2$   
 From A, d given  
 $B, \frac{d}{x+y} = \text{given}$   
 C, y = given, so upstream speed can be calculated by using any 2 of the 3 statements.
159. (4) From I,  $\ell : b = 3 : 2$   
 From II, length = 48 m  
 Cost of flooring = 850 per sq m  
 $\therefore \ell = 48$  m  
 $b = 32$  m  
 Area =  $48 \times 32$   
 Required price =  $48 \times 32 \times 850$  Rs.  
 From III, perimeter = 160  
 Length =  $3 \times 16 = 48$  m  
 Breadth =  $16 \times 2 = 32$  m  
 $\therefore$  Required cost =  $48 \times 32 \times 850$  Rs.  
 $\therefore$  We can get the cost of flooring a rectangular hall from any of the two statements.
160. (3) Let the required number =  $10x + y$   
 From I =  $x^2 + y^2 = 26$   
 From II,  $(10x + y) : (x + y) = 5 : 2$   
 From III,  $x = y - 4$   
 $y - x = 4$   
 We can get the value of x and y with the help of any of the two statements.
161. (5) Expenditure of the company =  $120 - 70 = 50$  cr.  
 $\therefore$  % profit =  $\frac{70}{50} \times 100 = 140\%$
162. (1) Required ratio =  $(85 + 30) : 85 = 115 : 85 = 23 : 17$
163. (3) Required average  
 $= \frac{40+55+50+70+30+75}{6} = \frac{320}{6} = 53\text{cr}$
164. (2) Req. exp =  $95 \text{ cr} - 40 \text{ cr} = 55 \text{ cr}$   
 $= 55 \times 10^7$
165. (4) Req. % =  $\frac{70 - 50}{50} \times 100 = 40\%$
166. (4) Let initial expenditures an rice, fish and oil be Rs. 12x, Rs. 17x and 3x respectively.  
 Total expenditure =  $12x + 17x + 3x = \text{Rs. } 32x$   
 After increase  
 Expenditure an rice =  $\frac{120}{100} \times 12x = \text{Rs. } 14.4x$   
 Expenditure an fish =  $\frac{130}{100} \times 17x = \text{Rs. } 22.1x$   
 Expenditure an oil =  $\frac{150}{100} \times 3x = 4.5x$   
 Total expenditure =  $14.4x + 22.1x + 4.5x$   
 $= 41x$   
 Increase = 9x  
 Percentage Increase =  $\frac{9x}{32x} \times 100 = 28\frac{1}{8}\%$
167. (2) Req. Probability =  $\frac{2c_1 + 1c_1}{12c_1} = \frac{3}{12} = \frac{1}{4}$

168. (4) Let A's capital = 3x  
 B's capital = 5x  
 Ratio of their profit = (4×3x) : (T×5x)  
 $\therefore \frac{12x}{5Tx} = \frac{4}{5}$   
 3 = T  
 $\therefore$  Required time = 3 months

169. (4) Let no. of students in class A, B and C be x, y and z  
 $\therefore A = 83x$   
 $B = 76y$   
 $C = 85z$   
 Now, A + B = 79x + 79y  
 $B + C = 81(y + z) = 81y + 81z$   
 $\therefore 83x + 76y = 79x + 79y$   
 $4x = 3y$   
 $\frac{x}{y} = \frac{3}{4}$   
 $\frac{y}{z} = \frac{4}{5}$   
 And,  $76y + 85z = 81y + 81z$   
 $5y = 4z$   
 $\frac{y}{z} = \frac{4}{5}$   
 $\therefore x : y : z = 3 : 4 : 5$   
 $\therefore$  Required average =  $\frac{83 \times 3 + 76 \times 4 + 85 \times 5}{12}$   
 $= \frac{249 + 304 + 425}{12}$   
 $= \frac{978}{12}$   
 $= 81.5$

170. (1) Let Required money = x  
 $\therefore \frac{x \times 8 \times 4}{100} + \frac{x \times 6 \times 10}{100} + \frac{x \times 5 \times 12}{100} = 12160$   
 $\frac{x}{100} (32 + 60 + 60) = 12160$   
 $x = \frac{12160 \times 100}{152} = 8000 \text{ Rs.}$

171. (3) Required average  
 $= \frac{40 \times 4200 + 35 \times 4000}{75}$   
 $= \frac{168000 + 140000}{75}$   
 $= \frac{308000}{75}$   
 $= 4106 \frac{2}{3} \text{ Rs.}$

