

IBPS RRB Assistant Prelim Memory based Question Paper 2016

QUANTITATIVE APTITUDE

1. A container contains mixture of milk and water in which milk is 80%. 75% of mixture is taken out and 10 water is added, now the concentration of milk in the mixture is 60%. Find the quantity of milk initially.

(a) 90 (b) 96 (c) 72 (d) 64 (e) None of these

Ans.(b) Milk Water
Sol. Let initial quantity = $5x$ x
 $-3x/x$ $\frac{-0.75x}{0.25x+10}$

$$\frac{x}{0.25x + 10} = \frac{3}{2}$$

$$1.25x = 30$$

$X=24$ litres so $4x = 96$ Lit.

2. The ratio of investment of A, B, C and D in a business is 2 : 3 : 5 : 7. A and B started the business initially, while C and D joined the business after 4 months. After 1 year the profit of C is equal to the average of the profit of A and D. i.e. 12000 Rs. Then find the Share of B.

(a) 10000 Rs (b) 10800 Rs (c) 12000 Rs (d) 11000 Rs (e) None of these

Ans.(b)

Sol.

Ratio of profit $2:3:5 \times \frac{2}{3} : 7 \times \frac{2}{3} = 6:9: 10:14$

Share of B = $\frac{18}{10} * 12000 = 10800$ Rs.

3. The length of a rectangle is increased by 49.99%. While its breadth is decreased by 10.01%. Then find the percentage change in area.

(a) 35% increase (b) 45% increase (c) 25% increase (d) 30% increase (e) None of these

Ans.(a) Sol.

Let initially length = l , Breadth = b

Area = lb New area = $1.5l \times 0.9b = 1.35lb$

Percentage increase = 35%

4. When Rs 6000 invested in a scheme for 6 years at $x\%$ simple interest per annum gives Rs 720 more interest as compared to the interest earned when the same principal is invested in another scheme for 4 years at $(x + 2)\%$ simple interest per annum. Find x

(a) 8% (b) 10% (c) 14% (d) 12% (e) None of these

Ans.(b)

Sol. Let Principal = Rs 100

$$\frac{6000 \times x \times 6}{100} - \frac{6000 \times (x+2) \times 4}{100} = 720$$

$X = 10\%$

5. A shopkeeper bought 150 calculators at the rate of Rs. 250 per calculator. He spent Rs. 2500 on transportation and packing. If the marked price of calculator is Rs. 320 per calculator and the shopkeeper gives a discount of 5% on the marked price then what will be the percentage profit gained by the shopkeeper?

(a) 20% (b) 14% (c) 15% (d) 16% (e) None of these

Ans.(b)

Sol. Total cost price = $(150 \times 250) + 250$
 $= 37500 + 2500$
 $= 40000$
 Total Selling Price = $320 \times \frac{(100-5)}{100} \times 150 = 45600$
 Profit Percentage = $\frac{45600 - 40000}{40000} \times 100 = 14\%$

6. The average weight of 3 men A, B and C is 84 kg. Another man D joins the group and the average now becomes 80 kg. If another man E, whose weight is 3 kg more than that of D, replaces A, then average weight of B, C, D and E becomes 79 kg. the weight of A is:

(a) 70 kg (b) 72 kg (c) 74 kg (d) 80 kg (e) None of these

Ans.(e);

Sol. $A + B + C = 84 \times 3 = 252$
 $A + B + C + D = 80 \times 4 = 320$
 So D's age = 68
 $E = 71$ therefore $B + C + D + E = 311$
 $B + C = 177$ Hence A's age 75 years.

7. A retailer purchases a sewing machine at a discount of 15% and sells it for Rs. 1955. In the bargain he makes a profit of 15%. How much is the discount which he got from the whole sale?

(a) Rs. 270 (b) Rs. 290 (c) Rs. 300 (d) 310 (e) None of these

Ans.(c)

Sol. C.P. to the retailer = $1955 \times \frac{100}{115} = 1700$
 But it is at a discount of 15%, M.P. $1700 \times \frac{100}{85} = 2000$
 Total discount = $2000 - 1700 = \text{Rs. } 300$

8. The wheat sold by a shopkeeper contained 10% low quality wheat. What quantity of good quality wheat should be added to 150 kg of wheat so that percentage of low quality wheat becomes 5%?

(a) 50kg (b) 150 kg (c) 135 kg (d) 75kg (e) None of these

Ans.(b)

Sol. Initially low quality wheat = 10% of 150 = 15kg
 High quality wheat = $150 - 15 = 135\text{kg}$
 15kg of low quality wheat will be 5% of the final quantity of wheat
 Final quantity of wheat = $100 / 5 \times 15 = 300\text{ Kg}$
 Quality of high quality wheat = $300 - 15 = 285\text{ Kg}$
 High quality wheat $300 - 15 = 285\text{ Kg}$
 Wheat added (high quality) = 150Kg

9. An urn contains 6 red, 4 blue and 2 green balls. 3 balls are picked at random, find the probability that all the 3 balls are of same colour.

