

Section – III

Directions for questions 101 to 104: Answer the questions based on the table given below.

The table given below shows the break-up of the percentage of people of different age groups frequenting discotheque in 4 different metro cities viz. Delhi, Mumbai, Bangalore and Pune in the year 2002.

Cities	Percentage break-up for age groups (Years) in 2002						
	Up to 15	15-20	20-25	25-30	30-35	35-40	Above 40
Delhi	8	13	24	21	11	17	6
Mumbai	3	8	35	23	10	16	5
Bangalore	4	21	27	11	8	14	15
Pune	1	7	43	32	9	5	3

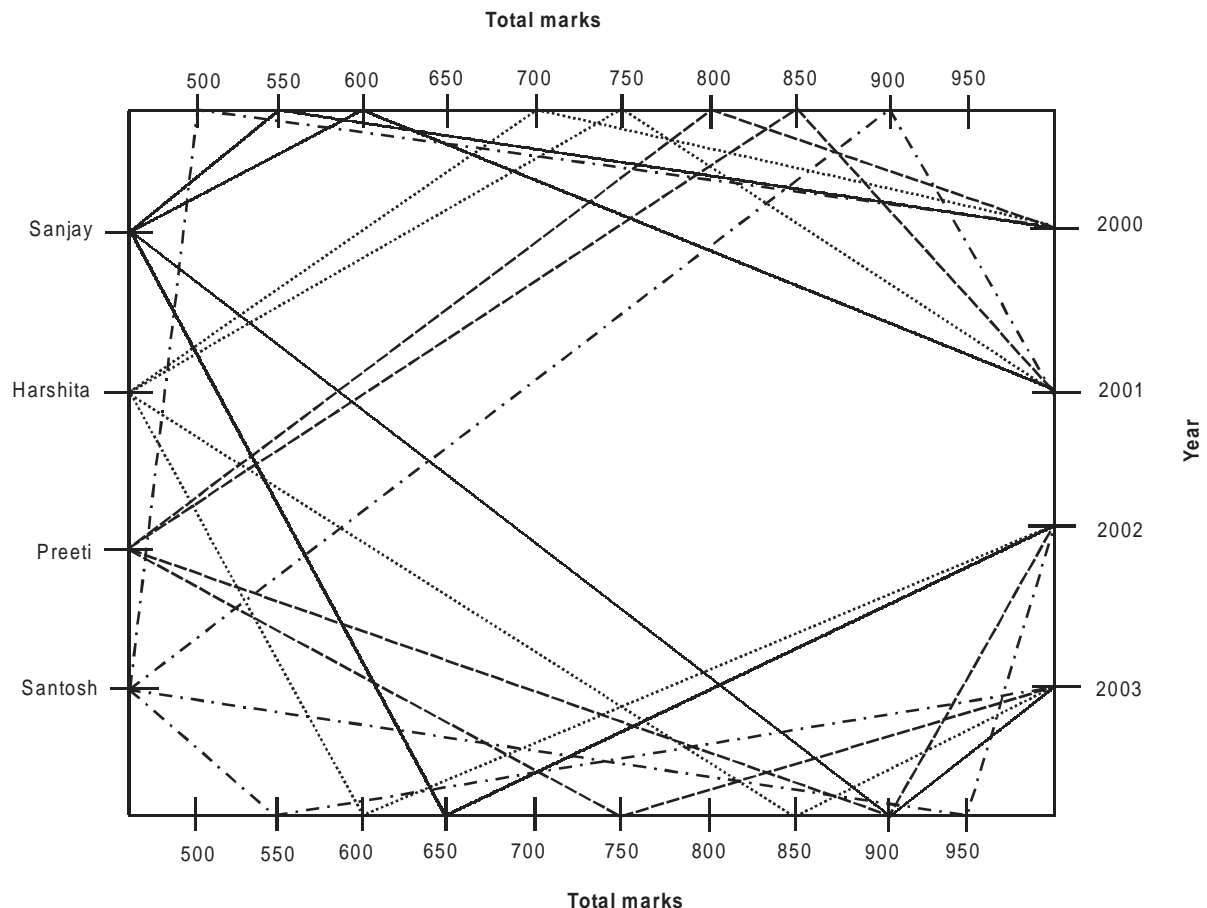
101. If all the people upto 25 years of age is categorised in a separate group called the 'Gen X' group then which city has the maximum number of 'Gen X' frequenting discotheques?
- a. Bangalore
b. Pune
c. Both (a) and (b)
d. Cannot be determined
102. Which age group contributes the maximum number of people frequenting discotheques in given cities?
- a. 20-25
b. 25-30
c. 30-35
d. Cannot be determined