172. (4) Let length of first train = 2ℓ  
 $\therefore$  length of second train = ℓ  
 $\therefore \frac{(48+42)5}{18} = \frac{3\ell}{12}$   
 $25 = \frac{3\ell}{12}$   
 $\ell = 100 \text{ m}$   
 Let length of platform = x  
 $\therefore \frac{48 \times 5}{18} = \frac{(200+x)}{45}$   
 $600 = 200 + x$   
 $x = 400 \text{ m}$

173. (2) Let speed of train = S km/hr  
 $(S - 6) \times \frac{5}{18} = \frac{75}{15} \times 2$   
 $S - 6 = 36$   
 $S = 42 \text{ km/hr}$   
 Let speed of the second person = x km/hr  
 $\therefore (42 - x) \frac{5}{18} = \frac{75}{27} \times 4$   
 $42 - x = 40$   
 $x = 2 \text{ km/hr}$

174. (5)  $2\pi r^2 = 616$   
 $r^2 = \frac{616}{2} \times \frac{7}{22}$   
 $r^2 = 98$   
 $\therefore$  Volume =  $\frac{2}{3} \pi r^3$   
 $= \frac{2}{3} \times \frac{22}{7} \times 98 \times 7 \sqrt{2}$   
 $= 2032.69 \text{ cm}^2$

175. (1) Let length of the wire = h  
 Radius =  $\frac{40}{2} = 20 \text{ mm}$   
 $= 2 \text{ cm}$   
 Volume of the wire =  $\pi r^2 h = 4\pi h$   
 and, volume of sphere =  $\frac{4}{3} \pi (9)^3$   
 $4\pi h = \frac{4}{3} \pi \times 9 \times 9 \times 9$   
 $h = 243 \text{ m}$

176. (2) ? = 622.793

177. (1) ? = (43)<sup>37-41+6</sup>  
 $= (43)^2 = 1849$

178. (4) ? = (53.7+43.6) (53.7-43.6)  
 $= 97.3 \times 10.1$   
 $= 982.73$

179. (3) ? =  $\frac{4004}{52 \times 7} = 11$

180. (2) ? =  $\frac{76 \times 112}{100} - \frac{42 \times 116}{100}$   
 $= \frac{3640}{100} = 36.40$

181. (1) I. (x + 10)(x - 3) = 0  
 $x = -10, 3$

II.  $y = \frac{10}{3}$   
 Hence,  $x < y$

182. (2) I. (3x - 7)(x - 3) = 0  
 $x = \frac{7}{3}, 3$

II. (6y + 7)(y + 3) = 0  
 $\therefore y = -3, -\frac{7}{6}$

Hence,  $x > y$

183. (2) I.  $x^3 = \frac{128}{2}$   
 $\therefore x = 4$

II.  $\frac{1}{y^2} = \frac{1}{8}$

$\therefore y = \pm 2\sqrt{2}$   
 Hence,  $x > y$

184. (4) I. (5x - 12)(x - 3) = 0  
 $x = \frac{12}{5}, 3$

II. (5y - 6)(5y - 12) = 0  
 $y = \frac{6}{5}, \frac{12}{5}$

Hence,  $x \geq y$

185. (5) I. (x + 6)(x + 3) = 0  
 $x = -6, -3$

II. (y + 3)(y - 6) = 0  
 $y = 6, -3$

Hence,  $x \leq y$

186. (4)  $P + \frac{P \times 6 \times T}{100} = P + \frac{P \times 4 \times (T+2)}{100}$   
 $6T = 4T + 8, T = 4 \text{ years}$   
 $P + \frac{P \times 6 \times 4}{100} = 18600, P = \text{Rs } 15000$

Total sum 30000 Rs

187. (5) Let the distance each way be x km

Then,

$\frac{x}{40} - \frac{x}{45} = 1$

or,  $5x = 1800$

or,  $x = 360 \text{ km}$

188. (2) Let the 3<sup>rd</sup> pipe can empty full tank in x hours

$\frac{1}{2} + \frac{1}{3} - \frac{1}{x} = \frac{7}{12}, x = 4 \text{ hours}$

189. (1) Distance covered by Sam in 30 sec = diagonal = 50 m  
 distance covered by Shyam in 40 sec = sum of 2 sides = 70 m  
 $x + y = 70, x^2 + y^2 = 2500$ , solving the eq<sup>n</sup>,  $xy = 1200 \text{ m}^2$

190. (3) Required no. of ways =  $\frac{6!}{2!} \times \frac{5!}{2!} = 21600$