(a) 55/6 (b) 6/5 (c) 11/5 (d) 2/5 (e) None of these

Ans.(e)

Sol. Required probability = $(6C3 + 4C3) \div (12C3) = 6/55$

10. 2 candles of the same height are lighted at the same time. The first is to be consumed in 5 hours and seconds in 4 hours. Assuming that they burn at constant rates, in how many hours their height will be in ratio 3 : 2 ?

(a) 20/7 (b) 7/8 (c) 9/7 (d) 7/20 (e) None of these

Ans.(a)

Sol. per hour consumption of Ist candle = $1/5$
 per hour consumption of IInd candle = $1/4$
 Let after x hour their height is in ratio = 3 : 2
 So $\frac{1 - (1 - \frac{1}{5})x}{1 - (x \times \frac{1}{4})} = \frac{3}{2}$
 By solving the equation: $x = 20/7$

Directions (Q. 11–15): The following table provides information regarding employees of company X and Company Y in 4 different cities. Study it carefully and answer the following questions.

City	Company X		Company Y	
	Total employees	Male : Female	Total employees	Male : Female
Delhi	760	11:8	810	4:5
Chennai	450	2:3	680	8:9
Chandigarh	560	5:3	620	17:14
Kolkata	640	9:7	720	11:7

11. What is the ratio the no. of females in Delhi in company X to the no. of females in Kolkata in the same Company ?

- (a) 8 : 5 (b) 5 : 8 (c) 8 : 7 (d) 7 : 8 (e) None of these

Ans.(c)

$$\text{Sol. Required ratio} = \frac{760 \times \frac{8}{19}}{640 \times \frac{7}{16}} = 8:7$$

12. What is the total no. of females in company Y in all 4 cities together?

- (a) 1370 (b) 1350 (c) 1310 (d) 1300 (e) None of these

Ans.(a)

Sol. Total no. of females in company

$$y = 450 + 360 + 280 + 280 = 1370$$

13. The no. of males in Company Y in Delhi and Chennai Together is approximately what percent of the no. of females in Company X in Chandigarh and Kolkata?

- (a) 135% (b) 145% (c) 139% (d) 149% (e) 152%

Ans.(c)

Sol. No. of males in Delhi and Chennai = 360 + 320 = 680

No. of females in Chandigarh and Kolkata together = 210 + 280 = 490

$$\% \text{ Required} = \frac{680}{490} \times 100 = 139\%$$

14. Total males in company Y is approximately what percent of total employees in company Y?

- (a) 50% (b) 52% (c) 54% (d) 56% (e) 58%

Ans.(b)

$$\text{Sol. Required percentage} = (1460/2830) \times 100 = 52\%$$

15. In how many cities the no. of females in company Y are more than no. of females in company X?

- (a) 0 (b) 1 (c) 2 (d) 3 (e) 4

Ans.(d)

Sol. Except Kolkata, in all cities the no. of females in company Y are more than the no. of females in company X

Direction (16-20): Due to demonetization of 500 Rs. and 1000 Rs. note, following rules are applicable to the people in the country —

	Max Credit Limit per day in a Bank	Max Withdrawal limit per day from Bank	% Penalty on Tax collected by govt
Senior Citizen	2,50,000 Rs.	40,000 Rs	30%
Male	5,00,000 Rs.	65,000 Rs.	55%
Female	5,00,000 Rs.	50,000 Rs.	45%
Children	10,00,00 Rs.	10,000 Rs	20%

Following age group will be applicable- 1. 0 – 8 years old → children 2. 9 – 45 Male / Female 3. < 45 senior citizen Note-2. Following tax slabs will be applicable-

1. No tax → 0 – 250000 Rs.
2. 10% → 250000 - 500000 Rs.
3. 20% → 500000 - 1000000 Rs.
4. 30% → < 1000000 Rs.

16. Babu, 56 years old has 5 crore black money. How much money (in crores) will he get after giving tax to the govt. and penalty on it?

- (a) 2.95 (b) 3.05 (c) 3.95 (d) 4.05 (e) 0.95

Ans.(b)

Sol. Tax = $(30/100) \times 5 = 1.5$ Crore

Penalty = $(30/100) \times 1.5 = 0.45$ crore

Total = $1.5 + 0.45 = 1.95$ crore

Required money = 3.05 crores.

17. Ram, 35 years old has black money amounts to 3,25,000Rs. On which day he will get all of his money after giving tax and penalty if he visits bank on daily basis and withdraw maximum amount.

