PART - III
QUANTITATIVE APTITUDE

Directions (111-115) : *In these questions, a number series is given. Only one number is wrong which doesn't fit in the series. Find out the wrong number.*

111. 6 4 5 8.5 18 48 139
- (1) 8.5
- (2) 4
- (3) 5
- (4) 18
- (5) 48

112. 10080 1440 240 48 12 3 2
- (1) 240
- (2) 3
- (3) 1440
- (4) 48
- (5) 12

113. 1 2 6 21 88 505 2676
- (1) 21
- (2) 6
- (3) 2
- (4) 505
- (5) 88

114. 18 21 25 35 52 78 115
- (1) 25
- (2) 21
- (3) 28
- (4) 35
- (5) 52

115. 120 137 178 222 290 375 477
- (1) 178
- (2) 137
- (3) 290
- (4) 375
- (5) 222

116. Area of a rectangle is 150 m². When the breadth of the same rectangle is increased by 2 m and the length decreased by 5 m, the area of the rectangle decreases by 30 m². What is the perimeter of the square whose sides are equal to the length of the rectangle ?
- (1) 76 m
- (2) 72 m
- (3) 120 m
- (4) 80 m
- (5) 60 m

117. A, B and C started a business with investments of ₹ 4,200/-, ₹ 3,600/- and ₹ 2,400/- respectively. After 4 months from the start of the business, A invested ₹ 1,000/- more. After 6 months from the start of the business, B and C invested additional amounts in the respective ratio of 1 : 2. If at the end of 10 months they received a profit of ₹ 2,820/- and share in the profit was ₹ 1,200/-, what was the additional amount that B invested ?
- (1) ₹ 800/-
- (2) ₹ 200/-
- (3) ₹ 500/-
- (4) ₹ 600/-
- (5) ₹ 400/-

118. A vessel contains a mixture of milk and water in the respective ratio of 5 : 1. 24 litre of mixture was taken out and replaced with the same quantity of milk so that the resultant ratio between the quantities of milk and water in the mixture was 13 : 2 respectively. If 15 litre of the mixture is again taken out from the vessel, what is the resultant quantity of milk in the mixture ? (in litre)
- (1) 97
- (2) 89
- (3) 91
- (4) 99
- (5) 84

Directions (119-123) : *Refer to the table and answer the given questions.*

Data related to performance of 6 batsmen in a tournament

Name of the batsman	Number of matches played in the tournament	Average runs scored in the tournament	Total balls faced in the tournament	Strike rate
A	8	—	—	129.6
B	20	81	—	—
C	—	38	400	114
D	—	—	—	72
E	28	55	1280	—
F	—	—	—	66

Note :

(i) Strike rate = (Total runs scored/ Total balls faced) × 100

(ii) All the given batsmen could bat in all the given matches played by them.

(iii) Few values are missing in the table (indicated by —). A candidate is expected to calculate the missing value, if it is required to answer the given question, on the basis of the given data and information.

119. The respective ratio between total number of balls faced by D and that by F in the tournament is 3 : 4. Total number of runs scored by F in the tournament is what percent more than the total runs scored by D in the tournament ?
- (1) $22\frac{2}{9}$ %
- (2) $32\frac{4}{9}$ %
- (3) $18\frac{8}{9}$ %
- (4) $24\frac{4}{9}$ %
- (5) $28\frac{2}{9}$ %

120. If the runs scored by E in last 3 matches of the tournament are not considered, his average runs scored in the tournament will decrease by 9. If the runs scored by E in the 26th and 27th match are below 128 and no two scores among these 3 scores are equal, what are the minimum possible runs scored by E in the 28th match ?
- (1) 137
- (2) 135
- (3) 141
- (4) 133
- (5) 139

121. In the tournament, the total number of balls faced by batsman A is 74 less than the total number of runs scored by him. What is the average run scored by batsman A in the tournament?
- (1) 42.5
- (2) 39.5
- (3) 38
- (4) 44
- (5) 40.5

122. Batsman B faced equal number of balls in first 10 matches he played in the tournament and last 10 matches he played in the tournament. If his strike rate in first 10 matches and last 10 matches of the tournament are 120 and 150 respectively, what is the total number of balls faced by him in the tournament?
- (1) 1150
- (2) 1400
- (3) 1200
- (4) 1000
- (5) 1500

123. What is the number of matches played by batsman C in the tournament?
(1) 10
(2) 16
(3) 12
(4) 18
(5) 8

124. 10 men can complete a project in 12 days, 12 children can complete the same project in 16 days and 8 women can complete the same project in 20 days. 5 men and 12 children started working on the project. If after 4 days, 8 children were replaced by 4 women. In how many days the remaining project was completed?

