113. 1; This one may be a googly! Don't panic at the long sum but don't at the same time foolishly venture into solving the question. It's simple common sense: Wherever the two trains may meet, they will be equidistant from a given place.

114. 4; We have

$$\frac{n}{2}[2\times 40+(n-1)5]=385$$

or, $\frac{n}{2}(80+5n-5)=385$

or, $80n+5n^2-5n=770$

or, $5n^2+75n-770=0 \quad \therefore \ n=7$

115. 3; We have

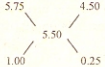
$$\left[\frac{x\times 25+30\times 30}{x+30}\right]\times\frac{110}{100}=30$$

$\therefore x = 36$ kg

116. 2; **Use Alligation Method:**

We have

Sugar I **Sugar II**



ie 4 : 1

Hence the required quantity of sugar I

$$=\frac{75}{1}\times 4=300 \text{ kg}$$

117. 1; Except it others show total number of employees to be more than 400.

118. 1; **Use Alligation Method:**

The ratio of the time he spent in bus and train

Bus **Train**

ie 1 : 1

Hence the time spent in train

$$=\frac{1}{(1+1)}\times 6 = 3 \text{ hours}$$

And the required distance = 55 × 3 = 165 km

119. 1; $\frac{30\times[(100-2)-(100-10)]}{(100-10)}$

$$=\frac{30\times 8}{90}=2\frac{2}{3} \text{ kg}$$

120. 3; Let the speed of the train be x m/s.

Then length of train

= Relative speed × Time taken to pass a man

$$\left(x-3\times\frac{5}{18}\right)9=\left(x-6\times\frac{5}{18}\right)10$$

or, $9x-\frac{15}{2}=10x-\frac{50}{3}$

or, $9x-\frac{15}{2}=10x-\frac{50}{3}$

or, $x=\frac{50}{3}-\frac{15}{2}=\frac{55}{6}$ metre per sec

$$=\frac{55}{6}\times\frac{18}{5}=33 \text{ km/hr}$$

Hence the required speed of the train = 33 km/hr

121. 1; **From A and B:**

Required earning = $\frac{2}{100}\times 3{,}40{,}000\times 3$

$= 2 \times 3400 \times 3 =$ Rs 20,400

122. 2; **From B:** WXY = 6

123. 3; **From A:** D > E > C

$\therefore$ D is the greatest.

124. 4; **From A:**

Required time = $\frac{15\times 20}{15+20}$

$$=\frac{300}{35}=8\frac{4}{7} \text{ hours.}$$

From B: We get

Ratio of the efficiencies of Sanjay and Mohit = 4 : 3

$\therefore$ Required time to finish the work by Sanjay and Mohit together = $\frac{15\times 4}{(4+3)}=\frac{60}{7}=8\frac{4}{7}$ hours

125. 3; If x = -2

then $3x^2+2x-1=7$

and $x^3+2x^2+1=1$

$\therefore$ A > B

126. 1

127. 2; **Column A** **Column B**

Rs 44.89 $\frac{47.25}{105}\times 100 = 45$

Here, 45 > 44.89

128. 1; **Column A** **Column B**

1 : 3 1 : 3

Here, $\frac{1}{3}=\frac{1}{3}$

129. 3; **Column A** **Column B**

1.4 : 2.0 2 : 3

= 7 : 10

Here $\frac{7}{10}>\frac{2}{3}$

130. 2; **Column A** **Column B**

$\frac{0.4+1.4+2.2+2.8+2.4+1.4+2}{7}$

= 1.8 (inches) 1.9 (inches)

Here 1.8 < 1.9

131. 3; **Column A** **Column B**

12.5% of 12.6

= 1.576 inches 1.4 inches

Here 1.576 > 1.4

132. 3; **Column A** **Column B**

$\frac{2.4}{0.4}=\frac{6}{1}$ $\frac{2.8}{1.4}=\frac{2}{1}$

Here $\frac{6}{1}>\frac{2}{1}$

133. 4; Required population of the country AD in the year 2006

$=\frac{10,000}{0.8}\times 7100 = 88750000$

ie 88750 thousand

134. 1; It is obvious from the table.

135. 4 136. 3 137. 4

138. 4; Among the four chemicals, only Aniline and Sodium bicarbonate witnessed increase in production from 2002-03 to 2003-04. Now it is obvious from the data in the table that percentage increase in the production of sodium bicarbonate is higher than Aniline.

139. 4; According to the data in the table given, the required chemical will be one of the following:

1. Titanium Oxide
2. Ethylene Glycol
3. Fatty Acids
4. Benzene

Now, an intuitive look indicates that among the four chemicals Titanium Oxide's production in 2003-04 is the lowest as a proportion of its total production for the two-year period.

