

**Q. (1 – 5) Study the following information carefully to answer the given questions.**

There is an apartment in Delhi. The eight members have decided to play some games around a round table facing to the center, so their eight members are P, Q, R, S, W, X, Y and Z. Each person has different cars viz; Swift, i20, Honda City, Duster, Accent, Bolero, Scorpio and Dustan Go,

but not necessarily in the same order and these 8 members live on different floor from floor number 1 to 8. Z lives on top most floor and P lives on first floor. The one who has Duster lives on 2 floor. The person who has i20, lives on fifth floor and sits third to the right of Y. R lives on 3rd floor and sits immediate neighbour of Y. The person who has Duster sits second to the right of R. Q sits third to the right of Z. Z's car is neither i20 nor Duster. Only one person sits between R and the person who has Honda city. The one who has Swift, lives on the immediate floor below from the one has Dustan Go. P and X are immediate neighbours of each other. Neither P's nor X's has i20. The person who has Dustan Go sits second to the right of P. Two persons sit between S and the person who has Accent. S has not i20. The one who has Honda city lives on 6th floor. The person who has Swift is not an immediate neighbour of the person who has i20. The person who has Bolero sits second to the left of P. The one who has Bolero, lives on just floor above from on which floor R lives.

**1. S lives on which floors?**

- A. 1
- B. 3
- C. 4
- D. 2
- E. 7

**2. Who is the immediate left neighbor of S ?**

- A. The one who has Scorpio
- B. The one who has Swift
- C. The one who has Bolero
- D. The one who has Honda City
- E. The one who has Duster

**3. Who sits exactly between the persons who have Honda City and Accent (clockwise from R)?**

- A. R and Z

- B. R and Q
- C. Only one person, Z
- D. P and Q
- E. None of these

**4. Who among the following has Scorpio?**

- A. P
- B. W
- C. R
- D. X
- E. S

**5. What is the position of S with respect to the person who has i20?**

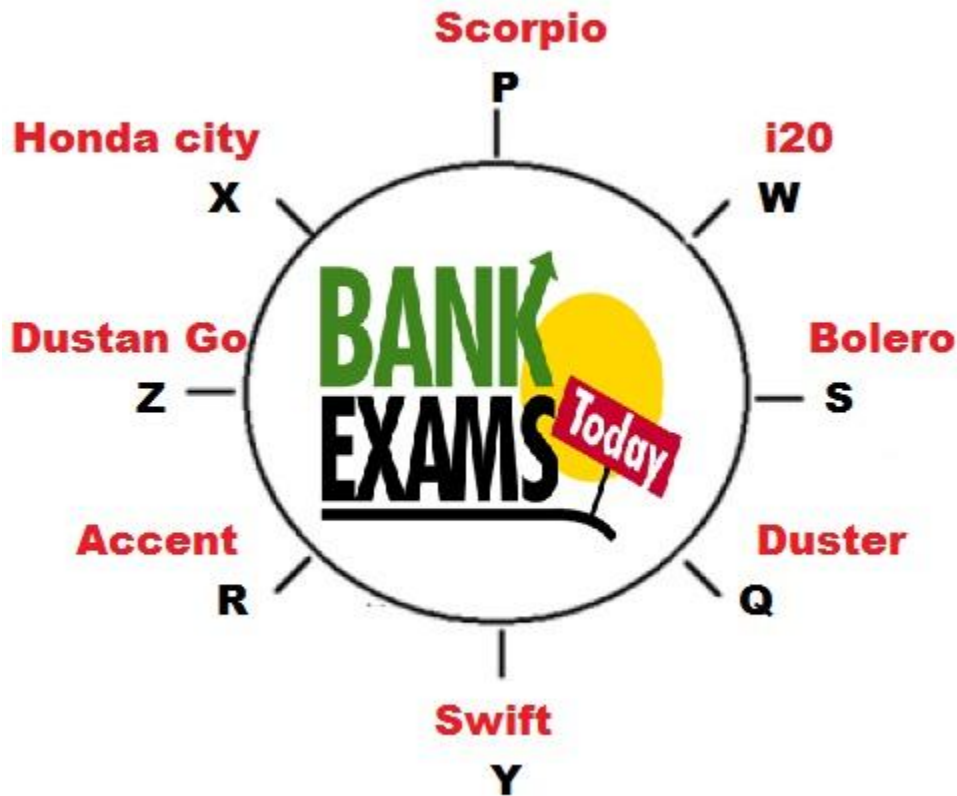
- A. Second to the left
- B. Second to the right
- C. Immediate right
- D. Immediate left
- E. None of these

**Answers:**

- 1. C. 4**
- 2. E. The one who has Duster**
- 3. C. Only one person, Z**
- 4. A. P**
- 5. D. Immediate left**

Floor	Members
<b>8</b>	<b>Z</b>
<b>7</b>	<b>Y</b>
<b>6</b>	<b>X</b>
<b>5</b>	<b>W</b>
<b>4</b>	<b>S</b>

3	R
2	Q
1	P



**Q. (6 – 10) Study the following information carefully to answer the given questions.**

There are seven friends namely L, M, N, O, P, Q, R and S are going to movies on different days i.e. Tuesday, Wednesday, Monday, Thursday, Friday, Sunday and Saturday, but not necessarily in the same order. Each person have an Birthday, in seven different months (of the same year) namely February, May, April, June, September, March and November but not necessarily in the same order. Q has a Birthday in the month which has more than 30 days. Both R and N have a Birthday in a month after the one who goes market on Tuesday. The one who goes market on Monday has a Birthday in the month which has less than 30 days. Only three people have a Birthday between the one who goes market on Monday and the one who goes market on Saturday. R has a Birthday immediately before N. Only two people have a Birthday between R and the one who goes market on Thursday. O has a Birthday immediately after the one who goes market on Thursday. Only one person has a Birthday between Q and the one who goes market on Tuesday. Only two people have a Birthday between O and P. L has a Birthday immediately before the one who goes market on Wednesday. N does not go on Sunday.

