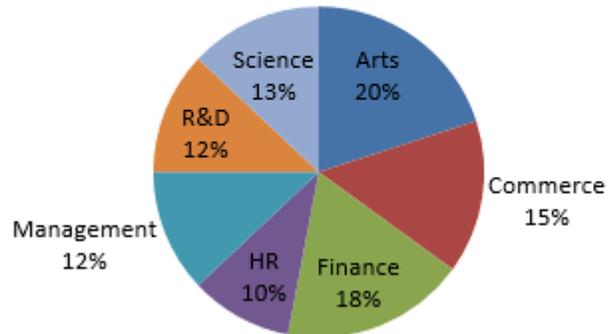


**Percentage of Scholars
(Total Scholar= 6000)**



Percentage of Girls in Disciplines

Disciplines	% of Girls
Arts	28
Commerce	34
Finance	35
HR	23
Management	20
R&D	40
Science	30

1. Number of girls scholar in Arts discipline is what percent more or less than the no. of Male Scholar in Science?

- A. 39.46%
- B. 38.46%
- C. 40.5%
- D. 42.82%

E. None of the above

2. What is the ratio of Maximum number of Boys in a discipline given to the maximum no. of girls in a discipline?

A. 16 : 7

B. 16 : 9

C. 15 : 7

D. 7 : 16

E. None of these

3. What is the difference between the average number of boys in all disciplines together to the average number of girls in all disciplines together(approximately)?

A. 222

B. 289

C. 300

D. 336

E. 312

4. Total number of scholars in Commerce, Arts and Science is what percent of Total number of Male scholar in R&D, Management and Finance together?

A. 152.76%

B. 158.48%

C. 168.42%

D. 178 %

E. None of the above

5. Due to some natural calamities in USA, 80% of the scholars from Management left the University . Approximately, What would be the new central angle of Commerce scholar as per current availability? (However, no students from other discipline left the University). (Approximately)

A. 85

B. 70

C. 75

D. 55

E. 60

Directions: (6-10) Following Table shows the Viewers of Five different IPL matches in five different cities, ratio of male and female among them and ratio of adult and minor among them. Answer the given questions based on the

table.

City	TEAM	Viewers	Ratio of Male and Female		Ratio of Adult and Minor	
			Male	Female	Adult	Minor
PUNE	RPS	33350	12	11	14	9
Kolkata	KKR	55440	9	7	11	5
Mumbai	MI	36990	4	5	16	11
Bangalore	RCB	25800	7	5	5	3
Mohali	KXIP	28152	8	9	11	6
Delhi	DD	30282	10	11	13	8

6. In Pune, if 16% of the seats were vacant during the match then Total Minor Viewers from all cities except the city which has team RCB and DD is approximately how many times the total no. of seats occupied in Pune?

- A. 3
- B. 2.5
- C. 2
- D. 4
- E. None of these

7. Total number of female viewers from the city Pune, Mumbai and Delhi is what percent more or less than total viewers from KXIP?

- A. 86%
- B. 87%
- C. 88%

D. 76%

E. 80%

8. What is the difference between Total adult Viewers and average of total Viewers for all teams? (Approximately)

A. 98240

B. 98420

C. 98480

D. 98520

E. None of these

9. Total Female viewers of MI is what percent of total viewers of City Mohali? (Approximately)

A. 69

B. 71

C. 77

D. 73

E. 70

10. What is the ratio of total male viewers of Team KKR to the total adult viewers of the Team in Delhi?

A. 31187 : 18746

B. 31185:18746

C. 411 : 746

D. 18746 : 31185

E. None of these

ANSWERS:

1.

$$\text{No. of Female scholar in ARTS} = 60 \times 20 \times \frac{28}{100} = 336$$

$$\text{No. of male Science Scholar} = \frac{70}{100} \times 60 \times 13 = \frac{780 \times 70}{100} = 546$$

$$\text{Desired \%} = \frac{546 - 336}{546} \times 100 = 38.46\%$$

B. 38.46%

2.

A. 16 :

No. of Males disciplinewise	No. of Females disciplinewise
ARTS: $60 \times 20 \times \frac{72}{100} =$ 864	ARTS: $60 \times 20 \times \frac{28}{100} =$ 336
Commerce: $60 \times 15 \times \frac{66}{100} = 594$	Commerce : $60 \times 15 \times \frac{34}{100} = 306$
Finance: $60 \times 18 \times \frac{65}{100} = 702$	Finance: $60 \times 18 \times \frac{35}{100} = 378$
HR: $60 \times 10 \times \frac{77}{100} = 462$	HR: $60 \times 10 \times \frac{23}{100} = 138$
Management: $60 \times 12 \times \frac{80}{100} =$ 576	Management: $60 \times 12 \times \frac{20}{100} =$ 144
R & D : $60 \times 12 \times \frac{60}{100} = 432$	R & D: $60 \times 12 \times \frac{40}{100} = 288$
Science: $60 \times 13 \times \frac{70}{100} = 546$	Science: $60 \times 13 \times \frac{30}{100} = 234$

7

Clearly, In Arts, Male count is maximum while in Finance, Female count is Maximum

Ratio between their Maximum value = 864 : 378
= 16 : 7

3.

Avg. of boys in All discipline together

$$= \frac{1}{7} (864 + 594 + 702 + 462 + 576 + 432 + 546)$$

$$= \frac{4176}{7}$$

Avg. of girls in All discipline together

$$= \frac{1}{7} (336 + 306 + 378 + 138 + 144 + 288 + 234)$$

$$= \frac{1824}{7}$$

$$\text{Difference} = \frac{4176}{7} - \frac{1824}{7} = 336$$

D. 336

4.

C. 168.42%

Total scholar in Commerce, Arts and Science = $60 \times (20 + 15 + 13) = 2880$

Total male scholar in R & D, Management and Finance = $576 + 432 + 702 = 1710$

$$\text{Desired \%} = \frac{2880}{1710} \times 100 = 168.42\%$$

5.