(1) $4\dfrac{2}{5}$
(2) $5\dfrac{1}{2}$
(3) $7\dfrac{1}{2}$
(4) $3\dfrac{5}{9}$
(5) $6\dfrac{2}{3}$

125. In a village, 60% registered voters cast their votes in the election. Only two candidates (A and B) were contesting the election. A won the election by 600 votes. Had B received 40% more votes, the result would have been a tie. How many registered voters are there in the village?
(1) 4000
(2) 3500
(3) 3000
(4) 3250
(5) 3750

126. Eight years ago, Poorvi's age was equal to the sum of the present ages of her one son and one daughter. Five years hence, the respective ratio between the ages of her daughter and her son that time will be 7 : 6. If Poorvi's husband is 7 years elder to her and his present age is three times the present age of their son, what is the present age of the daughter? (in years)
(1) 15 years
(2) 23 years
(3) 19 years
(4) 27 years
(5) 13 years

127. Boat A travels downstream from Point X to Point Y in 3 hours less than the time taken by Boat B to travel upstream from Point Y to Point Z. The distance between X and Y is 20 km, which is half of the distance between Y and Z. The speed of Boat B in still water is 10km/h and the speed of Boat A in still water is equal to the speed of Boat B upstream. What is the speed of Boat A in still water? (Consider the speed of the current to be the same.)
(1) 10 km/h
(2) 16 km/h
(3) 12 km/h
(4) 8 km/h
(5) 15 km/h

Directions (128-132) : *Study the following information carefully and answer the given questions.*

Data regarding number of applications received for various courses in University A and that in University B in the year 2001

(**Note :** Universities A and B offer courses in six courses only, namely, Commerce, Science, Engineering, Arts, Management and Law.)

- In University A, applications received for Commerce, Science and Engineering together constituted 70% of the total number of applications received (for all the given courses together). Applications received for Arts, Management and Law were 800, 750 and 400 respectively. Applications received for management were 40% less than that for Engineering. Applications received for Commerce were 20% more than that for Science.

- In University B, applications received for Science were 20% less than that for Science in University A.

- In University B, applications received for Arts were 780 and they constituted 15% of the total number of applications received (for all the given courses together). Also the applications received for Arts were 40% less than that received for Commerce. Total number of applications received for Engineering and Management together. were double the total number of applications received for Arts and law together. Applications received for Engineering were equal to that for Management.

128. What is the respective ratio between the total number of applications received for Engineering and Science together in University A and that for the same courses together in University B?
(1) 50 : 47
(2) 65 : 53
(3) 52 : 37
(4) 55 : 42
(5) 43 : 36

129. Number of applications received for only commerce in University B is what percent less than that in University A?
(1) 30%
(2) $27\dfrac{7}{9}$%
(3) 20%
(4) 15%
(5) $15\dfrac{5}{8}$%

130. $\dfrac{5}{8}$-th of the number of applications for Arts in University A were female students. If the number of female applicants for the same course in University B is less than that in University A by 120, what is the number of male applicants for Arts in University B?
(1) 500
(2) 420
(3) 450
(4) 360
(5) 400

131. Total number of applicants (for all the given six courses together) received by University A, was what percent more than that in University B?
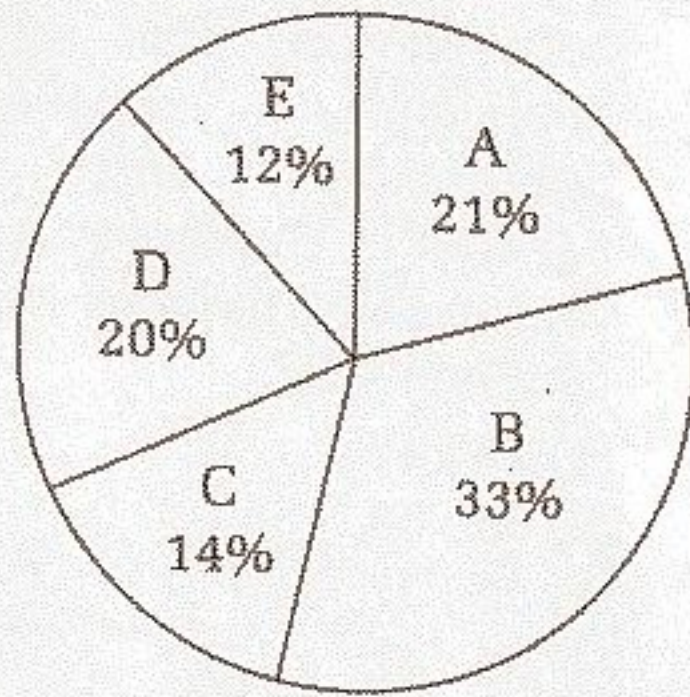(1) 25%
(2) 10%
(3) 20%
(4) 28%
(5) 30%