**6. As per the given arrangement Monday is related to April and Thursday is related to September following a certain pattern, which of the following is Saturday related to following the same pattern?**

- A. February
- B. June
- C. March
- D. November
- E. May

**7. Which of the following represents the people who have a Birthday in April and November respectively?**

- A. M, L
- B. P, L
- C. P, N
- D. M, N
- E. M, R

**8. How many people have a Birthday between the months in which P and L have a Birthday?**

- A. None
- B. One
- C. Three
- D. Two
- E. More than three

**9. Which of the following represents the month in which R has a Birthday?**

- A. Cannot be determined
- B. March
- C. May
- D. April
- E. September

**10. In which of the following days does N go to the market?**

- A. Tuesday
- B. Wednesday
- C. Thursday
- D. Friday
- E. Saturday

**Answers:**

- 6. D. November
- 7. D. U, V
- 8. C. Three
- 9. B. October
- 10. D. Friday

<b>Month</b>	<b>Person</b>	<b>Week days</b>
February	P	Monday
May	Q	Sunday
April	M	Thursday
June	O	Tuesday
September	L	Saturday
March	R	Wednesday
November	N	Friday

**Q. Rajnikant is planning to escape a prison along with some other convicts including his brother, thus a total of six persons are planning for the escape. The other convicts are Shera, Kaalia, Rajan , Saleem and Shakeel. The prison is built in such a way that there are five floors in the building with topmost floor numbered as 5th , 4th below it till the bottommost(ground) floor as 1st. There are eight cells on each floor, four facing the other four, such that there are two rows. These cells are marked alphabetically in such a way that cell A is at one of the ends with cell B facing it, followed by cell C neighbouring A, and facing D and this pattern continues on till the cell marked as H. Each and every convict lives on a differently marked cell.**

**Only one person is kept on the second floor. Only two persons are kept in the cells which are on the row which does not have any of the cell marked as vowel. Shera is imprisoned in a cell marked as a vowel and on an even numbered floor. Rajan is kept on an even numbered floor, but not above Saleem. No one is kept on the cells which are marked as the one diagonally opposite to the cell of Saleem. Rajan and the person kept on the cell marked as F are on the same floor. Only one person is kept on the cell marked as a vowel and he is not named as a vowel. Rajan is not kept at any of the ends, while the person kept in the cell immediately opposite to the cell below Saleem's cell is kept at one the ends. Kaalia is kept in a cell opposite to the vacant cell between the cell of Sakeel and Rajan.**

**1. Which of following is the mark of the cell in which no one is kept?-**

- A. F
- B. A
- C. D
- D. G
- E. Both options (B) and (C)

**2.** It is given that

(i) Staircase are provided at the same end where cell marked as H is there and right between the two rows such that no cells are there beyond it.

(ii) There is only one bunch of keys and every cell has a different key.

(iii) Rajnikant lives in cell B on 5th floor

(iv) All the other cell except those in which six convicts are kept are empty.

If Rajnikant was able to make the duplicate key of his cell but in order to get the keys of other cells, he has to get to cell D on floor 3 as the guard forgot to remove the keys from that cell's lock, then how many empty cells will Rajnikant pass through counting only the cells which are to his left?

A. 8

B. More than 8

C. Less than four

D. Four

E. None of these

**3.** It is given that: -

(i) Staircase are provided at the same end where cell marked as H is there and right between the two rows such that no cells are there beyond it.

(ii) There is only one bunch of keys and every cell has a different key.

(iii) Rajnikant lives in cell B on 5th floor

(iv) All the other cell except those in which six convicts are kept are empty.

Some more conditions are given that:

(i) After obtaining the keys, Rajnikant starts to free other five convicts using those keys.

(ii) He chooses a path by which he has to travel the least.

(iii) Exit gates of the prison are at the ground floor.

(iv) While freeing the convicts, Rajnikant does not skip any of the floors which has convicts. How many maximum keys will Rajnikant have to try to identify the key of the prison door of the of convict Rajan?

A. More than 38

B. 38

C. 36

D. Less than 36

E. 37

**4.**

It is given that: - (i) Staircase are provided at the same end where cell marked as H is there and right between the two rows such that no cells are there beyond it.

(ii) There is only one bunch of keys and every cell has a different key.

(iii) Rajnikant lives in cell B on 5th floor

(iv) All the other cell except those in which six convicts are kept are empty.  
Some more conditions are given that:

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(ii) He chooses a path by which he has to travel the least.

(iii) Exit gates of the prison are at the ground floor.

(iv) While freeing the convicts, Rajnikant does not skip any of the floors which has convicts.

**If the convicts whose doors are unlocked by Rajnikant , immediately starts heading towards the exit gates (all the convicts walks with same speed) and wait for Rajnikant who is to come only after freeing all the convicts, then who among the following will be the second last to reach the exit door)?**

- A. Rajnikant
- B. Shera
- C. Saleem
- D. Rajan
- E. None of these

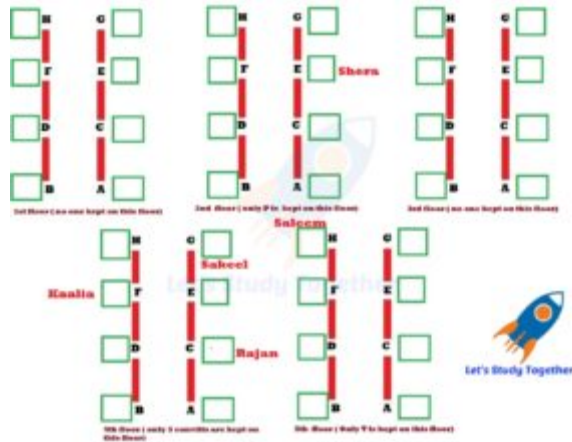
**5.Which of the following convicts is/are kept on third floor?**

- A. Rajan
- B. Sakeel
- C. Both Rajan and Sakeel
- D. None of these
- E. No one

ANSWER:

1.

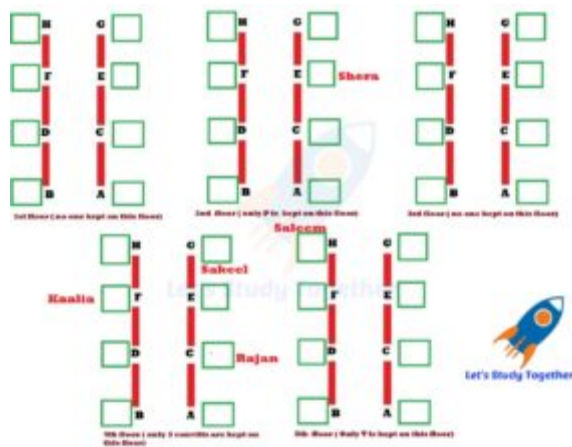
E. Both options (B) and (C)



2.