140. 2; Higly Volatile organic chemicals among the ten organic chemicals are:

1. Ethylene Gylcol
2. Fatty Acids
3. Aniline
4. Benzene
5. Xylene

141. 1 142. 2 143. 1 144. 4

145. 3; Clearly, the passage is about "abstraction". Hence D must be the first sentence and this rules out 1. Again, "this discovery" should follow w[illegible] "the discoverer of abstraction" did. And C[illegible] as a sequence rules out 2 and 4.

146. 3; The passage is about "accommodation" theory. Hence A must be the first sentnece. Which rules out 1 and 2. And B gives the "examples" of the "subtle adaptation" mentioned in C. CB as a sequence rules out 4.

147. 2; C, starting with "Thus", can't be the first sentence. Hence 1 and 3 are ruled out. 2 is preferred to 3 because rushing for A, which talks about mammals specifically, leads us to lose the general discussion too soon.

148. 1; "It" in D refers to the "bear market" mentioned in B. BD as a sequence rules out 2 and 3. Again, A is an explanation of C. And CA as a sequence rules out 4.

149. 4; The parallelism of participles needs to be maintained.

150. 1

151. 4; The pronoun one is preferable to you as an indefinite pronoun. Quicker should be replaced by quickly as we need an adverb. Also, the comparison is unwarranted.

152. 1; If you are entrusted with something, you are given its responsibility.

153. 1 154. 2

155. 2 156. 1

157. 3; Replace has with have.

158. 3; It should be written as: "When they want to tell the truth, Indians have an amazing way of doing so."

159. 2; Makes no sense at all.

160. 3; Replace for with to.

161. 1 162. 3 163. 2

164. 3 165. 1 166. 2

167. 3 168. 4 169. 2

170. 3 171. 3 172. 2

173. 3 174. 2 175. 2

176. 2 177. 3 178. 1

179. 3 180. 4

181. 2; **Per cent increase**

For Plywood: $\frac{(20000-14000)}{14000}\times 100 \approx 42\frac{6}{7}\%$

Sawn timber: $\frac{(16000-10000)}{10,000}\times 100 \approx 60\%$

Logs: $\frac{(7000-4000)}{4000}\times 100 \approx 75\%$

182. 2; It is obvious from the graph.

183. 3; 40% of 20000 + 30% of 16000 + 30% of $\left(\frac{7000}{800}\times 1000\right)$

= 8000 + 4800 + 2625

= Rs 15425

184. 2; $20000\times\frac{105}{100}\times\frac{40}{100}+16000\times\frac{101}{100}\times\frac{30}{100}$

$+ 7000\times\frac{110}{100}\times\frac{30}{100}\times\left(\frac{1000}{800}\right)$

$= 20000 \times 1.05 \times 0.4 + 16000 \times 1.01 \times 0.3 + 7000 \times 1.1 \times 0.3 \times 1.25$

$= 8400 + 4848 + 2887.5$

= Rs 16,135.5

185. 1; Required investment in high-risk stocks

$= \frac{11,0500000 \times 8.9}{100}$

= Rs 98,34500

186. 4; Required investment

$= 11,05,00,000 \times \frac{48.3}{100} \times \frac{26}{100}$

= Rs 1,38,76,590

187. 4; High-risk stocks

188. 3

189. 1; Rajasthan (45%)

190. 2

191. 1; $25,00,000 \times \frac{70}{100} - 15,00,000 \times \frac{45}{100}$

= 17,50,000 - 6,75,000

= 10,75,000

192. 1; It is obvious from the given diagram.

193. 4; Required per cent increase

$= \frac{25}{150} \times 100 = \frac{100}{6} = 16\frac{2}{3}\%$

194. 1; Required average number of employees

$= \frac{150 + 125 + 175 + 225 + 250}{5} = \frac{925}{5} = 185$

195. 1; Required difference in Rs '0000

$= \frac{50 + 75 + 100 + 125 + 250}{5} - 100$

$= 120 - 100 = 20$

ie Rs 2,00,000

196. 4; Required per cent

$= \frac{300}{\frac{300 + 325 + 350 + 350 + 400}{5}} \times 100$

$= \frac{300}{345} \times 100 = 86\frac{22}{23}\% \approx 87\%$

197-200:

Subject	Students	Girls	Boys
Arts	216	168	48
Biology	234	168	66
Law	360	360	Nil
Computers	270	120	150
Maths	90	24	66
Political Science	630	360	270
Total	1800	1200	600

197. 2 198. 1

199. 2; $\frac{270}{360} = 3 : 4$

200. 4; $\frac{(168 - 48)}{48} \times 100$

$= \frac{120 \times 100}{48} = 250\%$