132. What is the difference between the total number of applications received for Management and Law together in University A and that for same courses together in University B?
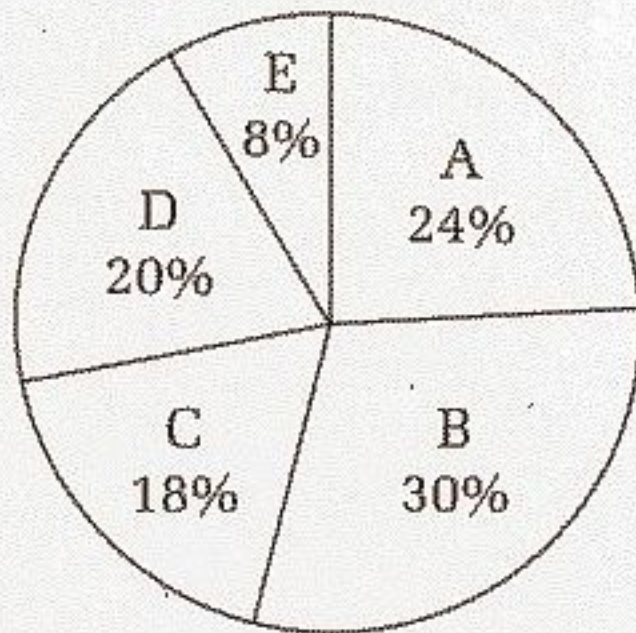(1) 210
(2) 150
(3) 130
(4) 80
(5) 170

Distribution of total number of members (both male and female) in 5 health clubs in 2011
Total number = 6300

Distribution of total number of male members in 5 health clubs in 2011
Total number = 3600

133. Only 25% of the members (both male and female) in health club D have lifetime membership. If the number of females in health club D who have lifetime membership is 126, what percent of male members in health club D have lifetime membership?
    (1) $30\frac{1}{2}\%$ (2) $28\frac{3}{4}\%$
    (3) $20\frac{3}{4}\%$ (4) $26\frac{1}{4}\%$
    (5) $24\frac{1}{2}\%$

134. What is the average number of female members in health clubs A, B and C?
    (1) 564   (2) 572
    (3) 568   (4) 548
    (5) 588

135. Number of male members in health clubs A and C increased by equal number from 2011 to 2012. If the respective ratio between number of male numbers in health club A and that in C in 2012 is 13 : 10, what

is the number of male members in health club C in 2012?
    (1) 690   (2) 750
    (3) 720   (4) 740
    (5) 760

136. What is the central angle corresponding to number of (both male and female) in health club B?
    (1) 118.8°   (2) 112.6°
    (3) 124.8°   (4) 116.4°
    (5) 128.4°

137. Number of female members in health club E is what percent less than number of male members in health club B?
    (1) $56\frac{2}{3}\%$ (2) $54\frac{1}{3}\%$
    (3) $60\frac{2}{3}\%$ (4) $64\frac{1}{3}\%$
    (5) $48\frac{2}{3}\%$

138. Rohan travelling at a speed of 'X' km/h took 2 hours 30 min to cover $\frac{2}{3}$rd of the distance. Travelling at a speed of 'X + 2' km/h, he took 50 min to cover the remaining $\frac{1}{3}$rd of the same distance. What was the total distance?
    (1) 21 km   (2) 15 km
    (3) 30 km   (4) 9 km
    (5) 24 km

139. Ram bought two articles- A and B at a total cost of ₹ 8,000/-. He sold article A at 20% profit and article B at 12% loss. In the whole deal he made no gain and no loss. At what price should Ram have sold article B to make an overall profit of 25%?
    (1) ₹ 5,200/-   (2) ₹ 5,800/-
    (3) ₹ 6,400/-   (4) ₹ 6,250/-
    (5) ₹ 4,260/-

140. An equal sum is invested for six years in scheme A offering simple interest at X% p.a. and in Scheme B for two years offering compound interest at 10% p.a. (compounded annually). The interest earned from Scheme A is double the interest earned from Scheme B. Had the rate of interest been X + 2% simple interest p.a. in scheme A, the difference in the interests earned from both the schemes would have been ₹ 3,960/-, what was

the sum invested in each of the scheme?
    (1) ₹ 10,000/-   (2) ₹ 20,000/-
    (3) ₹ 12,000/-   (4) ₹18,000/-
    (5) ₹ 15,000/-

PART-IV : REASONING ABILITY

Give answer :
(1) If **neither** conclusion I **nor** II is true.
(2) If **either** conclusion I or II is true.
(3) If **only** conclusion II is true.
(4) If **both** conclusions I and II are true.
(5) If **only** conclusion I is true.

141. **Statements :**
    $S \leq T < P = D$; $P \leq M$; $R \geq M$
    Conclusions : I. $M \leq S$
                    II. $D > S$

142. **Statements :**
    $S \leq T < P = D$; $P \leq M$; $R \geq M$
    Conclusions : I. $D < R$
                    II. $R = D$

143. **Statements :**
    $L \geq J \geq U \leq P$; $D \leq P$; $U > T$
    Conclusions : I. $L > T$
                    II. $D \leq J$

144. Read the given information and answer the question.
    Company S has launched its stores in Country Y just a month ago and is selling garments at less than 50% cost as compared to the leading garment stores in the country. However, even before Company S could establish itself in the country, there have been many protests against the same.
    Which of the following may not be a reason for protests against Company S in Country Y?
    (1) It has been reported in some of the international magazines that Company S relies on child labour for manufacturing clothes.