Additional information for questions 103 and 104: In the year 2003 Pune and Delhi Governments banned the age group of upto 15 from discotheque.

103. If the number of people frequenting discotheque for the other groups remains the same and Delhi Government loses Rs. 12,000 as revenue due to the ban in the year 2003 then what was the total revenue earned by Delhi Govt. in the year 2002 from the discotheques?
- a. Rs. 1,71,430
b. Rs. 1,50,000
c. Rs. 1,33,333
d. None of these
104. In Delhi, due to the ban if the percentage of the other age groups increases, keeping their ratio the same as in 2002 then what will be the percentage of people of age group 25-30 in 2003?
- a. 25.92%
b. 22.68%
c. 11.88%
d. 21.6%

Directions for questions 105 to 107: Answer the questions based on the figure given below.
The figure indicates the annual result of top four students of the class from years 2000 to 2003.
Maximum marks for each year are 1000.

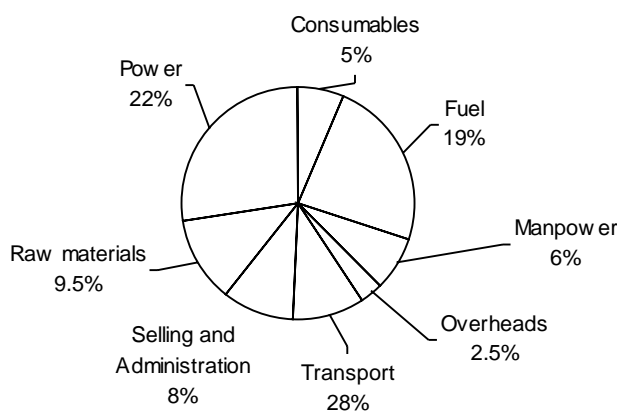
The figure contains the lines joining the student's total marks with their respective years.



105. Among the four students, how many times has the difference in total marks of the consecutive years been more than 100?
a. 5 b. 6 c. 4 d. 3
106. If the total marks for the period 2000-2003 are added, then which of the following students gets second highest cumulative total score?
a. Harshita b. Santosh c. Sanjay d. Harshita and Santosh
107. How many times has the total score, in an year, achieved by any student occurred more than once for the period 2000-2003?
a. Five b. Four c. Six d. Cannot be determined

Directions for questions 108 to 111: The following pie chart and tables give information about the cement industry.