D. Four

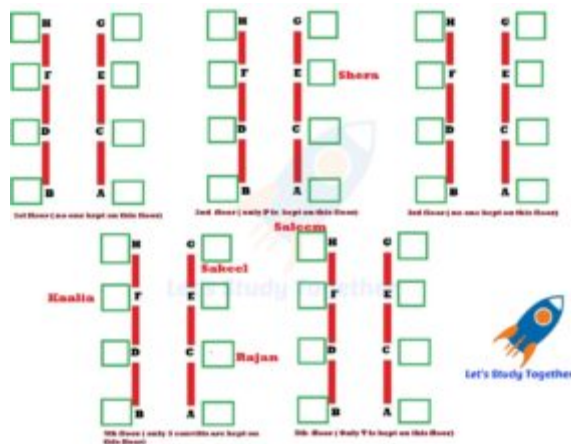
After exiting his cell (but did not pass through) Rajnikant will have to get to the staircase, on the way he will pass through cells D and F on the fifth floor and cell G and E on third floor before reaching his destination.



3.

C. 36

As there are keys to all the cells of the building in that bunch, that means there are  $8 \times 5 = 40$  keys in total. As it is given that Rajnikant will choose a route by which he would have to travel the least distance, that means that Rajnikant will head towards upper floors instead of the lower ones. Before reaching the convict Rajan, he will have to pass through Kaalia and Sakeel. As he unlocks the door of Sakeel then Kaalia, two of the thirty nine keys (fortieth one was already inside the lock) will be eliminated for the trial. And out of 37 keys left maximum 36 will have to be tried in order to identify the correct key.



E. None of these

After unlocking the doors of the upper cells, Rajnikant will head towards the cell of Shera which is on the second floor and after unlocking his door, they both will head towards the exit door and as their walking speed is the same (given in the question), they both will reach the exit gates together. So, the answer will be none of these.



**Direction : ( 6-8) Study the following information carefully and answer the given questions.**

In a Bike Racing competition five friends L, M, N, O and X participated in bike racing competition. All of them covered different distances. The distances were 28, 29, 31, 34 and 36 kilometer, but not necessarily in the same order. The rank obtained by each person is not necessarily related to the amount of distance covered by them. Similarly, the colour of bike of each person was different. Bike's colors were black, blue, yellow, green and red. Each person was called for racing one by one. M and the person, who was given the chance at fifth position to drive, covered more than 30 Kilometres. And neither of the two was has blue colour bike. N's bike was green. He ride immediately before the person who got the first rank. The person whose position was fourth, was has red color bike and run the bike two kilometre less than the person who run the bike only after one person. X was called first to ride. But he did not get the last rank. One who drove immediately after L was has yellow color bike. O was not the person who covered 31 or at 36 kilometres. The person has black color bike did not covered 31 kilometres. The person has blue color bike did not obtained 2nd or 4th rank. Ranking of N is the same as the position at which the one who covered 28 kms ride. Ranking of O is not lower than that of the one with red color bike.

**6.Which of the following persons has yellow color Bike?**

- A. O
- B. X
- C. M
- D. Data Inadequate
- E. None of these

**7.Who among the following persons got the first rank?-**

- A. M
- B. L
- C. N
- D. Data inadequate
- E. Other than these options

**8. Which of the following correctly shows the positions at which the following persons drove?**

L M N O X

- (1) 4 3 2 5 1
- (2) 4 3 2 1 5
- (3) 3 4 2 5 1
- (4) 4 2 3 1 5

- A. 1
- B. 2
- C. 3
- D. 4
- E. Other than these options

ANSWER:

6. **A. O**

Friends	Bike Riding Position	Colors of Bike	Distance	Rank
L	4	Red	28	5th
M	3	Black	36	1 <sup>st</sup>
N	2	Green	29	4th
O	5	Yellow	34	2 <sup>nd</sup>
P	1	Blue	31	3rd

7. A. M

<b>Friends</b>	<b>Bike Riding Position</b>	<b>Colors of Bike</b>	<b>Distance</b>	<b>Rank</b>
L	4	Red	28	5th
M	3	Black	36	1 <sup>st</sup>
N	2	Green	29	4th
O	5	Yellow	34	2 <sup>nd</sup>
P	1	Blue	31	3rd

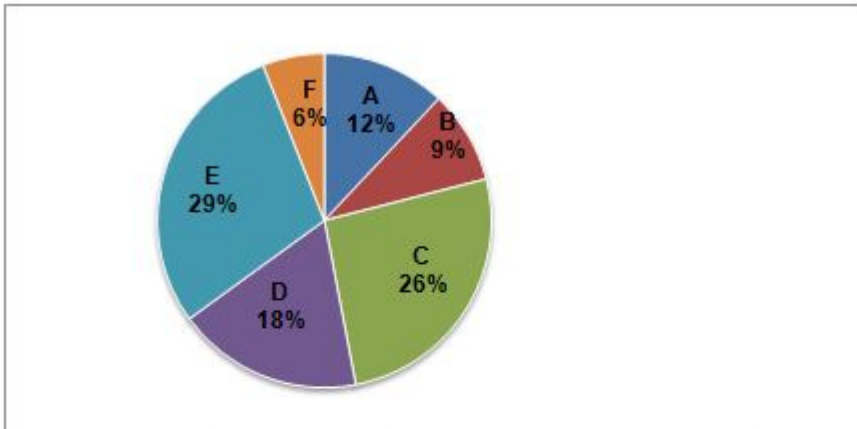
8. A. 1

<b>Friends</b>	<b>Bike Riding Position</b>	<b>Colors of Bike</b>	<b>Distance</b>	<b>Rank</b>
L	4	Red	28	5th
M	3	Black	36	1 <sup>st</sup>
N	2	Green	29	4th
O	5	Yellow	34	2 <sup>nd</sup>
P	1	Blue	31	3rd

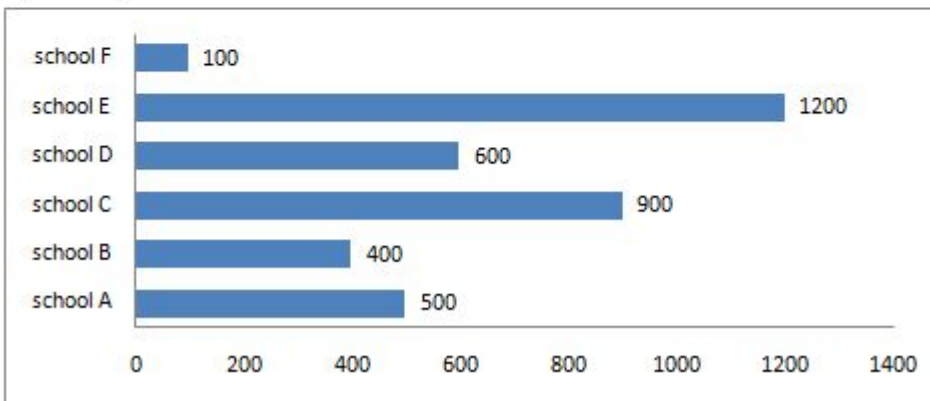
**Direction (1-5): Study the following pie chart and bar chart and answer the following questions, percentage wise distribution of food package (lunch and soft drinks) in six different schools.**