(2) Despite facing severe opposition, most properties acquired by Company S for setting up its own factories in Country Y are located near eco-sensitive areas of the country.

(3) The advertisements launched by Company S in Country Y, although meant to be humorous, are offensive as they ridicule the choice of clothes of people in the country.

(4) Many clothes manufactured by Company S are reportedly made up of genuine leather, which has been banned in Country Y since the past 10 years or so.

(5) Many malls in Country Y have decided to give their prime spots to the stores of Company S, as the Company is willing to pay the extra charge.

Directions (145-149) : *Study the following information carefully to answer the given questions.*

Ten persons from different cities viz. Delhi, Jaipur, Patna, Indore, Mumbai, Chennai, Hyderabad, Bengaluru, Ranchi and Surat are sitting in two parallel rows containing five people each, in such a way that there is an equal distance between adjacent persons. In row 1- A, B, C, D and E are seated and all of them are facing south. In row-2 P, Q, R, S and T are seated and all of them are facing north. Therefore in the given seating arrangement, each member seated in a row faces another member of the other row. (All the information given above does not necessarily represent the order of seating in the final arrangement.)

The person from Mumbai sits second to the right of the one who faces S. S does not sit at an extreme end of the line. One of the immediate neighbours of the person from Mumbai faces the person from Ranchi.

Only one person sits between the person from Ranchi and Q. The person from Indore sits to the immediate right of Q. C sits to

who faces Q. Only two people sit between B and E.

D faces one of the immediate neighbours of the person from Patna. S is not from Patna. D is not from Mumbai. R sits second to the left of person from Surat. A sits third to the right of the person from Chennai.

P faces one of the immediate neighbours of the person from Jaipur. P does not face A. The person from Delhi sits second to the right of the person from Bengaluru.

145. Who amongst the following faces the person from Hyderabad?
(1) The person from Delhi
(2) D
(3) The person from Chennai
(4) The person from Ranchi
(5) B or E

146. T is from which of the following cities?
(1) Patna   (2) Indore
(3) Hyderabad (4) Ranchi
(5) Mumbai

147. Which of the following is true regarding C ?
(1) C sits at an extreme end of the line.
(2) None of the given options is true.
(3) C is from Bengaluru.
(4) The person from Indore faces C.
(5) The person from Hyderabad is an immediate neighbour of C.

148. R is related to Indore in the same way as C is related to Jaipur based on the given arrangement, To who amongst the following is T related to following the same pattern?
(1) Delhi
(2) Surat
(3) Patna
(4) Hyderabad
(5) Ranchi

149. Who amongst the following sit at extreme ends of the rows?
(1) The persons from Delhi and R.
(2) The persons from Bengaluru and R
(3) A and the person from Hyderabad.
(4) The persons from Chennai and Patna.
(5) A, E

Directions (150-154) : *Study the following information to answer the given questions.*

In a certain code language,
- 'ki la bx tu' codes for 'must adapt and change'
- 'gm tu dr la' codes for 'change a must here'
- 'fn bx ms dr' codes for 'here to adapt better'
- 'cx qa fn rm' codes for 'little better than nothing'

(All the codes are two letter codes only)

150. Which of the following is needed to arrive at a code for 'little'?
(1) 'little sweet nothing' is coded as 'th cx qa'
(2) 'more than little' is coded as 'rm qa yr'
(3) 'nothing more than' is coded as 'cx rm yr'
(4) 'nothing to declare' is coded as 'ld cx ms'
(5) 'nothing but little' is coded as 'cx xl qa'

151. What does 'gm' stand for ?
(1) here
(2) Either 'change' or 'here'
(3) must
(4) a
(5) change

152. If 'must bring change' is written as 'op la tu', then how will 'bring peace here' be possibly coded in the given code language?
(1) dr op fn
(2) la dr op
(3) op dr ov
(4) la vx dr
(5) ms dr op

153. Code for which of the following cannot be definitely known?
(1) than   (2) here
(3) and   (4) to
(5) adapt

154. Which of the following may represent 'better and improved' in the given code language?
(1) xi cx ms   (2) zp bx yz
(3) yz ki fn   (4) fn ki gm
(5) dr ki fn

155. Which of the following expressions is true if the expression 'P<T≤Q>S>M≥W' is definitely true ?
(1) W ≤ P   (2) S < P
(3) M > P   (4) W < Q
(5) T ≤ M

Eight people–A, B, C, D, E, F, G and H live in eight different floors of building (but not necessarily in the same order.) The lowermost floor of the building is numbered one, the one above that is numbered two, and so on till the topmost floor is numbered eight. Each one of them also owns a different car, namely, Santro, Brio, Amaze, Civic, Etios, Celerio, Micra and Fabia (but not necessarily in the same order.)

F lives on an odd numbered floor above the floor numbered four. Only one person lives between F and the one who owns Amaze. The number of people living above F is same as the number of people living between F and D.