Production cost of Cement

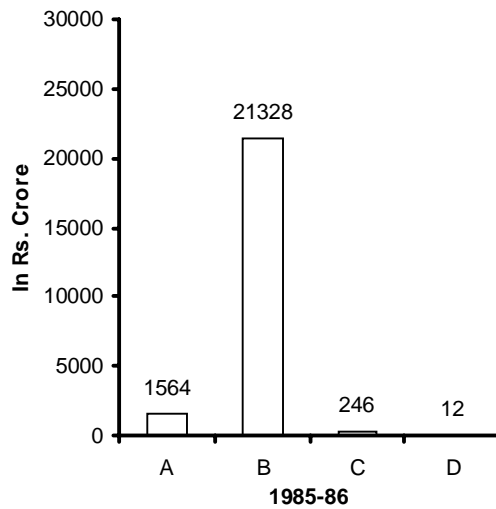
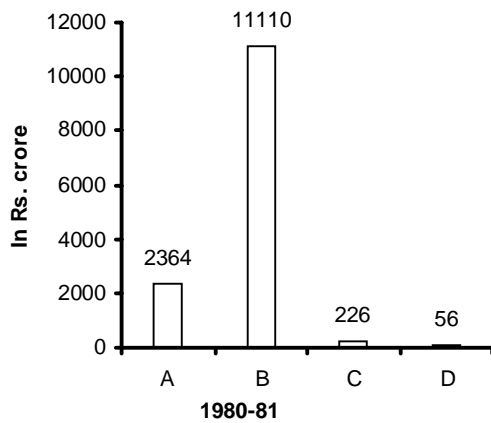
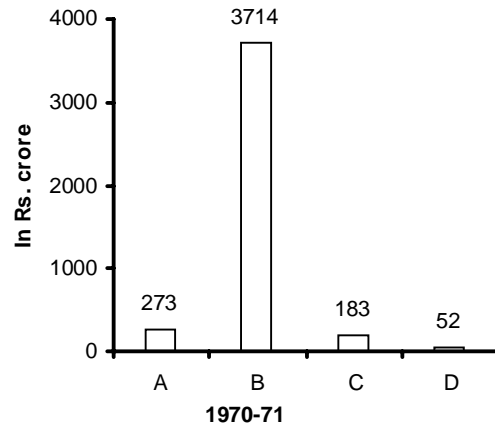
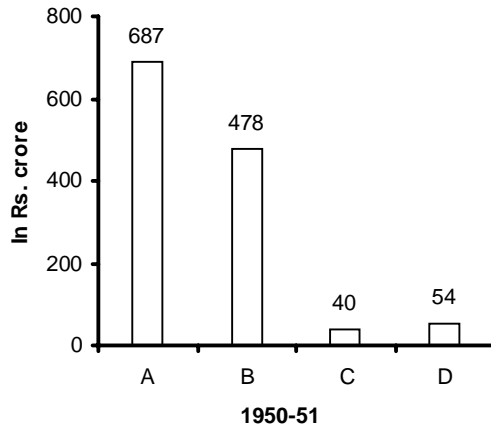


The Coal Scenario			
Year	Coal production (in million tonnes)	Coal supplied to cement industry (in million tonnes)	% of receipt to production
1989-90	201.02	8.85	4.4
1990-91	211.67	10.04	4.7
1991-92	229.32	10.51	4.6
1992-93	238.26	10.5	4.4
1993-94	246.02	10.34	4.2
1994-95	253.81	10.28	4.1
1995-96	268.94	10.06	3.7

Input Norms require to produce one tonne of cement	
Limestone	1.3 to 1.4 tonnes
Clay	0.1 to 0.3 tonnes
Gypsum	30 kgs to 50 kgs
Coal	0.25 tonnes
Electricity	120 kw/h

108. How much cement was produced in 1994-95 (in million tonnes), if all raw material other than coal were in abundance?
a. 40.36 b. 41.12 c. 41.36 d. Cannot be determined
109. If the coal supplied to the cement industry had been 10% more than original value in 1994-95, then how many additional million tonnes of cement would have been produced?
a. 4.036 b. 4.112 c. 4.136 d. Cannot be determined
110. If the production cost of cement is Rs 8,500 per tonne, then what is the contribution of overheads to the cost of producing 500 kg of cement?
a. Rs. 106.25 b. Rs. 111.25 c. Rs. 212.50 d. Rs. 223
111. If the production cost of cement is Rs. 8,500 per tonne, then by how much is the contribution of consumables to the production cost of cement more than that of overheads per tonne of cement production?
a. Rs. 212.50 b. Rs. 205.00 c. Rs. 106.25 d. Rs. 112.25

Direction for questions 112 to 115: Following bar charts represent the distribution of total assets of RBI.