No. of scholars leaving the University

$$= 60 \times 12 \times \frac{80}{100} = 576$$

Total scholars available = $6000 - 576 = 5424$

New central angle for commerce scholar

$$= \frac{60 \times 15}{5424} \times 360 = 60^\circ$$

E. 60

6.

$$\text{Number of occupied seats from Pune} = 84 \times \frac{33350}{100} = 28014$$

Total number of required minors

$$= 33350 \times \frac{9}{23} + 55440 \times \frac{5}{16} + 36990 \times \frac{11}{27} + 28152 \times \frac{6}{17}$$

$$= 13050 + 17325 + 15070 + 9936$$

$$= 55381$$

Hence, Desired Value is approximately two times.

C. 2

7.

Total female viewers from Pune, Mumbai, and Delhi

$$= 33350 \times \frac{11}{23} + 36990 \times \frac{5}{9} + 30282 \times \frac{11}{21}$$

$$= 15950 + 20550 + 15862 = 52362$$

Total viewers from KXIP = 28152

$$\text{Desired Value} = \frac{52362 - 28152}{28152} \times 100 = 86\%$$

A. 86%

8.

B.

98420

Total adult viewers

$$= 33350 \times \frac{14}{23} + 55440 \times \frac{11}{16} + 36990 \times \frac{16}{27} + 25800 \times \frac{5}{8} + 28152 \times \frac{11}{17} +$$

$$30282 \times \frac{13}{21}$$

$$= 20300 + 38115 + 21920 + 16125 + 18216 + 18746$$

$$= 133422$$

$$\text{Avg. of total viewers} = \frac{210014}{6} \approx 35002$$

$$\text{Difference} = 133422 - 35002 = 98420$$

9.

$$\text{Total female viewers of MI} = 36990 \times \frac{5}{9} = 20550$$

$$\text{Desired\%} = \frac{20550 \times 100}{28152} \approx 73\%$$

D. 73

10.

$$\text{KKR's male viewer} = 55440 \times \frac{9}{16} = 31185$$

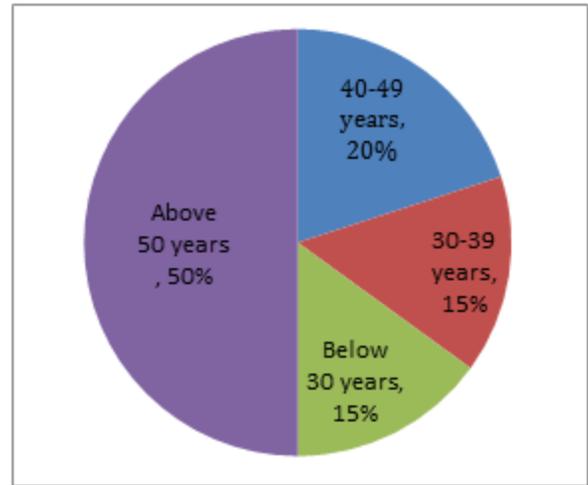
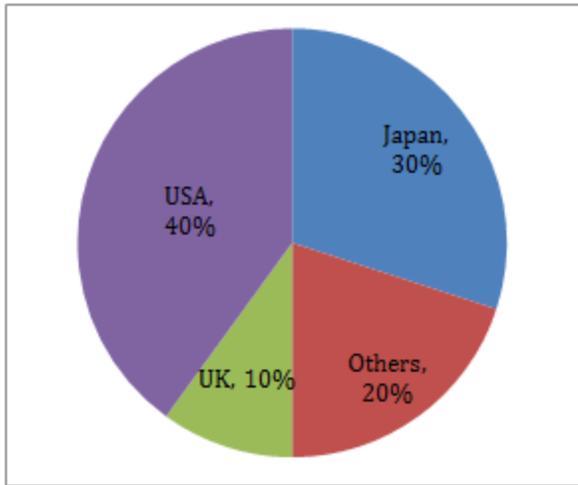
$$\text{Total adult viewers in Delhi} = 30282 \times \frac{13}{21} = 18746$$

B. 31185:18746

$$\text{Ratio} = 31185 : 18746$$

Directions: (1-4) Study the given pie charts and answer the following questions.

In the first pie chart distribution of overseas tourist traffic from India to different countries is given and in the second pie chart distribution of overseas tourist traffic from India according to age wise is given. Distribution of Overseas Tourist Traffic from India.



1.If the tourist traffic from India to USA is 165000 more than that of UK then overseas tourist traffic in the age group of (40-49) years are how much (in lakh) more/less then the overseas traffic from India in the age group of (30 – 39) years?

- A. 0.725 lakh
- B. 0.275 lakh
- C. 0.55 lakh
- D. 0.527 lakh
- E. 0.42 lakh

2. The ratio of the number of Indian tourists that went to USA to the number of Indian tourists who were below 30 years of age is-

A. 2 : 1

B. 8 : 3

C. 3 : 8

D. Cannot be determined

E. none of these

3. If amongst other countries, Switzerland, accounted for 25% of the Indian tourist traffic, and it is known from official Swiss records that a total of 25 lakh Indian tourists had gone to Switzerland during the year, then find the number of 30-39-year-old Indian tourists who went abroad in that year.

A. 18.75 lakh

B. 25 lakh

C. 50 lakh

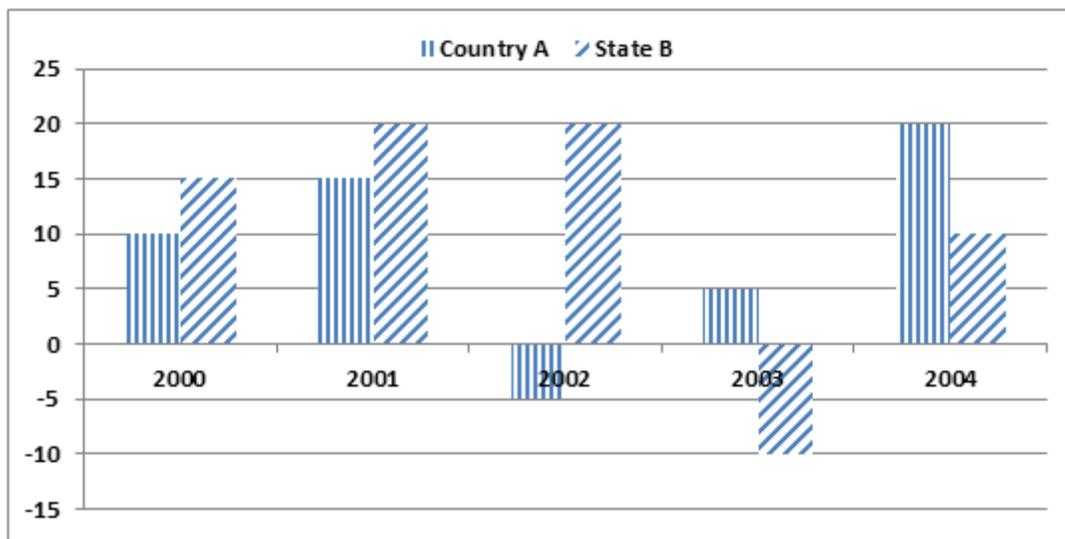
D. 75 lakh

E. none of these

4. If amongst other countries, Switzerland, accounted for 25% of the Indian tourist traffic, and it is known from official Swiss records that a total of 25 lakh Indian tourists had gone to Switzerland during the year, then what was the volume of traffic of Indian tourists in the US?