Only three people live between D and the one who owns Celerio. C lives on one of the odd numbered floors above the one who owns Celerio.

Only two people live between C and the one who owns Santro. The one who owns Micra lives immediately above G. G owns neither Celerio nor Santro. E does not own Micra.

Only three people live between G and A. The one who owns Fabia lives immediately above the one who owns Brio, but not on the topmost floor.

Only one person lives between the one who owns Fabia and H. Only one person lives between B and the one who owns Etios.

156. Which of the following statements is true with respect to the given information?
(1) G lives immediately above the one who owns Celerio.
(2) E lives immediately above C.
(3) Only three people live between F and the one who owns Fabia.
(4) All the given statements are true.
(5) D owns Etios.

157. Who amongst the following lives exactly between H and the one who owns Brio?

(1) D, the one who owns Fabia
(2) A, the one who owns Amaze
(3) F, E
(4) A, The one who owns Santro
(5) E, D

158. Which of the following cars does E own?
(1) Civic   (2) Celerio
(3) Brio   (4) Amaze
(5) Fabia

159. Four of the following five are alike in a certain way and so form a group. Which one of the following does not belong to the group?
(1) G-Civic   (2) C-Celerio
(3) F-Etios   (4) H-Fabia
(5) D-Amaze

160. How many people live between C and the one who owns Amaze?
(1) Four   (2) Three
(3) Two   (4) None
(5) Five

161. Read the following information and answer the given questions.
Workers of JNT Manufacturers decided to go on strike claiming that the management failed to comply with the safety and welfare norms for workers.
Which of the following statements does not weaken the workers claims?
(1) An in-house program on 'dealing with emergencies' was conducted by the company in the previous month.
(2) JNT manufacturers has tie-up with a near-by hospital to provide medical facilities for its employees as and when required.
(3) Few employees died due to suffocation at the workplace after one of the buildings caught fire at JNT manufacturers.
(4) No employee under the age of 30 years is allowed to work on heavy machines in JNT manufacturers.
(5) JNT manufacturers follow the protocol of periodical review of all machines and equipments.

Seven people, namely A, B, C, D, E, F and G like seven different movies namely Inception, Titanic, Vertigo, X-Men, Fearless, Batman and Memento but not necessarily in the same order. Each people also works in the same office but at a different department on the basis of experience namely Administration (ADMIN), Marketing & Sales (M&S), Accounts (ACC), Production (PO), Quality Management (QM), Human Resources (HR), and Public Relations (PR), but not necessarily in the same order.

(Please Note : Each person has been allocated to a department as per increasing order of experience with the one in ADMIN being the least experienced whilst the one in PR being the most experienced.)

Only one person has less experience than F. The one who has less experience than F likes X-Men. Only one person has more experience than A. The one in HR likes Fearless. Only two people have more experience than the one who likes Inception. G likes Memento and has more experience than the one who likes Inception. D has less experience than the one in PO, but more experience than the one who likes Vertigo. E neither has the least experience nor he works in QM. B does not work in QM. The one who likes Titanic does not work in PO.

162. As per the given arrangement, ADMIN is related to X-Men and PR is related to Memento in a certain way. To which of the following is ACC related to in the same way?
(1) Vertigo
(2) Inception
(3) Batman
(4) Fearless
(5) Titanic

163. Which of the following pairs represent the people who have more experience than D and less experience than F?
(1) G, A
(2) B, F
(3) C, G
(4) E, B
(5) C, A

164. Which combination represents the department that C works in and the movie he likes?

(1) QM- Inception
(2) PO-Vertigo
(3) PO-Batman
(4) ACC-X-Men
(5) ADMIN-X-Men

165. Who amongst the following works in ADMIN?

(1) Other than those given as options
(2) D
(3) C
(4) A
(5) B

166. Which of the following movies does D like?

(1) Vertigo
(2) Batman
(3) Inception
(4) X-Men
(5) Titanic

167. Who amongst the following works in PO?

(1) C (2) E
(3) A (4) G
(5) B

168. Ajay : "Even though "Sebatol" hardly has any side effects, strangely doctors in this hospital recommended the drug 'Ryanosin' even for treating common flu."

Akash : "They have to attar all pharma company 'WynPharma' pays them a handsome commission."

Which of the following cannot be inferred from the given conversation?

(1) 'Ryanosin' is used for treating diseases other than common flu as well.
(2) 'Sebatol' can be administered for the treatment of common flu.
(3) Ajay and Akash disagree over the effectiveness of 'Ryanosin' for treatment of common flu.
(4) WynPharma definitely manufactures and markets Ryanosin.
(5) 'Ryanosin' is not a medicine which is generally prescribed for treatment of common flu by other doctors.

169. Read the following paragraph and answer the question which follows.

Fighting the disease 'reincer' is never easy for anyone. However, finding an insurance to be financially prepared for it, definitely is. For the disease requiring a minimum of Rs. 60 lakh worth medical expenditure, our insurance scheme offers ₹ 5 lakhs every year for first five years followed by Rs. 10 lakhs every subsequent year– An advertisement by an insurance company.