A = Foreign securities B = Rupee securities C = Gold coins D = Rupee coins

112. By what percentage has the percentage of gold coins in the total assets come down from 1950-51 to 1985-86?
 - a. 60%
 - b. 67%
 - c. 75%
 - d. 50%
113. If in 1980-81 a US dollar was worth Rs. 17, then what was the value of India's foreign securities in that year in US dollars?
 - a. 1.39 billion
 - b. 13.5 crore
 - c. 1.45 billion
 - d. 13.9 crore
114. If the 1970-71 graph is represented in a pie chart, what will be the angle at the centre of the sector relating to rupee securities?
 - a. 274°
 - b. 317°
 - c. 348°
 - d. 307°
115. If the circles are to be drawn on scale, so that their areas are proportionate to the total assets of each year, and the radius of the first circle (1950-51) is 1 cm, then the radius of the last circle (1985-86) would be:
 - a. between 2 cm and 3 cm
 - b. between 3 cm and 4 cm
 - c. between 4 cm and 5 cm
 - d. between 5 cm and 6 cm

Directions for questions 116 to 119: In each question there are two statements: A and B, either of which can be true or false on the basis of the information given below.

Following table gives us the detailed information regarding the admission process of a reputed Engineering Institute for the year 2003 and 2004.

Year	Gender	Number of applicants	Number of candidates appeared for written test	Number of candidates called for an interview	Number of candidates selected for the course
2003	Male	61000	59000	600	120
	Female	19000	15000	150	50
2004	Male	63000	60000	640	128
	Female	40000	35000	300	60

Choose (a) if only A is true.
 Choose (b) if only B is true.
 Choose (c) if both A and B are true.
 Choose (d) if neither A nor B is true.

116. **Statement A:**
 The success rate of moving from written test to interview stage for females was worse than for males in 2003.
Statement B:
 The success rate of moving from written test to interview stage for males was better in 2003 than in 2004.
117. **Statement A:**
 The percentage of absentees in the written test among males decreased from 2003 to 2004.
Statement B:
 The percentage of absentees in the written test in 2003 among females was larger than that among females in 2004.
118. **Statement A:**
 The percentage of female candidates selected in 2004 from female applicants is more than percentage of male candidates selected for year 2004 out of total male applicants of that year.
Statement B:
 In 2003, from among those called for an interview males had a greater success rate than females.
119. **Statement A:**
 Difference in total number of male and female applicants is more than 50% of the total candidates who appeared for the written test in 2004.
Statement B:
 Total number selected for the course for both the years is more than 70% of the total female candidates called for an interview in both the years.

Directions for questions 120 to 123: The following table gives the value of exports of 25 countries for the years 2000 to 2003. In each year the countries are ranked from 1 to 25 based on the descending export values i.e. the country with the highest exports is ranked 1 and country with the lowest exports is ranked 25.

Country	Export Value			
	2000	2001	2002	2003
Canada	1640.1	1596.3	1687.7	1547.4
Mexico	695.5	656.5	661.9	751.4
Japan	650.6	619.7	513.7	481.4
Germany	455.9	592.8	1381.0	1618.0
United Kingdom	319.7	442.0	504.5	442.9
France	297.8	317.4	229.7	221.3
Netherlands	258.3	214.5	228.4	252.9
Singapore	192.4	71.5	84.2	74.3
South Korea	180.1	127.3	194.2	278.9
Italy	169.0	224.7	147.1	111.4
China	160.5	209.8	234.3	355.8
Brazil	139.7	144.9	142.3	137.6
Australia	134.1	143.8	122.9	125.2
Honduras	125.6	120.3	127.4	170.5
Belgium	112.7	137.2	144.2	105.6
Hong Kong	97.4	103.3	131.9	104.4
Spain	88.9	85.2	59.6	60.5
Taiwan	76.0	85.3	97.0	130.1
Costa Rica	75.8	59.9	62.4	70.1
Dominican Republic	62.4	73.4	96.6	75.1
Saudi Arabia	42.4	71.3	58.1	91.5
Colombia	34.5	27.0	43.3	60.5
El Salvador	31.6	47.4	53.7	65.8
Ireland	31.3	78.4	183.0	134.4
Thailand	22.3	43.0	79.1	81.4