Total no of food package (lunch and soft drinks) = 6000

Percentage of foods package



Number of food package (only lunch) out of six thousand foods in each school separately



**1) What is the total number of soft drinks in school C, school E and number of lunch in School D together?**

- a) 1500
- b) 1600
- c) 1800
- d) 2200



e) None of these

**2) What is the respective ratio between the number of lunch in school C and number of soft drinks in school B and total number of food package (lunch + soft drink) in school E?**

a) 45 : 7 : 87

b) 35 : 4 : 57

c) 57 : 6 : 77

d) 27 : 4 : 37

e) None of these

**3) What is the difference between the total number of food package in school F and the number of Lunch in school E?**

a) 340

b) 850

c) 840

d) 240

e) None of these

**4) In Which school the total numbers of Foods (both lunch and soft drinks) together are equal to the no of soft drinks in school E?**

a) School E

b) School B

c) School C

d) School A

e) None of these

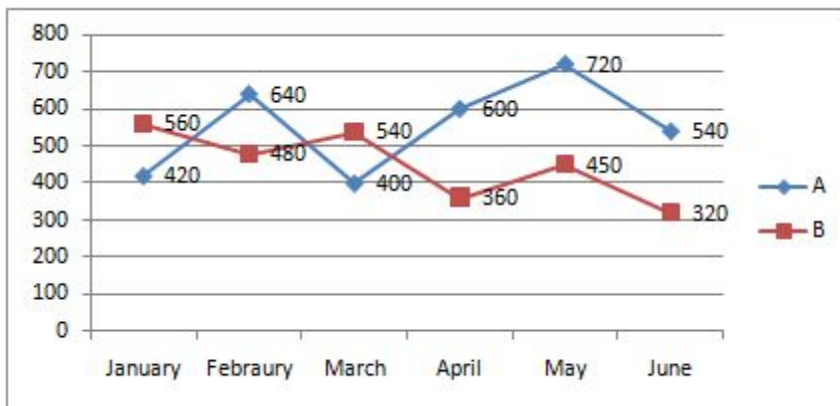
**5) Number of soft drinks in school A is approximately what percent of total number of food package in school B?**

a) 41%

- b) 31%
- c) 61%
- d) 71%
- e) None of these

**Directions (6-10): Study the following graph carefully and answer the given questions:**

**The line graph shows the number of cars manufactured in six different months in two different companies**



**6) What is the ratio of 120% of the number of cars manufactured by company A on January and April together to the 80% of the number of cars sold by company B in march and June together?**

- a) 154:83
- b) 81:127
- c) 23:49
- d) 153:86
- e) 27:89

**7) Number of cars manufactured by company B on March and April together is what percentage more than the number of cars manufactured by company A on January and June together?**

- a) 6.25%
- b) 7.5%
- c) 10.5%
- d) 5%
- e) 12.5%

**8) If the number of cars manufactured by company B on July is 120% of the average number of cars manufactured by company A for all the months together (Exclude February and march ), and then find the number of cars manufactured by B on July**

- a) 724
- b) 684
- c) 586
- d) 498
- e) 386

**9) What is the difference between the total number of cars manufactured by company A and the total number of cars manufactured by company B?**

- a) 590
- b) 640
- c) 630
- d) 710
- e) None of these

**10) In which month difference between the number of cars manufactured by company A and B maximum in the given months?**

- a) January
- b) February
- c) March

d) April

e) June

## Answers:

### Direction (1-5)

#### 1) Answer: c)

$$\text{School C soft drinks} = ((6000 \times 26) / 100) - 900 \Rightarrow 660$$

$$\text{School E soft drinks} = ((6000 \times 29) / 100) - 1200 \Rightarrow 540$$

$$\text{School D Lunch} = 600$$

$$\text{Ans} = 660 + 540 + 600 \Rightarrow 1800$$

#### 2) Answer: a)

$$\text{Number of lunch in school C} = 900$$

$$\text{Number of soft drinks in school B} = ((6000 \times 9) / 100) - 400 \Rightarrow 140$$

$$\text{Number of foods in school E} = ((6000 \times 29) / 100) \Rightarrow 1740$$

$$\text{Ratio} = 900 : 140 : 1740$$

$$45 : 7 : 87$$

#### 3) Answer: c)

$$\text{Number of lunch in school E} = 1200$$

$$\text{Number of foods in school F} = ((6000 \times 6) / 100) \Rightarrow 360$$

$$\text{Difference} = 1200 - 360$$

$$= 840$$

#### 4) Answer: b)

$$\text{Number of soft drinks in school E} = ((6000 \times 29) / 100) - 900 \Rightarrow 540$$

$$\text{Total number of foods in school B} = ((6000 \times 9) / 100) = 540$$

Ans = School B

**5) Answer: a)**

Number of soft drinks in school A =  $((6000 \times 12)/100) - 500 \Rightarrow 220$

Total number of foods in school B =  $((6000 \times 9)/100) = 540$

Percentage =  $(220/540) \times 100 = 41\%$

**Direction (6-10):**

**6) Answer: d)**

Required ratio =  $120/100 \times (420+600) : 80/100 \times (540+320)$

$\Rightarrow 6 \times (1020) : 4 \times (860)$

$\Rightarrow 153 : 86$

**7) Answer: a)**

Required percentage =  $\{(540+360) - (420+540)\} / (420+540) \times 100$

$\Rightarrow 600/96 = 6.25\%$

**8) Answer: b)**

Required number of cars =  $120/100 \times (420+600+720+540)/4$

$\Rightarrow 6/5 \times 2280/4 = 6/5 \times 570 = 684$

**9) Answer: e)**

Required difference =  $(420+640+400+600+720+540) - (560+480+540+360+450+320)$

$\Rightarrow 3320 - 2710$

$\Rightarrow 610$

**10) Answer: d)**

January =  $560 - 420 = 140$

February =  $640 - 480 = 160$

March =  $540 - 400 = 140$

$$\text{April} = 600 - 360 = 240$$

$$\text{June} = 540 - 320 = 220$$

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

Village	Population	Percentage of male	literate : Illiterate	Rich : Poor
P	35000	45%	5:2	3:2
Q	48000	60%	7:5	5:1
R	45000	55%	3:2	4:5
S	32000	40%	3:1	1:1
T	30000	30%	2:3	3:2
U	25000	42%	7:3	2:3

**1) If out of females of village Q, 30% are literate, then find the number of literate males of village Q?**

- a) 32400
- b) 21340
- c) 22240
- d) 20040
- e) None of these

**2) Total number of rich population of village P is what percent of total number of females of village T?**

- a) 200 %
- b) 100 %
- c) 125 %
- d) 150 %
- e) 175 %

**3) Find out the total number of rich population from all the given villages together?**

- a) 14000
- b) 135000
- c) 120000
- d) 125000
- e) None of these

4) If the ratio of literate males to literate females of village S is 2 : 3, then find the number of illiterate males of village S?