Which of the following statements would prove that the insurance policy is flawed in its approach?

(1) The disease although serious and cash intensive, is total only in 23% of the cases.
(2) 75% of the entire amount for treatment is required in the first two of years of contracting the disease.
(3) Expenses for treatment of the disease do not fluctuate much based on the intensity of disease and the type of hospitals.
(4) If treated within 4 years of contracting the disease, the patient can be completely cured of the disease for life.

(1) Only (3)
(2) Both (2) and (4)
(3) All (1), (2), (3) and (4)
(4) Only (1)
(5) Both (2) and (3)

Directions (170-172) : In these questions, three statements followed by two conclusions numbered I and II have been given. You have to take the given statements to be true even if they seem to be at variance from the commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Give answer :

(1) If **either** conclusion I **or** II is true.
(2) If **neither** conclusion I **nor** II is true.

(3) If **both** conclusions I and II are true.
(4) If **only** conclusion I is true.
(5) If **only** conclusion II is true.

170. Statements : Some shows are plays. Some plays are movies. No movie is theatre.

Conclusions :

I. All movies are plays.
II. Some shows are definitely not theatres.

171. Statements : Some urns are jugs. All jugs are vessels. No vessel is a plate.

Conclusions :

I. Some plates being jugs is a possibility.
II. All urns can never be plates.

172. Statements : All streets are paths. Some streets are roads. All roads are trails.

Conclusions :

I. All trails being paths is a possibility.
II. Atleast some paths are roads.

173. Read the given information and answer the question.

There has been a sudden increase in the patients suffering from Fugosis- a life threatening communicable disease- In the past three months in Country S.

Doctor X- This disease is mainly spreading because of the meat eaters in the country. This can be said because till now the virus causing the disease has been largely found only in meat and meat products.

Which of the following strengthens the statements of Doctor X?

(1) Out of the total number of patients diagnosed with Fugosis more than 55% patients are vegetarians.
(2) Although some people in Country S have restricted their meat consumption, this has not restricted the spread of the virus so far.
(3) Fugosis mimics' the symptoms of the common cold, as a result by the time the person is hospitalised many around him/her are already affected with the virus.

(4) State Y of Country S, where almost 90% people are vegetarians, has been least affected by the virus so far.

(5) Although many samples of packaged and fresh meat were collected for testing from across the country, not even one was found to be contaminated with the virus.

Directions (174-175) : *In these questions are given four statements followed by five conclusions, one of which definitely logically follows (or is a possibility of occurrence) from the given statements. That conclusion is your answer.*

[NOTE : You have to take the four given statements to be true even if they seem to be at variance from commonly known facts and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts]

174. **Statements** : Some logos are patents. All patents are copyrights. Some copyrights are trademarks. No copyright is goodwill.

Conclusions :

(1) At least some trademarks are patents.
(2) Some patents are goodwill.
(3) All trademarks being logos is a possibility.
(4) No goodwill is a logo.
(5) All logos are copyrights.

175. **Statements** : No text is a font. Some fonts are scripts. Some scripts are essays. All essays are chapters.

Conclusions :

(1) Some fonts are definitely not chapters.
(2) No text is an essay.
(3) All fonts are essays.
(4) All texts being scripts is a possibility.
(5) Atleast some chapters are texts.

Directions (176-181) : *Study the following information carefully and answer the given questions.*

Eight family members P, Q, R, S, T, U, V and W are sitting around a circular table but not necessarily in the same order. Some of them are females and some are males. All of them are related to each other in same way or the other. Some of them are facing the centre while some are facing outside (*i.e.* opposite to the centre.)

T sits second to the right of Q. Q faces the centre. Only two people sit between T and R. R is the daughter of P. No female is an immediate neighbour of R. W is not an immediate neighbour of Q. W is the wife of U. U sits third to the right of W. S is neither an immediate neighbour of W nor T. R's brother sits to her immediate right. Neither Q nor U is the brother of R. P's wife sits to the immediate right of T. P sits second to the left of his wife.

Only three people sit between P and his brother. Both the immediate neighbours of R face opposite directions. (*i.e.* if one neighbour faces the centre then the other neighbour faces outside and vice-versa.)

R's husband sits to the immediate right of V. T and U face a direction opposite to that of P. (*i.e.* if P faces the centre then T and U face outside and vice-versa.)

176. How many people sit between Q and V's daughter when counted from the left of Q?
(1) None (2) Three
(3) Four (4) Two
(5) One

177. If it is given that Q is the father of V, then what is the position of Q with respect to Q's son-in-law?
(1) Immediate right (2) Second to the left
(3) Third to the right (4) Third to the left
(5) Second to the right

178. Which of the following statements regarding V is definitely correct?
(1) V is the sister of T.
(2) V sits second to the left of U.
(3) Q and P are immediate neighbours of V.
(4) None of the given options is correct.
(5) V is the sister-in-law of U.