120. Which of the following has the same rank for all four given years?
 - a. United Kingdom
 - b. Colombia
 - c. Honduras
 - d. Canada
121. Countries, with the maximum gain in the rank and maximum slip in the rank between 2000 to 2003, are
 - a. China, Honduras
 - b. China, Singapore
 - c. Ireland, Singapore
 - d. Ireland, Honduras
122. How many countries had the same rank in 2000 and 2002?
 - a. 2
 - b. 3
 - c. 4
 - d. 5

123. Which country has shown the maximum growth rate in the exports from 2000 to 2003 and what is the percentage growth rate?
- | | |
|--------------------|--------------------|
| a. Germany, 254.9% | b. Germany, 329.4% |
| c. Ireland, 429.4% | d. Ireland, 325.8% |

Directions for questions 124 to 127: Answer the questions based on the following information.

Long ago, King Ashoka, organised a horse riding competition. The entry fee for participation was one gold coin and the total number of coins collected would be distributed among the first four winners. All the four winners were awarded with a different number of coins, however the winner in the first position got the maximum coins and so on, so that the winner in the fourth position got the least number of coins.

A, B, C, D were the first four winners in the competition so that:

- I. A did not come first, B did not come second, C did not come third and D did not come fourth.
- II. B won more coins than C.
- III. D won more coins than B.

124. C, one of the four winners ended the competition in position number
- | | | | |
|------|------|------|-------------------------|
| a. 4 | b. 2 | c. 1 | d. Cannot be determined |
|------|------|------|-------------------------|
125. If 12 participants took part in the competition, then how many coins did B win?
- | | | | |
|------|------|------|-------------------------|
| a. 2 | b. 3 | c. 4 | d. Cannot be determined |
|------|------|------|-------------------------|
126. If 13 participants took part in the competition and D won 7 coins, how many coins did A win?
- | | | | |
|------|------|------|-------------------------|
| a. 1 | b. 2 | c. 3 | d. Cannot be determined |
|------|------|------|-------------------------|
127. If 13 participants took part in the competition and A won 4 coins, how many coins did D win?
- | | | | |
|------|------|------|-------------------------|
| a. 7 | b. 5 | c. 6 | d. Cannot be determined |
|------|------|------|-------------------------|

Directions for questions 128 to 131: Answer the questions based on the following information:

Each digit, 1, 2, 3, 4, 5, 6, 7, 8 and 9 is represented by a different letter A, B, C, D, E, F, G, H and I but not necessarily in this order. Further, each of $A + B + C$, $C + D + E$, $E + F + G$ and $G + H + I$ is equal to 13.

128. Find the value of E.
- | | | | |
|------|------|------|-------------------------|
| a. 5 | b. 7 | c. 4 | d. Cannot be determined |
|------|------|------|-------------------------|
129. What is the sum of C, E and G?
- | | | | |
|------|------|-------|-------------------------|
| a. 7 | b. 9 | c. 11 | d. Cannot be determined |
|------|------|-------|-------------------------|
130. How many different sum's of A, D, F and I are possible?
- | | | | |
|------|------|------|-------------------------|
| a. 1 | b. 2 | c. 4 | d. Cannot be determined |
|------|------|------|-------------------------|
131. Which one of the following is NOT definitely true?
- | | |
|-------------------------|-------------------------|
| a. A is greater than G. | b. H is less than D. |
| c. B is less than C. | d. D is greater than F. |

Directions for questions 132 to 136: Answer the questions based on the following information:

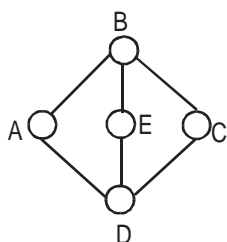
In an institute's hostel, a group of six students — Rahul, Chetan, Vinay, Suraj, Kumar and Srinu decide to study together in one of their rooms. Here is a complete account of their movement between 11 p.m. and 5:30 a.m.