- a) 3200
- b) 3500
- c) 3800
- d) 4200
- e) None of these

5) Literate population of village R is what percentage more than the poor population of village U?

- a) 100 %
- b) 70 %
- c) 90 %
- d) 80 %
- e) None of these

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

The following bar graph represents the number of employees (managers and workers) working in a company and the table shows the ratio of male and female in 6 different years.

6) Find the total number of female employees of the company over all the years together?

- a) 1658
- b) 1852
- c) 1970
- d) 1540
- e) None of these

7) Total number of managers in a company is approximately what percentage of total number of workers in a company in all the given years?

- a) 15 %



- b) 22 %
- c) 9 %
- d) 4 %
- e) 26 %

8) If in the year 2004, out of total male employees,  $\frac{3}{4}$ th are workers, then find the ratio of male workers in 2004 to the total number of female employees in 2009?

- a) 13 : 15
- b) 14 : 25
- c) 34 : 27
- d) 27 : 34
- e) None of these

9) Number of workers in 2008 is approximately what percent of number of workers in 2005?

- a) 123 %
- b) 95 %
- c) 107 %
- d) 74 %
- e) 116 %

10) Find the difference between the total number of female employees in 2006 and total number of female employees in 2008.

- a) 145
- b) 255
- c) 146
- d) 256
- e) None of these

Answers :

1). Answer: c)

Explanation:

Total number of females of village Q =  $(\frac{40}{100}) * 48000 = 19200$

$$\text{Number of literate females} = (30/100) * 19200 = 5760$$

$$\text{Total number of literate population of village Q} = (7/12) * 48000 = 28000$$

$$\text{Number of literate males} = 28000 - 5760 = 22240$$

2). Answer: b)

Explanation:

$$\text{Total number of rich population of village P} = (3/5) * 35000 = 21000$$

$$\text{Total number of females of village T} = [(100 - 30)/100] * 30000 = 21000$$

$$\text{Required percentage} = (21000/21000) * 100 = 100 \%$$

3). Answer: d)

Explanation:

Rich population of,

$$P = (3/5) * 35000 = 21000$$

$$Q = (5/6) * 48000 = 40000$$

$$R = (4/9) * 45000 = 20000$$

$$S = (1/2) * 32000 = 16000$$

$$T = (3/5) * 30000 = 18000$$

$$U = (2/5) * 25000 = 10000$$

$$\text{Required sum} = 21000 + 40000 + 20000 + 16000 + 18000 + 10000 = 125000$$

4). Answer: a)

Explanation:

$$\text{Number of males of village S} = (40/100) * 32000 = 12800$$

$$\text{Number of literate population of village S} = (3/4) * 32000 = 24000$$

$$\text{Number of literate males} = (2/5) * 24000 = 9600$$

$$\text{Number of illiterate males} = 12800 - 9600 = 3200$$

5). Answer: d)

Explanation:

$$\text{Literate population of village R} = (3/5) * 45000 = 27000$$

$$\text{Poor population of village U} = (3/5) * 25000 = 15000$$

$$\text{Required percentage} = [(27000 - 15000)/15000] * 100 = 80 \%$$

6). Answer: c)

Explanation:

$$\text{Total number of employees in 2004} = 50 + 250 = 300$$

$$\text{Females in 2004} = (2/5)*300 = 120$$

$$\text{Total number of employees in 2005} = 100 + 700 = 800$$

$$\text{Females in 2005} = (3/10)*800 = 240$$

$$\text{Total number of employees in 2006} = 75 + 1000 = 1075$$

$$\text{Females in 2006} = (3/5)*1075 = 645$$

$$\text{Total number of employees in 2007} = 40 + 500 = 540$$

$$\text{Females in 2007} = (3/4)*540 = 405$$

$$\text{Total number of employees in 2008} = 30 + 750 = 780$$

$$\text{Females in 2008} = (1/2)*780 = 390$$

$$\text{Total number of employees in 2009} = 50 + 800 = 850$$

$$\text{Females in 2009} = (1/5)*850 = 170$$

Total number of female employees

$$=> 120 + 240 + 645 + 405 + 390 + 170 = 1970$$

7). Answer: c)

Explanation:

$$\text{Total number of managers} = 50 + 100 + 75 + 40 + 30 + 50 = 345$$

$$\text{Total number of workers} = 250 + 700 + 1000 + 500 + 750 + 800 = 4000$$

$$\text{Required \%} = (345/4000)*100 = 9 \%$$

8). Answer: d)

Explanation:

$$\text{Number of male workers in 2004} = (50 + 250)*(3/5)*(3/4) = 135$$

$$\text{Number of female employees in 2009} = (50 + 800)*(1/5) = 170$$

$$\text{Required ratio} = 135 : 170 = 27 : 34$$

9). Answer: c)

Explanation:

$$\text{Required \%} = (750/700)*100 = 107 \%$$

10). Answer: b)

Explanation:

Female employees in 2006 =  $(3/5)*(1000 + 75) = (3/5)*1075 = 645$

Female employees in 2008 =  $(1/2)*(750 + 30) = (1/2)*780 = 390$

Required difference =  $645 - 390 = 255$

**Directions (1 – 5): Study the following information carefully and answer the given questions:**

**Following table shows different types of items sold by the shopkeeper and its cost price, discount, Profit/Loss % and Mark-up % also given.**

Find the ratio between the mark-up % of Item A to that of Item E?

- a) 3: 5
- b) 2: 3
- c) 5: 4
- d) 6: 7
- e) None of these

2. Find the profit/loss % earned by selling the Item C?

- a) 10 %
- b) 14 %
- c) 20 %
- d) 18 %
- e) None of these

3. If the cost price of Item A to that of Item D is in the ratio of 10: 13, then find the difference between the marked price of Item D to that of Item B?