- A. 150 lakh
- B. 125 lakh
- C. 200 lakh
- D. 225 lakh
- E. none of these

Directions: (5-8) The bar graph given below shows the percentage increase/decrease in the production of wheat in a country 'A' with respect to the production in previous year. The bar graph also shows the percentage increase/decrease in the production of wheat in one of the states 'B' of country 'A' with respect to the production in previous year.



Note:

1. Country A produced 100 thousand kg of wheat in 1999 and the amount of production of wheat in state B in 1999 was 20% of the country's production of

wheat.

2. Values which are in negative value show decrease in production.

5. If the production of wheat in states B in 2001 is 60% of the production of wheat of state C in 2001 then what is the production of wheat in state C in 2001?

A. 46 thousand kg

B. 40 thousand kg

C. 50 thousand kg

D. 42 thousand kg

E. None

6. The amount of production of wheat in state B in 2000 is what percent of the amount of production of wheat in the country in 2002? (nearest integer value)

A. 10%

B. 19%

C. 25%

D. 29%

E. 33%

7. What is the difference between the amount of production in state B and the country in the year 2003?

A. 140124.5 kg

B. 122612.5 kg

C. 96375.75 kg

D. 120141.5 kg

E. None

8. Find the ratio of the amount of production of wheat in state B in 2001 to that of the country in year 2002?

A. 44 : 211

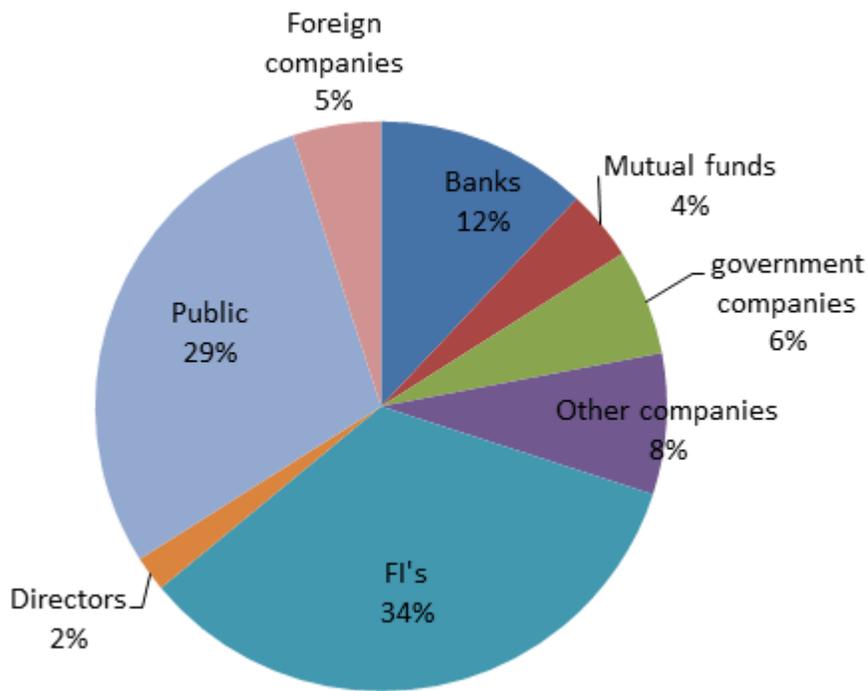
B. 41 : 209

C. 49 : 211

D. 48 : 209

E. None

Directions: (9-10) The following table gives the sales and profit pattern of company XYZ over the period 1990-91 to 1994-95 and the pie graph gives the shareholding pattern of the some company for the same period.



year	Sales (in Rs. crore)	Profit (in Rs. crore)
1990-91	6700	590
1991-92	6900	630
1992-93	7300	710
1993-94	7500	530
1994-95	8000	800

Note: The shareholding has remained static throughout this time period.

9. What is the difference of dividends received by banks in 1991-92 and that received by Mutual funds in 1992-93, if the total profits of a year are disbursed as dividends to shareholders in the ratio of shareholding?

- A. 47.2 crores
- B. 48.6 crores
- C. 49.6 crores
- D. 44.6 crores

E. None of these

10. What is the difference of expenditure made by foreign companies in 1992-93 and that made by other companies in 1994-95 if the total expenditure of a year is shared by all shareholders in the ratio of their shareholdings?

A. 414 crores

B. 246.5 crores

C. 421.5 crores

D. 390 crores

E. None of these

ANSWERS:

1.

Given

$$30\% \rightarrow 165000$$

$$1\% \rightarrow 5500$$

$$100\% \rightarrow 550000$$

$$\therefore \text{Total overseas tourist from India} = 550,000$$

Then,

$$(20 - 15) = 5\% \text{ of } 550,000$$

$$= 5 \times 5500$$

$$= 27500$$

$$\text{B. } 0.275 \text{ lakh} = 0.275 \text{ lakh}$$

2.

E. none of these

$$\text{Required Ratio} = \frac{40}{15+15} = \frac{40}{30}$$

$$= 4 : 3$$

3.

$$25\% \rightarrow 25 \text{ lakh}$$

$$100\% \rightarrow 100 \text{ lakh}$$

\therefore total overseas tourist from India

$$= \frac{100}{20} \times 100 = 500 = \text{lakh}$$

Then required no. of overseas tourist

$$= \frac{15}{100} \times 500 = 75 \text{ lakh}$$

$$\text{D. } 75 \text{ lakh}$$

4.