- I. Three students started studying at 11:00 p.m. in one of their rooms.
- II. Rahul who overheard their discussion joined them immediately.
- III. Chetan went to his room to have a nap at 1:45 a.m.
- IV. Vinay who came to the night canteen met Chetan on the stairs. Soon, he joined the study group.
- V. Suraj went out at 2:15 to have a cold drink.
- VI. Kumar went out at 2:30 to fetch Chetan.
- VII. Suraj woke up Srinu and brought him along at 2:35.
- VIII. Srinu did not find the owner of the room, he left immediately.
- IX. Kumar and Chetan went to the library at 2:45 and returned at 4:30 a.m.
- X. The group finally dispersed at 5:30 a.m.

132. What is the highest number of students in the study room at a given time which is 11 p.m. and 5:30 a.m.?
a. 3 b. 4 c. 5 d. None of these
133. In whose room were a group of six students studying?
a. Suraj b. Rahul c. Kumar d. Cannot be determined
134. Who was in the room for the longest duration (between 11 p.m. and 5:30 a.m.)?
a. Suraj b. Rahul c. Kumar d. Cannot be determined
135. How many students did Vinay meet between 11 p.m. and 5:30 a.m.?
a. 5 b. 4 c. 3 d. Cannot be determined
136. Who spent the least time in the study room between 11 p.m. and 5:30 a.m.?
a. Chetan b. Srinu c. Vinay d. Cannot be determined

Directions 137 and 138: Answer the questions based on the following information.

Five cities A, B, C, D and E are connected by roads as shown below. Design a route so that a person travels on all the six roads only once.

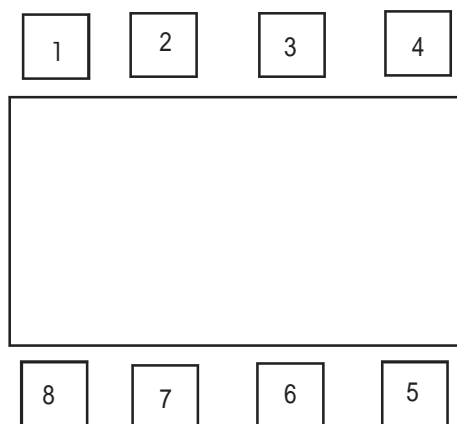


137. Which of the following is true of a route that satisfies the above condition?
a. The route starts from A or C b. The route starts from E
c. The route starts from B or D d. No such route exists
138. City E is the ____ city on the route.
a. Second b. Fourth
c. Sixth d. Any of the above

139. A, B, C have some coins with them. A gives 10 coins to B, B gives 20 coins to C and C gives 30 coins to A. Now they all have equal number of coins. Which of the following is true?
- a. Initially B had more coins than C b. Initially C had more coins than B
- c. Initially B and C had equal number of coins d. Cannot be determined

Directions for questions 140 to 143: Answer the questions based on the following information.

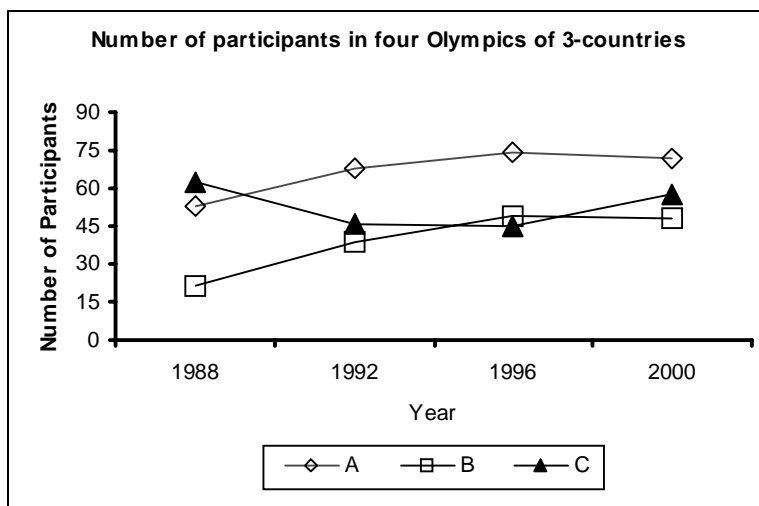
Six boys — Kaif, Prem, Rahul, Ravi, Ajay and Akash and 2 girls — Pooja and Aish occupy seats on a dinning table with numbered chairs as follows:



Below are some additional facts about how they occupy their seats.

- I. The two girls are on opposite sides of the table but they are not sitting opposite to each other. Also neither of them is sitting on a corner seat.
- II. Ravi and Prem are sitting on diagonally opposite corner seats.
- III. Akash is on seat number 4.
- IV. Rahul and Kaif are on the same side but not adjacent to each other.
140. Which seat does Ajay occupy?
- a. 2 b. 8 c. 7 d. Cannot be determined
141. If Rahul and Pooja are on opposite sides, which seat does Aish occupy?
- a. 2 b. 3 c. 7 d. Cannot be determined
142. Who occupies seat number 8?
- a. Rahul b. Kaif c. Ajay d. Cannot be determined
143. Which of the following pairs can never sit together
- a. Ajay and Aish b. Kaif and Pooja c. Ravi and Aish d. None of these

Directions for questions 144 and 145: Answer the questions based on the following information. The following graph gives data about the number of participants from 3 different countries A, B and C at successive Olympics 1988, 1992, 1996 and 2000.



144. If it is known that an increase in the number of participants is directly related to the increase in expenditure for Olympics preparation, then which of the following countries has the highest expenditure on Olympics year 2000?
- a. A b. B c. C d. Cannot be determined
145. If war always results in a decrease in participation, then which of the three countries was engaged in war for the highest number of Olympics?
- a. A b. B c. C d. Cannot be determined

Directions for questions 146 to 150: Each question consists of a question and two statements, I and II. Choose

- a. If one of the two statements (I or II) alone is sufficient to answer the question, but cannot be answered by using the other statement alone.
- b. If each statement alone is sufficient to answer the question asked.
- c. If I and II together are sufficient to answer the question but neither statement alone is sufficient.
- d. If even I and II together are not sufficient to answer the question.
146. A man has three sons A, B and C, what are their ages?
- I. The difference between the ages of A and B is 3 years and the difference between the ages of B and C is also 3 years.
- II. The sum of the age of the three sons is 57 years.
147. Which is costlier, a ball point pen or an ink pen?
- I. 5 sets of 4 ball point pens and 3 ink pens, cost the same as 4 sets of 3 ball point pens and 5 ink pens.
- II. 6 sets of 6 ball point pens and 4 ink pens, cost the same as 12 sets of 3 ball point pens and 2 ink pens.

148. In a pack of cards each card is either yellow or red in colour. Two players have to play this game and each one takes turns to draw a card. If a yellow card is drawn, the player gets 3 points and if a red card is drawn the player gets 5 points. The first player to accumulate 50 points wins the game. How many cards of each colour does Ram have at this stage of the play?
- I. Ram has 9 cards right now and has a total of 41 points.
 - II. Ram wins the game.
149. Can I exactly measure X cms using three rods of lengths L_1 cms, L_2 cms and L_3 cms, given that each of the rod, is of different length and that X , L_1 , L_2 and L_3 are integers?
- I. $L_1 + L_2 = 100$ cms
 - II. $L_2 + L_3 = 201$ cms
150. If Nishit lies on six days of the week and speaks the truth on only one day of the week, does he speak the truth or a lie on Monday?
- I. On a particular day, Nishit makes two comments viz. "Today is Monday" and "I always lie on all days other than Monday"
 - II. On a particular day, Nishit makes two comments viz. "Today is not a Monday" and "I always tell the truth on Mondays"