- a) Rs. 58
- b) Rs. 64
- c) Rs. 72
- d) Rs. 46
- e) None of these

4. The cost price of Item E is 80 % more than the cost price of Item A. The selling price of Item E is 160 less than twice the selling price of Item D. Find the cost price of Item D?

- a) Rs. 700
- b) Rs. 650
- c) Rs. 800
- d) Rs. 850
- e) None of these

5. Find the average selling price of Item A, B and C?

- a) Rs. 584
- b) Rs. 572
- c) Rs. 566
- d) Rs. 528
- e) None of these

**Directions (6 – 10): Study the following information carefully and answer the given questions:**

**Following table shows the different types of grains and the quantity of different grains and markup % and list price per kg and discount % also given.**

Grains	Quantity	Markup %	List price per kg (In Rs.)	Discount %
Rice	50 Kg	200/7 %	45	20 %
Wheat	70 Kg	40 %	35	10 %
Maize	80 Kg	33 1/3 %	20	15 %
Bajra	30 Kg	400/9 %	52	100/13 %

6. Find the ratio between the cost price per kg of Rice to that of cost price per kg of Wheat

- a) 5: 3
- b) 7: 5
- c) 6: 11
- d) 9: 13
- e) None of these

7. Find the profit of amount earned by selling the given quantity of Maize?

- a) Rs. 180
- b) Rs. 200
- c) Rs. 225
- d) 160
- e) None of these

8. Find the difference between the total selling price of Maize and Bajra?

- a) Rs. 90
- b) Rs. 75
- c) 80
- d) Rs. 55
- e) None of these

9. Total selling price of Rice is what percentage of total selling price of Bajra?

- a) 125 %
- b) 105 %
- c) 115 %
- d) 80 %
- e) None of these

10. Find the total cost price of Wheat and Maize together?

- a) Rs. 3125
- b) 2950
- c) Rs. 3580
- d) Rs. 3750
- e) None of these

ANSWER:

Directions (Q. 1 – 5):

Answer: c)

Selling price of Item A =  $500 * (120/100) = \text{Rs. } 600$

Marked price of Item A =  $600 + 25 = \text{Rs. } 625$

$CP \times (100 + \text{Mark-up } \%) / 100 = \text{MP}$

$500 \times (100 + \text{Mark-up } \%) / 100 = 625$

$(100 + \text{Mark-up } \%) = 625 / 5$

$(100 + \text{Mark-up } \%) = 125$

Mark-up % of Item A =  $125 - 100 = 25 \%$

Required ratio =  $25 : 20 = 5 : 4$

2. Answer: a)

Marked price of Item C

=  $> 480 \times (115 / 100) = \text{Rs. } 552$

Selling price of Item C =  $552 - 24 = \text{Rs. } 528$

According to the question,

$480 \times (x / 100) = 528$

$x = 528 \times (100 / 480) = 110$

So, Profit % =  $10 \%$

3. Answer: d)

Marked price of Item B =  $600 \times (105 / 100) = \text{Rs. } 630$

The ratio of cost price of Item A to that of Item D =  $10 : 13$

10's =  $500$

1's =  $50$

Cost price of Item D =  $13 \text{'s} = \text{Rs. } 650$

Selling price of Item D =  $650 \times (94 / 100) = \text{Rs. } 611$

Marked price of Item D =  $611 + 65 = \text{Rs. } 676$

Required difference =  $676 - 630 = \text{Rs. } 46$

4. Answer: b)

The cost price of Item E =  $(180 / 100) \times 500 = \text{Rs. } 900$

The Selling Price of Item E =  $900 \times (118 / 100) = \text{Rs. } 1062$

The Selling price of Item E =  $2 \times \text{Selling price of Item D} - 160$

$1062 + 160 = 2 \times \text{Selling price of Item D}$

$1222 / 2 = \text{Selling price of Item D}$



Selling price of Item D = Rs. 611

Cost price of Item D =  $611 \times (100/94) = \text{Rs. } 650$

5. Answer: c)

The selling price of Item A =  $500 \times (120/100) = \text{Rs. } 600$

The selling price of Item B =  $600 \times (95/100) = \text{Rs. } 570$

The Marked price of Item C =  $480 \times (115/100) = \text{Rs. } 552$

The selling price of Item C =  $552 - 24 = \text{Rs. } 528$

Required average =  $(600 + 570 + 528)/3 = 1698/3 = \text{Rs. } 566$

Directions (Q. 6 – 10):