C. 200 lakh

Total overseas Indian tourist = 500 *lakh*

∴ Required No. of tourist

$$= \frac{40}{100} \times 500 = 200 \text{ lakh}$$

5.

Production of wheat in state B in 2001

$$= \frac{20}{100} \times 100 \times \frac{115}{100} \times \frac{120}{100}$$
$$= 27.6 \text{ thousand kg}$$

Production of wheat in state C in 2001

$$= 27.6 \times \frac{100}{60}$$
$$= 46 \text{ thousand kg}$$

A. 46 thousand kg

6.

B. 19%

Production of wheat in the country in 2002

$$= 100 \times \frac{110}{100} \times \frac{115}{100} \times \frac{95}{100}$$
$$= 120.175 \text{ thousand kg}$$

$$\text{Req\%} = \frac{23}{120.175} \times 100 = 19.13\% \approx 19\%$$

7.

C. 96375.75 kg

Amount of production of state B in 2003

$$= 20 \times 1.15 \times 1.2 \times 1.2 \times 0.9$$

$$= 29.808 \text{ thousand kg}$$

Amount of production of the Country in 2003

$$= 100 \times 1.1 \times 1.15 \times 0.95 \times 1.05$$

$$= 126.18375 \text{ kg}$$

$$\text{Difference} = 126.18375 - 29.808 = 96.37575 \text{ thousand kg}$$

$$= 96375.75 \text{ kg}$$

8.

$$\begin{aligned} \text{Req. Ratio} &= \frac{20 \times \frac{120}{100} \times \frac{115}{100}}{100 \times \frac{110}{100} \times \frac{115}{100} \times \frac{95}{100}} \\ &= \frac{20 \times 120}{110 \times 95} = \frac{48}{209} \end{aligned}$$

D. 48 : 209

9.

Dividend received by banks in 1991-92

$$= \frac{12}{100} \times 630 = 75.6 \text{ crore}$$

Dividend received by Mutual funds in 1992-93

$$= \frac{4}{100} \times 710 = 28.4 \text{ crores}$$

$$\text{Difference} = 75.6 - 28.4 = 47.2 \text{ crores}$$

A. 47.2 crores

10.

B. 246.5 crores

Expenditure made by foreign companies in 1992-93 $= \frac{5}{100} \times (7300 - 710)$

= 329.5 crores

Expenditure made by other companies in 1994-

$= \frac{8}{95} \times (8000 - 800) = 576$ crores

Difference = $576 - 329.5 = 246.5$ crores

Direction (1-5): Study the following information carefully to answer the given questions.

A, B, C, D, E, F and G are seven friends who live in a building of seven floors. They live on separate floors of a same seven storey building, but not in the same order. The ground floor of the building is numbered 1, the floor above it 2 and so on until the topmost floor is numbered 7. Each person uses different cable connection viz, Dish TV, Airtel TV, Videocon TV, Big TV, Jio TV, Tata sky TV and Sun TV, but not necessarily in the same order.

The person who uses Big TV lives on floor numbered 4. Only two persons live between D and the one who uses Big TV. A does not live on the lowermost floor. A lives on any odd numbered floor below the one who uses Big TV. G lives on an even numbered floor but neither immediately above nor immediately below the floor of A. Only two persons live between A and the person who uses Sun TV. Only one person lives between B and F. F lives on an even numbered floor and does not like Big TV. Only three persons live between the persons who like Dish TV and Videocon TV respectively. The person who uses Dish TV lives on any floor above the B's floor. The person who uses Dish TV does not live on the topmost floor. C does not like Dish TV or Videocon TV. The person who uses Jio TV lives on the floor immediately above the floor of the person who uses Tata sky TV.

Q1. How many persons live between the floors on which G and D live?

- (a) Three
- (b) Two
- (c) Four
- (d) Five
- (e) No one

Q2. Which of the following statements is/are true according to the given information?

- (a) E lives on floor numbered 5 and he does not like Big TV
- (b) A uses Jio TV and he does not live on floor numbered 4
- (c) C uses Airtel TV and he lives on the topmost floor
- (d) Only two persons live between the floors of E and F
- (e) All the statements are true.

Q3. Who among the following lives on the floor immediately above the floor of A?

- (a) B
- (b) F
- (c) G
- (d) C
- (e) No one

Q4. Who among the following lives exactly between the floors on which G and B live?

- (a) D
- (b) F
- (c) A
- (d) E
- (e) No one

Q5. Who among the following does use Videocon TV?

- (a) F
- (b) D
- (c) B
- (d) E
- (e) G

Directions (6-10): Study the information carefully and answer the questions given below.

Ten persons P, Q, R, S, T, U, V, W, X and Y stay on a 9-floor building where only one person stays on each floor except on third floor but not necessary in the same order. Their flats are painted with different colour i.e. White, Black, Red, Pink, Yellow, Green, Violet, Blue, and Brown. But not necessary in the same order. The colour of the floor on which a person lives and his favourite colour are same, (he likes the same colour as his flat is painted)

R stays on an odd number floor below the floor number 5 and 5th floor is painted with white colour. There are three floors between white colour and Green colour. P stay above R and does not stay on odd number floor and like brown colour. Y stay on 8th floor and there are three floors between Y and the flat which is painted by Black colour. T does not stay on an even number floor and neither like white colour nor like violet colour. Q lives below R and his flat painted with Green colour. P does not stay immediate above or below Y who does not like blue and yellow colour. S stays above the floor of Q and below P. S does not like Black and Violet colour. R's floor does not painted with violet colour. S and U stay on consecutive floors. There are three floors between yellow and Red colour flat. Pink colour flat is just above yellow colour flat. W and V stay alone. T doesn't stay on top floor and doesn't like red colour painted flat.

Q6. Which of the following floor does X stay?

- (a) 5th floor
- (b) 3rd floor
- (c) 7th floor
- (d) 4th floor
- (e) None of these

Q7. Which of the following person stays on 2nd floor?

- (a) V
- (b) W
- (c) U
- (d) S
- (e) Either (a) or (b)

Q8. How many person/s sits between U and the person who like Yellow colour?

- (a) One
- (b) Two
- (c) Three
- (d) Four
- (e) None of these

Q9. Four of the following five are alike in a certain way based on their arrangement find the one which does not belong to that group?