179. Who amongst the following faces the centre?
(1) R (2) T
(3) V (4) P
(5) W

180. Who amongst the following sits exactly between R and P when counted from the left of P?
(1) U (2) S
(3) W (4) T
(5) Q

181. Who amongst the following sits third to the right of T?
(1) U (2) T's father-in-law
(3) T's nephew (4) R
(5) T's father

182. In which of the following expressions does the expression 'L = T' definitely hold true?
(1) $K \geq L \leq R = P < S \leq T$
(2) $U \geq T \geq M = F \leq A \geq L$
(3) $L \leq C > Q \geq B = N \leq T$
(4) $G \leq L = A < B \leq S \leq T$
(5) $T \geq E = G \geq W = Y \geq L$

Directions (183-187) : *Study the following information carefully and answer the given questions.*

When a word and number arrangement machine is given an input line of words and numbers, it arranges them following a particular rule. The following is an illustration of input and rearrangement. (All the numbers are two digit numbers.)

Input : games 79 go glacier 57 14 give 86 63 gender 42 get
Step I : glacier games 79 go 57 give 86 63 gender 42 get 41
Step II : gender glacier games 79 go 57 give 86 63 get 41 24
Step III : games gender glacier 79 go give 86 63 get 41 24 75
Step IV : give games gender glacier 79 go 86 get 41 go 75 36
Step V : get give games gender glacier go 86 41 24 75 36 97
Step VI : go get give games gender glacier 41 24 75 36 97 68

Step VI is the last step of the above arrangement as the intended arrangement is obtained.

As per the rules followed in the given steps, find out the appropriate steps for the given input.

Input : micro 63 make 19 morales 72 25 my map 48 margin 56

183. Which element comes exactly between 'morales' and 'make' in Step III of the given input?
(1) 63   (2) my
(3) 91   (4) micro
(5) 56

184. Which of the following combinations represent the sixth and eighth element in Step II of the given input from left end?
(1) '63' and 'margin'
(2) 'map' and '63'
(3) '72' and 'margin'
(4) '72' and 'map'
(5) '48' and 'micro'

185. If in the last step, '2' is added to each of the odd numbers and '1' is subtracted from each of the even numbers, then how many numbers multiple of '3' will be formed?
(1) Two   (2) One
(3) None   (4) Three
(5) More than three

186. Which element is fourth to the left of one which is ninth from the left end in the second last step?
(1) micro   (2) 72
(3) morales   (4) 91
(5) margin

187. If in Step IV, '72' interchanges its position with 'micro' and 'morales' also interchanges its position with '91' then which element will be to the immediate right of '91'?
(1) '63'   (2) 'my'
(3) '52'   (4) 'morales'
(5) '72'

188. Study the given information carefully to answer the given question.

A camera manufacturing company 'Puello' brought a grim fate for the existing market leader 'Zenon' within five months of its launch.

According to Puello's Marketing head, "Zenon perished only because it could not update its cameras as per the recent technological advancements."

Which of the following statements negates the remark made by Puello's Marketing head?

(1) The zoom lenses launched by Puello were so strong that they beautifully captured even the intricate designs on the walls which were more than 15 feet away.

(2) Zenon was the only camera manufacturing company which had been successfully selling remote controlled cameras for the last two years.

(3) Zenon cameras had always supported heavy price tags as compared to its counterparts. But the picture quality it produced was unparalleled.

(4) Just a week before Puello's launch, a small part of one of the Zenon's factories caught fire due to short circuit.

(5) The body designs of the Cameras manufactured by Puello were more or less same as those of Zenon, but 'Zenon' offered a wide variety of colours.

189. Study the given information carefully to answer the given question.

"It is only because of the absence of 'Kodal' pulses in the diet of the younger generation, that the incidence of Zyver disease has drastically shot up across the country"- Dr. XYZ.

Which of the following can be inferred from the Doctor's statement?

(An inference is something by which you can logically deduce something to be true based on known premises.)

(1) The older generation compulsorily includes a good amount of 'Kodal' pulses in their daily diet.

(2) Even a little amount of Kodal in your diet will keep you away from being affected by Zyver disease.

(3) No medicine has been developed as of now which can cure Zyver completely.

(4) Zyver disease only hits people who are below 30 years of age.

(5) One of the constituents of 'Kodal' acts as a cure to Zyver.

Directions (190-194): These questions consist of a question and two statements numbered I and II given below them. You have to decide whether the data given in the statements are sufficient to answer the questions. Read both the statements and choose the most appropriate option.

Give answer :
(1) If the data in statement I **alone** are sufficient to answer the question, while the data in statement II alone are not sufficient to answer the question.

(2) If the data in statement **II alone** are sufficient to answer the question, while the data in statement I alone are not sufficient to answer the question.

(3) If the data either in statement I alone or in statement II alone are sufficient to answer the question.

(4) If the data given in **both** statements I and II together are **not sufficient** to answer the question.