6. Answer: b)

Cost price  $\times [(100 + \text{Markup } \%)/100] = \text{List price}$

The cost price per kg of Rice

$\text{CP} \times (100 + (200/7))/100 = 45$

$\text{CP} \times (900/700) = 45$

$\text{CP} = 45 \times (7/9) = \text{Rs. } 35$

The cost price per kg of Wheat

$\text{CP} \times (100 + 40)/100 = 35$

$\text{CP} = 35 \times (100/140) = 25$

Required ratio =  $35 : 25 = 7 : 5$

7. Answer: d)

The cost price per kg of Maize

$\text{CP} \times (100 + 100/3)/100 = 20$

$\text{CP} \times (400/300) = 20$

$\text{CP} = 20 \times (3/4) = \text{Rs. } 15$

The selling price per kg of Maize

$\text{LP} \times (85/100) = \text{SP}$

$20 \times (17/20) = \text{SP}$

$\text{SP} = \text{Rs. } 17$

Profit per kg of Maize =  $17 - 15 = \text{Rs. } 2$

Total profit =  $2 \times 80 = \text{Rs. } 160$

8. Answer: c)

The cost price per kg of Maize

$$CP \cdot (100 + 100/3) / 100 = 20$$

$$CP \cdot (400/300) = 20$$

$$CP = 20 \cdot (3/4) = \text{Rs. } 15$$

The selling price per kg of Maize

$$LP \cdot (85/100) = SP$$

$$20 \cdot (17/20) = SP$$

$$SP = \text{Rs. } 17$$

$$\text{Total selling price of Maize} = 17 \cdot 80 = \text{Rs. } 1360$$

The cost price per kg of Bajra

$$CP \cdot (100 + 400/9) / 100 = 52$$

$$CP \cdot (1300/900) = 52$$

$$CP = 52 \cdot (9/13) = \text{Rs. } 36$$

The selling price per kg of Bajra

$$LP \cdot (1200/1300) = SP$$

$$SP = 52 \cdot (12/13) = \text{Rs. } 48$$

$$\text{Total selling price of Bajra} = 48 \cdot 30 = \text{Rs. } 1440$$

$$\text{Required difference} = 1440 - 1360 = \text{Rs. } 80$$

9. Answer: a)

The cost price per kg of Rice

$$CP \cdot (100 + (200/7)) / 100 = 45$$

$$CP \cdot (900/700) = 45$$

$$CP = 45 \cdot (7/9) = \text{Rs. } 35$$

The selling price per kg of Rice

$$LP \cdot (80/100) = SP$$

$$SP = 45 \cdot (4/5) = \text{Rs. } 36$$

$$\text{Total selling price of Rice} = 36 \cdot 50 = \text{Rs. } 1800$$

The cost price per kg of Bajra

$$CP \cdot (100 + 400/9) / 100 = 52$$

$$CP \cdot (1300/900) = 52$$

$$CP = 52 \cdot (9/13) = \text{Rs. } 36$$

The selling price per kg of Bajra

$$LP \cdot (1200/1300) = SP$$

$$SP = 52 \cdot (12/13) = \text{Rs. } 48$$

$$\text{Total selling price of Bajra} = 48 \cdot 30 = \text{Rs. } 1440$$

$$\text{Required \%} = (1800/1440) \cdot 100 = 125 \%$$

10. Answer: b)

The cost price per kg of Wheat

$$CP \cdot (100 + 40)/100 = 35$$

$$CP = 35 \cdot (100/140) = 25$$

$$\text{Total cost price of Wheat} = 25 \cdot 70 = \text{Rs. } 1750$$

The cost price per kg of Maize

$$CP \cdot (100 + 100/3)/100 = 20$$

$$CP \cdot (400/300) = 20$$

$$CP = 20 \cdot (3/4) = \text{Rs. } 15$$

$$\text{Total cost price of Maize} = 15 \cdot 80 = \text{Rs. } 1200$$

The total cost price of Wheat and Maize together

$$= > 1750 + 1200$$

$$= > \text{Rs. } 2950$$

**Directions (1-5):** Each of the following questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer.

- (a) if the data in **statement I alone are sufficient** to answer the question, while the data in statement II alone are not sufficient in answer the question.
- (b) 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.
- (c) if the data in **either in statement I alone or in statement II alone are sufficient** to answer the question.
- (d) if the data in **both the statements I and II together are not sufficient** to answer the question.
- (e) if the data in **both the statements I and II are together necessary** to answer the question.

**Q1. What does 'ra' mean in the code language?**

- I. 'st qm ra' means 'Look at me' and 'qm ms st rt' means 'don't look at him' in that code language.
- II. 'ka tv ne ra' means 'take me and go' and 'vw wx si ra' means 'either me or you' in that code language.

**Q2. How is Sarita related to Rajesh?**

- I. Soni, the cousin of Rajesh, is the niece of Sarita.
- II. Swarna is sister of Sarita who is the wife of Om. Om is the father of Rajesh.

**Q3. What is M's rank in the class of 40?**

- I. S, who is 9th from the top in the class is above R by 12 ranks who is below M by 5 ranks.
- II. N, who is between M and Q, is 15th from the bottom.

**Q4. Point Y is in which direction with respect to point X?**

- I. Point A is east of point B and north of point X. Point Y is north-west of point A.
- II. Point X is east of point B and north of point A. Point Y is north of point A.

**Q5. Who among A, B, C, D and E types fastest?**

- I. B types faster than E but he is not the fastest among them.
- II. C types faster than D and E. C does not type as fast as A and B.

**Directions (6-7):** Each of the questions below consists of a question and three statements numbered I, II and III given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and given answer.

- (a) If the data in **statement I and II are sufficient** to answer the question.

- (b) If the data in **statement II and III are sufficient** to answer the question.
- (c) If the data in **statement I and III are sufficient** to answer the question.
- (d) If the data in **all the statement I, II and III together are not sufficient** to answer the question.
- (e) If all the **statements I, II and III are necessary** to answer the question.

**Q6. Six kids viz. U, V, W, X, Y and Z were born in the same week starting from Monday to Saturday, one on each day. How many of them are older than W?**

- I. X is older than at least three kids. U was born on Tuesday.
- II. Y is older than at least one of them. W was born immediately after X.
- III. At least four persons were born after V.

**Q7. In a certain code language 'fa ka la ju' means 'will black high fly'. Then what is the code of 'feed black'? If,**

- I. 'lu ja ka hu' means 'will crow feed us',
- II. 'ju lu na fu' means 'fly of the us'
- III. 'la fu ja ju' means 'feed black the fly'

**Directions (8-12): Each of the questions below consists of a question and some statements numbered given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read all the statements and answer the following questions.**

**Q8. There are 5 boxes V, W, X, Y, and Z of chocolate stored in 5 floor shelves one above the others. In which floor does box X store?**

- (I) Box Y is at topmost floor. Box W is just below V but store in even numbered floor.
- (II) Box Y does not store in an even number floor.
- (III) Box Z does not store in even number floor and Y is above Z.
- (a) If the data in **statement I alone or in the statement II alone or in the statement III alone is sufficient** to answer the question.
- (b) If the data in **statement I and II together are sufficient** to answer the question, while the **data in statement III are not sufficient** to answer the question.
- (c) If the **data in statement I and III together are sufficient** to answer the question, while the **data in statement II is not sufficient** to answer the question.
- (d) If the data in **statement II and III together are sufficient** to answer the question, while the **data in statement I is not sufficient** to answer the question.
- (e) If the **data in all the statement I, II and III together are necessary** to answer the question.

**Q9. How is 'world' written in a code language?**

- (I) 'after become world for 'is written as 'mn, lk, st, uv' in that code language.
- (II) 'become digital year one' is written as 'pq, cd, st, lm' in that code language.

**(III)** 'fight news world center' is written as 'ad, op, mn, ma' in that code language.

- (a) Only I & II
- (b) Only II & III
- (c) Only I & III
- (d) Data inadequate
- (e) All are required

**Q10. 'S' is in which direction with respect to 'Q'?**

**(I)** P is north of Q and west of T who is south of N.

**(II)** T is west of J who is north east of S who is south east of P.

**(III)** S is north of K and south west of P.

- (a) If the **data in statement I and II are sufficient** to answer the question, while the **data in statement III are not sufficient** to answer the question.
- (b) If the **data in statement I and III are sufficient** to answer the question, while the **data in statement II is not sufficient** to answer the question.
- (c) If the **data in statement II and III are sufficient** to answer the question, while the **data in statement I is not sufficient** to answer the question.
- (d) If the **data in statement I alone or in the statement II alone or in the statement III alone is sufficient** to answer the question.
- (e) If the **data in all the statement I, II and III together are not sufficient** to answer the question.