- (a) Green
- (b) Red
- (c) White
- (d) Black
- (e) Yellow

Q10. Which of the following is not correctly matched?

- (a) 7th – T- Yellow
- (b) 8th – U – Black
- (c) 3rd – X – Red
- (d) 3rd – R – Red
- (e) 8th – Y – Pink

Directions (11-15): Study the following information and answer the given questions:

Eight family members A, B, C, D, E, F, G, and H live on 8 different floors of a building, lowermost floor is numbered as 1 and topmost floor is numbered as 8. There are only 3 female members and 3 generation in a family. There is only three persons live between B's son and B's wife. F is daughter-in-law of A and has only two children. There is only three persons live between A's brother-in-law and F. H doesn't live above A. D, who lives on odd numbered floor, lives below H but not lives above F. Aunt of E lives above E's floor. G lives on odd numbered floor but not on 5th floor. A is a wife of H's brother. C doesn't live just below G's uncle. B, who is not from 2nd generation, has one daughter. F lives just below B's son. H and E live on even numbered floor. D is not a female member. C doesn't live just above A and just below A's Daughter in law.

Q11. Who among the following is a son of B?

- (a) D
- (b) E
- (c) G
- (d) C
- (e) None of these

Q12. Who amongst the following lives on floor number 3?

- (a) B's son
- (b) D
- (c) None of these
- (d) B's wife
- (e) E

Q13. C lives on which of the following floor?

- (a) 4th floor
- (b) 6th floor
- (c) 5th floor
- (d) None of these
- (e) 8th floor

Q14. Who among the following is/are a son of G?

- (a) E
- (b) C
- (c) None of these
- (d) Both (a) and (e)
- (e) D

Q15. How many people live between the floors on which D and B live?

- (a) None
- (b) Two
- (c) One
- (d) More than three
- (e) Three

ANSWER:

Solutions (1-5):

FLOOR NUMBER	FRIENDS	CABLE CONNECTION
7	C	Airtel TV
6	G	Sun TV
5	E	Dish TV
4	B	Big TV
3	A	Jio TV
2	F	Tata sky TV
1	D	Videocon TV

S1. Ans.(c)

Sol.

S2. Ans.(e)

Sol.

S3. Ans.(a)

Sol.

S4. Ans.(d)

Sol.

S5. Ans.(b)

Sol.

Solutions (6-10):

Floor	Persons	Colour
9	V/W	Blue/Violet
8	Y	Pink
7	T	Yellow
6	P	Brown
5	S	White
4	U	Black
3	R, X	Red
2	V/W	Violet/Blue
1	Q	Green

S6. Ans.(b)

S7. Ans.(e)

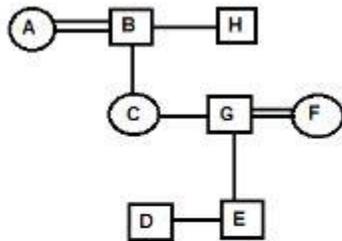
S8. Ans.(b)

S9. Ans.(d)

S10. Ans.(b)

Solutions (11-15):

Floors	Family members
8	C
7	G
6	F
5	B
4	E
3	A
2	H
1	D



- S11. Ans.(c)
- S12. Ans.(d)
- S13. Ans.(e)
- S14. Ans.(d)
- S15. Ans.(e)

Directions (Q. 1 – 5): Study the following information and answer the questions given below.

Vishal, Rohan, Anu, Yogendra, Akash and Ritu stay on different floors of a six-storey building (ground floor is numbered as floor 1 and top floor is numbered as floor 6).

Each of them plays one of the following games: Golf, Hockey, Squash, Tennis, Chess and Volleyball, but not necessarily in the same order.

Rohan stays on floor 4 and he plays neither Chess nor Volleyball. The one who plays Hockey stays on floor 3. Akash plays Tennis and he doesn't stay on either floor 1 or 6. Anu stays on floor 2 and plays Squash. Yogendra plays Volleyball but neither he nor Ritu stays on floor 1.

1. Who plays Golf?

- 1) Ritu
- 2) Yogendra
- 3) Rohan
- 4) Vishal
- 5) None of these

2. Which game does Vishal play?

- 1) Squash
- 2) Chess
- 3) Hockey
- 4) Golf

5) None of these

3. On which floor does Akash stay?

1) 5

2) 4

3) 3

4) 2

5) None of these

4. Who plays Hockey?

1) Rohan

2) Vishal

3) Ritu

4) Anu

5) None of these

5. Which of the following combinations is true?

1) Vishal—Floor 1—Hockey

2) Akash—Floor 5—Chess

3) Yogendra—Floor 6 — Volleyball

4) Rohan—Floor 4—Chess

5) None of these

Directions (Q. 6 – 8): Study the following information carefully and answer the given questions.

A, B, C, D, E and F are six representatives from different countries, viz China, India, Brazil, Russia, Canada and Spain, not necessarily in the same order. Each one is scheduled to represent his country on a different day of the week from Monday to Saturday. The one who is from Russia is scheduled to represent his country on Thursday. D represents his country on Tuesday. A is from China but represents neither on Wednesday nor on Saturday. C represents neither Russia nor India but has scheduled his day on Friday. B is from Brazil and E is from Spain.

6. Who is from Canada?

- 1) F
- 2) C
- 3) D
- 4) Either C or F
- 5) None of these

7. Who is scheduled to represent his country on the day after D represents his country?

- 1) B
- 2) C
- 3) F
- 4) Either B or E
- 5) None of these

8. Which of the following combinations is correct?

- 1) D–India
- 2) C–Canada
- 3) F–Thursday
- 4) China–Monday
- 5) All are correct

Directions (Q. 9 – 10): Study the following information carefully and answer the given questions.

Five courses, viz A, B, C, D and E, each of one month's duration, are to be taught from July to November one after the other but not necessarily in the same order by the lecturers P, Q, R, S and T. P teaches course B but not in the month of October or November. Q teaches course A in the month of September. R teaches in the month of July but does not teach either course C or D.