(5) If the data given in **both** statements I and II **together** are necessary to answer the question.

190. How far is Point S from Point T?
I. Point S is 5m north of Point K. Point G is 4m to the east of Point S. Point P is 2.5m to the north of Point G. Point R is 5.5m to the west of Point P. Point T is 2.5m to the south of Point R.
II. Point T is 5m to the east of Point L. Point Z is 10m to the east of point T. Point S and G lie between Point Z and L, such that points Z, G, S and L form a straight line.

191. Among M, N, O, P, Q and R, each having a different height, who is the second tallest?
I. Q is taller than only three people. P is taller than M but shorter than R. N is shorter than R.
II. M is taller than only O. N is taller than P but shorter than R. Q is shorter than N.

192. How many people are standing in a straight line (Note: All are facing north)?
I. Only one person stands to the left of S. Only two people stand between S and D. D is an immediate neighbour of M. M stands exactly at the centre of the line.
II. Only two people stand to the left of O. O is an immediate neighbour of M. Only two people stand between M and P. P stands at the extreme right end of the line.

193. How many people are standing between K and L in a straight line of 15 people (Note: All are standing in a straight line facing north)?

I. S stands eleventh from the right end of the line. L stands exactly at the centre of the line. There are as many people to the right of K as there are to the left of S.

II. R stands fourth from the left end of the line. S is an immediate neighbour of R. Only two people stand between L and S. Only two people stand between K and S.

194. How is N related to J?

I. K is the mother of D and J. D is married to B. B is the only child of S. N is the granddaughter of S.

II. S is the mother of B. N is the daughter of B. B is married to D. J is the only sibling of D.

Directions (195-200): *Study the following information to answer the given questions.*

Seven trains are bound to travel to different cities viz. Delhi, Mumbai, Patna, Kanpur, Chennai, Guwahati and Surat from Monday to Sunday of the same week. Each train leaves at a different time viz. 2pm, 3pm, 4pm, 5pm, 6pm, 7pm and 8 pm on its respective days. None of the information given is necessarily in the same order.

The Chennai bound train leaves on Thursday, but not at 8 pm. There are only two days between the Chennai bound train and the train which leaves at 3 pm. There are only two days between the Surat bound train and the train which leaves at 4 pm. Surat bound train leaves on one of the days before the train leaving at 4 pm. The Surat bound train is neither scheduled on Wednesday nor on Monday.

Train which is scheduled on Saturday leaves on a time earlier than the train which is scheduled on Friday (For example, if the train scheduled to leave on Friday leaves at 5 pm then the train on Saturday leaves at 4, 3 or 2 pm.)

The Mumbai bound train is scheduled on a day immediately before the train which leaves at 7 pm. Neither the Surat nor the Chennai bound train leaves at 7 pm.

The Guwahati bound train leaves at 6 pm.

There is a difference of exactly three hours between the Delhi and the Patna bound trains. Delhi bound train leaves on a time earlier than the Patna bound train. (For example, if Delhi bound train leaves at 5 pm, then Patna bound train leaves at 8 pm on its respective day.)

195. Which train leaves on the day immediately after the day on which the Patna bound train leaves?

(1) The train which leaves on Thursday.
(2) The train which leaves at 5 p.m.
(3) The train which leaves at 5 p.m.
(4) None as the Patna bound train leaves on Sunday.
(5) The Surat bound train.

196. Which of the following trains leaves at 3 pm?

(1) The train scheduled on the day immediately after the Patna bound train
(2) The Mumbai bound train
(3) The Kanpur bound train
(4) The train scheduled on Sunday
(5) The Train which is scheduled on Friday

197. Which train leaves exactly 3 hours after the Chennai bound train on its scheduled day?

(1) The Kanpur bound train
(2) The train which leaves on Monday

(3) The train which leaves on Sunday
(4) The train which leaves at 7 pm
(5) The Surat bound train

198. On which of the following days does the Guwahati bound train leave?

(1) Monday   (2) Wednesday
(3) Saturday   (4) Tuesday
(5) Sunday

199. The Delhi bound train reaches Delhi in 6 hours after its start. If a person travels to Mathura from Delhi which takes two more hours (including the transition time) from Delhi, at what time will he reach Mathura?

(1) 1 am next day
(2) 10 pm in the night
(3) 12 O'clock midnight
(4) 2 am next day
(5) 11 pm in the night

200. Read the following information and answer the given question.

Major part of revenues from tourism in Country X comes from State Z, however in the past two years the number of tourists coming to State Z has reduced drastically.

Which of the following statements cannot be a reason for the given problems?

(1) Country X decided to adapt strict visa norms in the previous year after receiving threats of bomb blasts.
(2) More than 5 tourists were injured due to landslide in State Z last year.
(3) The currency of Country X appreciated by 5% for 2 years consecutively.
(4) The incidence of robberies in State Z has doubled in the past couple of years.
(5) The luxury tax in State Z increased substantially among tourist destinations in Country X two years ago.