**Q11. In a certain code language "zebpay bitcoin" is written as "AZ12 YO14" and "Ethereum coin" is written as "VN16 XO8". Then following the same pattern what is the code for "Ripple will increase"?**

**(I)** "Ripple is very popular" is coded as "IF12 RT4 EZ8 KS14"

**(II)** "Zebpay will increase" is coded as "AZ12 DM8 RF16"

**(III)** "Rollex watch costly" is coded as "IY12 DI10 XZ12"

- (a) If the **data in statement I alone or in the statement II alone or in the statement III alone is sufficient** to answer the question.
- (b) If the **data in statement I and II are sufficient to answer the question, while the data in statement III are not sufficient** to answer the question.
- (c) If the **data in statement I and III are sufficient** to answer the question, while the **data in statement II is not sufficient** to answer the question.
- (d) If the **data in statement II and III are sufficient** to answer the question, while the **data in statement I is not sufficient** to answer the question.
- (e) If the **data in all the statement I, II and III are necessary** to answer the question.

**Q12. Six persons A, B, C, D, E and F are sitting in a parallel row facing in the north direction. Who sits between C and E?**

**(I)** A Sits second from the left end. C sits third to the left of B who is near to E.

**(II)** B is not an immediate neighbor of F who does not sits any extreme end of the row.

**(III)** E is not the neighbor of A.

- (a) If the **data in statement I alone or in the statement II alone or in the statement III alone is sufficient** to answer the question.
- (b) If the **data in statement I and II are sufficient** to answer the question, while the **data in statement III are not sufficient** to answer the question.
- (c) If the **data in statement I and III are sufficient** to answer the question, while the **data in statement II is not sufficient** to answer the question.
- (d) If the **data in statement II and III are sufficient** to answer the question, while the **data in statement I is not sufficient** to answer the question.
- (e) If the **data in all the statement I, II and III are necessary** to answer the question.

**Directions (13-15):** Each of the questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statement are sufficient to answer the question. Read both the statements and

**Give answer:**

- (a) 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.
- (b) 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.
- (c) If the **data either in statement I alone or in statement II alone are sufficient** to answer the question.
- (d) If the **data even in both statements I and II together are not sufficient** to answer the question.
- (e) If the **data in both statement I and II together are necessary** to answer the question.

**Q13. There are six members P, Q, R, S, T, and U in a family, how is T related to S?**

**I.** S is son of R. P and U are child of Q. T is grandfather of P.

**II.** R is mother-in-law of Q, who is a female member. S has no brother.

**Q14. What is the distance between point P and Q?**

**I.** Point S is 4m away in east direction from point P. Point T is in 2m north of point S.

**II.** Point Q is in north-west of point T.

**Q15. M, N, O, P, R, and Q are sitting in a circular table. How many persons are facing opposite to the centre?**

**I.** There is only one person sit between P and Q. R is not an immediate neighbour of Q and sits immediate left of P.

**II.** O sits second to the left of R. N is not an immediate neighbour of R, but faces outside the centre. O faces inside the centre.

ANSWER:

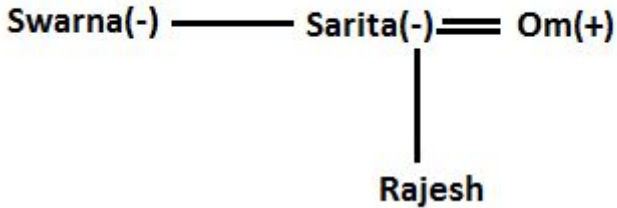
**Solutions (1-5):**

**S1. Ans.(c)**

**Sol.** if the data in either in statement I alone or in statement II alone are sufficient to answer the question.  $ra=me$

**S2. Ans.(b)**

**Sol.** From statement II- Sarita is mother of Rajesh.



**S3. Ans.(a)**

**Sol.**

if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient in answer the question.

S's rank from top=9th

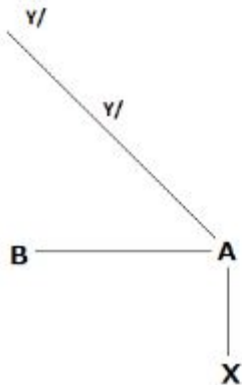
R's rank from top=21st

M's rank from top in the class= 16th

**S4. Ans.(a)**

**Sol.** if the data in statement I alone are sufficient to answer the question, while the data in statement II alone are not sufficient in answer the question.

From Statement I- Point Y is in north-west of point X.



**S5. Ans.(e)**

**Sol.** if the data in both the statements I and II are together necessary to answer the question.

After combining both statements I and II- A types fastest among them.

$A>B>C>D/E>D/E$



**Solutions (6-7):****S6. Ans.(a)****Sol.**

Kids	Day
	Monday
U	Tuesday
X	Wednesday
W	Thursday
	Friday
	Saturday

**S7. Ans.(b)****Sol.** From statement II and III we get our final answer.

Word	Code
feed	Ja
fly	<u>ju</u>
The	Fu
black	la
Of/us	Lu/ <u>na</u>
Will/high	Fa/ka

**Solutions (8-12):****S8. Ans.(c)****Sol.**

Shelve	BOX
5	Y
4	X
3	V
2	W
1	Z

**S9. Ans.(c)****Sol.** By using (I) and (III) statement we can find the code of world is- 'mn'.**S10. Ans.(e)****Sol.****S11. Ans.(a)****Sol.** Zebpay is coded as AZ12**In the coded language:**

1st letter is coded as the reverse of the first letter of the word

2nd letter is coded as the succeeding letter of the last letter of the word according to

alphabetic series.

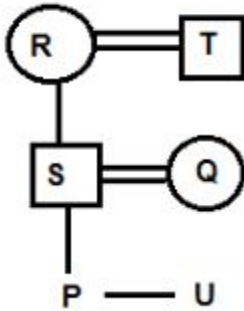
Number is coded by multiplying the total number of letter in the word by 2.

**S12. Ans.(e)**

**Solutions (13-15):**

**S13. Ans.(e)**

**Sol.** From both the statements I and II we can find that T is father of S.



**S14. Ans.(d)**

**Sol.** By combining both the statements together we cannot find the distance between point P and Q.

**S15. Ans.(d)**

**Sol.** From both the statements we cannot find that how many persons are facing outside to the centre.