9. Which course is taught by S?

- 1) C
- 2) D
- 3) E
- 4) Either C or D
- 5) None of these

10. Which of the following lecturers' course immediately follows the lecture of course B?

1) P

2) Q

3) S

4) T

5) None of these

1. **On which day of the week from Monday to Sunday did Ravi leave for London ?**

I. Ravi didn't leave for London during the weekend.

II. Ravi's brother left for London on Friday 2 days after Ravi left for London

1) If the data in statement I alone are sufficient

2) If the data in statement II alone are sufficient

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

4) If the data given in both I and II together are not sufficient

5) If the data in both the statements I and II together are necessary to answer

2. **How many boys are there between A and D in a row of 30 boys ?**

I. A is 6 places away from B, who is 20th from the left end.

II. A is 12th from the left end and D is 7th from the right end.

1) If the data in statement I alone are sufficient

2) If the data in statement II alone are sufficient

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

4) If the data given in both I and II together are not sufficient

5) If the data in both the statements I and II together are necessary to answer

3. **Among P, Q, R, S, T and U, who is the tallest ?**

I. S and T are taller than U, P and Q but none of them is the tallest.

II. T is taller than S but shorter than R

1) If the data in statement I alone are sufficient

2) If the data in statement II alone are sufficient

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

4) If the data given in both I and II together are not sufficient

5) If the data in both the statements I and II together are necessary to answer

4. **In a certain code 48 means 'stop smoking' and 62 means 'injurious habit'. What do 6 and 8 mean respectively in that code ?**

I. 8 2 9 means 'smoking is injurious'

II. 4 6 7 means 'stop bad habit'

1) If the data in statement I alone are sufficient

2) If the data in statement II alone are sufficient

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

- 4) If the data given in both I and II together are not sufficient
- 5) If the data in both the statements I and II together are necessary to answer

5. **How is M related to H ?**

I. E is the only granddaughter of H and K is father of E.

II. E is sister of G and M is mother of G.

- 1) If the data in statement I alone are sufficient
- 2) If the data in statement II alone are sufficient
- 3) If the data either in statement I alone or statement II alone are sufficient to answer
- 4) If the data given in both I and II together are not sufficient
- 5) If the data in both the statements I and II together are necessary to answer

6. **How many pages of the Book did Divya read on Sunday ?**

I. Divya read the last 50 pages of the book on Monday morning

II. The book has 300 pages out of which two-thirds were read by Divya before Sunday.

- 1) If the data in statement I alone are sufficient
- 2) If the data in statement II alone are sufficient
- 3) If the data either in statement I alone or statement II alone are sufficient to answer
- 4) If the data given in both I and II together are not sufficient
- 5) If the data in both the statements I and II together are necessary to answer

7. **A, B, C, D, E and F are sitting in a circular table facing the centre. How many persons are there between E and F (If counted clockwise from F)**

I. B and E sit adjacent to each other and B is on the immediate left of F.

II. A and C sit adjacent to each other. There is one person who sits between D and E. A is not an immediate neighbour of E.

- 1) If the data in statement I alone are sufficient
- 2) If the data in statement II alone are sufficient
- 3) If the data either in statement I alone or statement II alone are sufficient to answer
- 4) If the data given in both I and II together are not sufficient
- 5) If the data in both the statements I and II together are necessary to answer

8. **How many sisters does Yuvaraj have ?**

I. Rohit is father of Yuvaraj and he has 3 children

II. Yuvaraj has 2 siblings one of them is Shila

- 1) If the data in statement I alone are sufficient
- 2) If the data in statement II alone are sufficient
- 3) If the data either in statement I alone or statement II alone are sufficient to answer
- 4) If the data given in both I and II together are not sufficient
- 5) If the data in both the statements I and II together are necessary to answer

9. **In which direction is W with respect to Z ?**

I. W is to the west of Y, who is to the north of U

II. Z is to the north – east of U and in the line of Y and W.

- 1) If the data in statement I alone are sufficient
- 2) If the data in statement II alone are sufficient
- 3) If the data either in statement I alone or statement II alone are sufficient to answer
- 4) If the data given in both I and II together are not sufficient
- 5) If the data in both the statements I and II together are necessary to answer

10. **Who among A, B, C, D and E each having a different weight is the lightest ?**

I. C is heavier than only A

II. D is lighter than E and B

- 1) If the data in statement I alone are sufficient
- 2) If the data in statement II alone are sufficient
- 3) If the data either in statement I alone or statement II alone are sufficient to answer
- 4) If the data given in both I and II together are not sufficient
- 5) If the data in both the statements I and II together are necessary to answer

ANSWERS:

1. Answer – **2) If the data in statement II alone are sufficient**

Solution:

From II : Ravi left for London on Wednesday

2. Answer – **2) If the data in statement II alone are sufficient**

Solution:

$24 - 12 = 12$ boys

3. Answer – **1) If the data in statement I alone are sufficient**

Solution:

$R > S, T > U, P, Q$

4. Answer – **3) If the data either in statement I alone or statement II alone are sufficient to answer**

Solution:

6 => habit

8 => smoking

We can get the answer separately from I or II

5. Answer – **5) If the data in both the statements I and II together are necessary to answer**

Solution:

From both I and II

M is daughter-in-law of H.

6. Answer – **5) If the data in both the statements I and II together are necessary to answer**

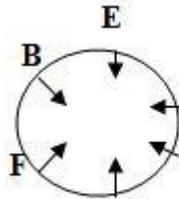
Solution:

From both I and II

$\frac{2}{3}(300) = 200$

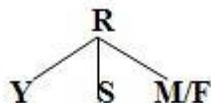
Sunday = $300 - (200 + 50) = 50$

7. Answer – **1) If the data in statement I alone are sufficient**



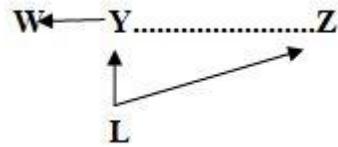
Solution:

8. Answer – **4) If the data given in both I and II together are not sufficient**



Solution:

9. Answer - **5) If the data in both the statements I and II together are necessary to answer**



Solution:

W is west of Z

10. Answer - **I. C is heavier than only A**

Solution:

$E, B > D > C > A$

1. **Jeevan went to buy a chocolate worth Rs. x . He gave Rs.10 rupee note to the shopkeeper to buy the chocolate then shopkeeper gave rest of the money in the denominations of 50 paise, 1 rupee, and 2 rupees. If the ratio of the number of coins is 4:2:1 respectively. Then what is the price of the chocolate?**
 1. 4
 2. 5
 3. 6
 4. 7
 5. Cannot be determined
2. **In a family, there are ' n ' persons. The expenditure of rice per month is directly proportional to 4 times the square of the number of persons of the family. If one of them left the family there was a decrease in consumption of 28Kg rice per month. Then initially how many persons were in the family?**
 1. 3
 2. 4
 3. 5
 4. 6
 5. 7
3. **Three Rabbits A, B, and C move in such a way that when A takes 7 steps, B takes 8 steps and C takes 9 steps. But 4 steps of A are equal to 5 steps of B and 6 steps of C. What is the ratio of their speeds?**
 1. 28:40:54
 2. 42:40:36
 3. 35:32:30
 4. 30:32:35
 5. None
4. **In the year 2013, in a company the ratio of employees in three different departments HR, MT and TA are 2:3:4 respectively. In the year 2014 in each department if ' n ' number of employees left then the ratio becomes 3:5:7. In the year 2015 in each department 5 employees left then the ratio became 1:2:3. Then what is the total number of employees in the year 2014?**
 1. 70
 2. 72
 3. 75
 4. 78
 5. Cannot be determined

5. **In a horse racing, there are three horses, A, B and C. The Payoffs at A is 3:7, at B, is 4:9, at C, is 5:11. Sharif bets Rs. 693 on a horse which would fetch maximum amount. Luckily his horse has won. Then what is the total amount won by him?**
1. Rs.990
 2. Rs.1001
 3. Rs.1008
 4. Rs.1011
 5. Rs.1018
6. **Sujitha bought 108 Bangles. While carrying she slipped the bangles down. By this, some them were broken. What cannot be the ratio of broken and unbroken bangles?**
1. 1:2
 2. 4:3
 3. 7:5
 4. 7:11
 5. 13:5
7. **Four friends A, B, C, and D have some money among them, they decided to equate the money, so first A gave B what B had initially, now B gave C what C had initially. Again C gave D what D had initially and finally, D gave what A had now. Thus each of them had an equal sum of Rs.48. Then what amount does A have initially?**
1. 48
 2. 60
 3. 69
 4. 72
 5. Cannot be determined
8. **A,B,C, and D are four numbers if B is more than A, D is 10 more than B, C is 5 less than D, A is 10 less than C. Then ratio of A: B: C: D is?**
1. 1:2:3:4
 2. 1:2:4:5
 3. 1:3:4:1
 4. 1:2:2:1
 5. Cannot be determined
9. **A, B, C, and D are four friends living in a room. A bought some sweet and went to the room. He found no one is in the room. He then divided the sweets into four parts and ate one part. After that B came to the room they then divided the remaining sweets**

into four parts at one part each. After that C came to the room, now together they divided the remaining sweets into four parts and ate their parts. After that D came now together they divided the sweets into four parts and finished the sweets. D ate 6 sweets only. Then how many sweets does A eat?

1. 142
2. 144
3. 146
4. 150
5. 156

10. The cost of Coal block varies directly with the square of its weight. The Coal block is divided into three parts whose weights are in the ratio of 5:6:7. If the Coal block is divided into three equal parts by weight then there would be further loss of Rs.7200. Then what is the actual cost of Coal Block?

1. 1166400
2. 2332880
3. 3888000
4. 3960000
5. None

11. An amount of money is to be divided between P, Q and R in the ratio of 3:7:12. If the difference between the shares of P and Q is Rs.X, and the difference between Q and R's share is Rs.3000. Find the total amount of money?

- A.11000
- B.12400
- C.13200
- D.14300
- E.None of these

12. If a certain amount X is divided among A, B, C in such a way that A gets $\frac{2}{3}$ of what B gets and B gets $\frac{1}{3}$ of what C gets, which of the following is true

- A.C's Share = 1053 and X = 1666
- B.A's Share = 238 and X = 1638
- C.B's Share = 234 and X = 1666
- D.C's Share = 1053 and X = 1638
- E.A's Share = 351 and X = 1638

13. Seats for Mathematics, Science and arts in a school are in the ratio 5:7:8. There is a proposal to increase these seats by X%, Y% and Z% respectively. And the ratio of increased seats is 2:3:4,

which of the following is true?

A. $X = 50$; $Z = 40$

B. $Y = 40$; $Z = 50$

C. $X = 40$; $Z = 75$

D. $X = 50$; $Z = 40$

E. $Y = 50$; $X = 75$

14. **An amount of money is to be distributed among P, Q and R in the ratio of 7:4:5 respectively. If the total share of P and R is 4 times the share of Q, what is definitely Q's share?**
- A. 2000
B. 4000
C. 6000
D. Data inadequate
E. None of these
15. **Two candles of same height are lighted at the same time. The first is consumed in 3 hours and second in 2 hours. Assuming that each candles burns at a constant rate, in how many hours after being lighted, the ratio between the first and second candles becomes 2:1?**
- A. 2 hour
B. 2.5 hour
C. 4 hour
D. 4.5 hour
E. None of these
16. **If A and B together have a certain amount X and if $\frac{4}{15}$ of A's amount is equal to $\frac{2}{5}$ of B's amount, which of the following is true?**
- A. $A = 1767$; $X = 2675$
B. $B = 1070$; $X = 2895$
C. $A = 1767$; $X = 2945$
D. $B = 1158$; $X = 2585$
E. $A = 1605$; $X = 2945$
17. **sum of Rs.4880 was divided among boys and girls in such a way that each boy gets Rs.44.50 and each girl get Rs. 55.25. If the total number of girls and boys is 100, find the number of girls?**
- A. 60
B. 50
C. 40
D. 30
E. None of these

18. **The income of Vinay and Prakash are in the ratio of 4:5 and their expenditure is in the ratio of 2:3. If each of them saves 5000, then find their income.**
- A.11000, 8550
 B.12000, 7750
 C.15000, 8750
 D.13000, 9780
 E.None of these
19. **If the ratio of the first to second is 2:3 and that of the second to the third is 5: 8, then which of the following is true,**
- A.Sum = 98; A = 48
 B.Sum = 147; B = 30
 C.Sum = 147; C = 45
 D.Sum = 98; B = 30
 E.Sum = 98; C = 72
20. **A bag contains 25p coins, 50p coins and 1 rupee coins whose values are in the ratio of 8:4:2.If the total values of coins isX and the total amount in rupees is Y,thenwhich of the following is true**
- A.X = 840; Y = 260
 B.X = 966; Y = 345
 C.X = 840; Y = 280
 D.X = 740; Y = 260
 E.None of these

ANSWERS :

1. Answer – **1. 4**

Explanation :

Possible coins = (4, 2, 1) & (8, 4, 2)

If (4, 2, 1) = $0.50 \times 4 + 2 \times 1 + 1 \times 2 = 6$

Chocolate cost = $10 - 6 = 4$

Case 2: (8, 4, 2) = $0.50 \times 8 + 4 \times 1 + 2 \times 2 = 12$ more than 10 rupees so wrong

2. Answer – **2. 4**

Explanation :

$R1 = 4n^2$

$R2 = 4(n-1)^2$

$R1 - R2 = 28 = 2n - 1$

$n = 4$

3. Answer – **3. 35:32:30**

Explanation :

$$A: B: C = 7:8:9$$

$$\text{Size of step, } 4A=5B=6C$$

$$\text{the ratio of speeds} = 7/4:8/5:9/6$$

$$35:32:30$$

4. Answer – **3. 75**

Explanation :

$$\text{In the year 2013} = 2x: 3x: 4x$$

$$\text{In the year 2014} = 3y:5y:7y$$

$$3y-5/5y-5 = \frac{1}{2}$$

$$y = 5$$

$$\text{Employees in 2014} = 15, 25, 35$$

$$\text{Now } 2x-n = 15$$

$$3x-n = 25$$

$$x = 10$$

$$\text{Employees in 2013} = 20, 30, 40$$

$$\text{No of left in 2014} = 3*5 = 15$$

5. Answer – **3. Rs.1008**

Explanation :

$$\text{If he bets on horse A: } 693*3/7 = 297$$

$$\text{If he bets on horse B: } 693*4/9 = 308$$

$$\text{If he bets on horse C: } 693*5/11 = 315$$

$$\text{So he bets on horse C and he wins 315}$$

$$\text{Total} = 693+315 = 1008$$

6. Answer – **2. 4:3**

Explanation :

$$108 \text{ cannot be divided in the ratio of } 4:3$$

7. Answer – **3. 69**

Explanation :

$$A \ B \ C \ D$$

$$A-B \ B+B \ C \ D$$

$$A-B \ B+B-C \ C+C \ D$$

$$A-B \ 2B-C \ 2C-D \ 2D$$

$$2(A-B) \ 2B-C \ 2C-D \ 2D-(A-B)$$

$$48 \ 48 \ 48 \ 48$$

$$2(A-B) = 48$$

$$A-B = 24$$

$$2D-(A-B) = 48$$

$$2D = 72 \ D = 36$$

$$2C-D = 48 \quad C = 42$$

$$2B-C = 48 \quad B = 45$$

$$A-B = 24 \quad A = 69$$

8. Answer – **5. Cannot be determined**

Explanation :

From the above values of A, B, C and D cannot be determined

9. Answer – **1. 142**

Explanation :

$$D = 3x/128 = 6$$

$$\text{Total sweets} = 256$$

$$A = x/4 + 3x/16 + 3x/32 + 3x/128$$

$$A = 142$$

10. Answer – **1. 1166400**

Explanation :

$$\text{Cost} = (5x)^2 + (6x)^2 + (7x)^2 = 110x^2$$

$$\text{When weights equal} = (6x)^2 + (6x)^2 + (6x)^2 = 108x^2$$

$$\text{Loss} = 7200 = 110x^2 - 108x^2 = 2x^2$$

$$x = 60$$

$$\text{Actual cost} = (6x + 6x + 6x)^2$$

$$(18 \times 60)^2 = 1166400$$

11. Answer – **C.13200**

Explanation :

$$12a - 7a = 3000$$

$$5a = 3000$$

$$a = 600$$

$$7a - 4a = x$$

$$3a = x$$

$$x = 1800$$

$$22 \times 600 = 13200$$

12. Answer – **D.C's Share = 1053 and X = 1638**

Explanation :

$$A = \frac{2}{3} B; \quad B = \frac{1}{3} C;$$

$$A:B = 2:3; \quad B:C = 1:3;$$

$$A:B:C = 2:3:9$$

$$C = \frac{9}{14} \times 1638 = 1053 +$$

13. Answer – **C.X = 40; Z = 75**

Explanation :

Number of increased seats are (140% of 5x), (150% of 7x) and (175% of 8x)

i.e., $(140/100 \times 5x)$, $(150/100 \times 7x)$ and $(175/100 \times 8x)$

i.e., $7x$, $21x/2$ and $14x$
Required ratio = $7x:21x/2:14x$
= $14x : 21x : 28x = 2:3:4$

14. Answer – **D.Data inadequate**

Explanation :

Total sum not given

15. Answer – **D.4.5 hour**

Explanation :

Height of both candles are same i.e. h

First one takes 6 hours to burn completely, so in one hour = $h/3$

Similarly second one will burn in one hour = $h/2$

Let after t time, ratio between their height is 2:1

so, remaining height of first candle = $h - t*(h/3)$

similarly for second candle = $h - t*(h/2)$

ratio given 2:1,

$h - t*(h/3) / h - t*(h/2) = 2/1$

Solving we get $t = 9/2 = 4.5$

16. Answer – **C.A = 1767; X = 2945**

Explanation :

$4/15 * A = 2/5 * B$

$A = 2/3 B$;

$A:B = 3:2$;

$A = 3/5 * 2945 = 1767$

17. Answer – **C.40**

Explanation :

$x+y=100$ ----- (i)

$44.50x + 55.25y = 4880$ ----- (ii)

Solving (i) and (ii) $Y = 40$

18. Answer – **C.15000, 8750**

Explanation :

$4x - 2y = 5000$ and $5x - 3y = 5000$.

$X = 8750$, so income = 8750 and 15000

19. Answer – **D.Sum = 98; B = 30**

Explanation :

$A:B:C = 10:15:24$

If sum = 98, $B = 15/49 * 98 = 30$

20. Answer – **C.X = 840; Y = 280**

Explanation :

Value is given in the ratio 8:4:2.

$$(8x/0.25) + (4x/0.5) + (2x/1) = 840.$$

$$X = 20. \text{ Total amount, } Y = 14 * 20 = 280$$