- (a) 4th (b) 5th (c) 3rd (d) 6th (e) 7th

Ans.(b)

Sol. Money that he will get : $32000 - \frac{10}{100} \times 325000 - \frac{55}{100} \times \left(\frac{10}{100} \times 32500 \right) = 274625Rs.$

Required no. of day = $274625/65000$

$4.225 = 5^{th}$ day

18. If the credit limit per day in Bank for senior citizen is increased by 20% and the withdrawal limit per day from bank for senior citizen is increased by 50% then find the ratio of credit limit per day to the withdrawal limit per day after increment for senior citizen?

- (a) 2 : 1 (b) 3 : 1 (c) 4 : 1 (d) 7 : 1 (e) 5 : 1

Ans.(e)

Sol. Required Ratio = $\frac{300000}{60000} = 5 : 1$

19. Govt. said that there will be investment of 25% out of the total amount recovered as tax and penalty on tax in Garib Kalyan Yojana scheme. If Gopal, 26 year old has 20 crore black money then find how much money will be invested in Garib Kalyan Yojana scheme?

- (a) 2,32,50,000 (b) 34,32,50,000 (c) 1,19,40,000 (d) 4,05,10,000 (e) None of these

Ans.(a)

Sol. Tax = $\frac{30}{100} \times 20 = 6$ crore

Penalty = $(55/100) \times 6 = 3.3$ crore

Total Tax = 9.3 crore

Required amount = $\frac{25}{100} \times 9.3 = 2.325$ crore

20. Find the difference between the days required to withdraw 52,00,000Rs. money under a male bank account to the days required to withdraw 5,00,000Rs. money under a children Bank account ?

- (a) 25 days (b) 20 days (c) 40 days (d) 30 days (e) None of these

Ans.(d)

Sol. Required days = $\frac{5200000}{65000} - \frac{500000}{10000} = 30$ days

21. P and Q entered into partnership investing Rs 12000 and Rs 16000 respectively. After 8 months, R also joins the business with a capital of Rs 15000. The share of R in a profit of Rs 45600 after 2 years will be :

- (a) 24000 (b) 16000 (c) 12000 (d) 11400 (e) None of these

Ans.(c) Sol. Share of C = $\frac{(15000 \times 6)}{(12000 \times 24) + (16000 \times 24) + ((15000 \times 16))} = 12000$ rs

22. When the price of sugar was increased by 20%, a family reduced its consumption in such a way that the expenditure on sugar is only increased by 15%. If 24 kg were consumed per month before the increase in price, find the new monthly consumption.

(a) 22 kg (b) 23 kg (c) 23.5 kg (d) 22.5 kg (e) None of these

Ans.(b)

Sol. Let the price before increase = x

Then new price = $\left(\frac{100+20}{100}\right)x = 1.2x$

$$\frac{115}{100} \times (x \times 24) = 1.2x \times y$$

Y= 23 kg

23. A person covered 9 km at 3 km/h, 25 km at 5 km/h and 30 km at 10 km/h. Then find the average speed in covering the whole distance.

(a) km/h (b) km/h (c) km/h (d) 6 km/h (e) None of these

Ans.(e)

Sol. Avg Speed $64/11 = 5 \frac{9}{11}$ Kmph

24. A dishonest dealer sells the goods at 10% loss on cost price but uses 20% less weight. What is his percentage profit a loss?

(a) 12.5% gain (b) 12.5% loss (c) loss (d) 16 gain (e) None of these

Ans.(a)

Sol. Let CP = Rs 1000

SP at 10% loss = $\frac{(100-90)}{100} \times 1000 = 900$

But actual CP = $\frac{(100-20)}{100} \times 1000 = 800$

Profit Percentage = 12.5%

25. Two pipes A and B can fill a tank in 30 minutes and 45 minutes respectively. Both pipes are opened. The tank will be filled in just 20 minutes, if the pipe B is turned off after :

(a) 10 minutes (b) 18 minutes (c) 8 minutes (d) 15 minutes (e) None of these

Ans.(d)

Sol. Let pipe B be turned off after minutes

Part filled by (A + B) in min. + part filled by A in (20-x)min. = 1

$$\frac{5x}{90} - \frac{x}{30} = \frac{10}{30} \quad \text{So X=15 minutes}$$

26. In a voyage of 600 km, a ship was slowed down due to bad weather and storm in Ocean. Its average speed for the trip was reduced by 200 km/hr, and the time of trip increased by 30 minutes. The duration of the voyage is:

(a) 1 hour (b) 2 hour (c) hour (d) hour (e) hour

Ans.(a)

Sol. Let the duration x be hours

$$\frac{600}{x} - \frac{600}{x+\frac{1}{2}} = 200, \text{ so } x=1 \text{ hour}$$

27. After replacing an old member by a new member, it was found that the average age of four members of a family is the same as it was 3 year ago. What is the difference between the ages of the replaced and the new member ?

(a) 10 years (b) 11 years (c) 12 years (d) 8 years (e) None of these

Ans.(c)

Sol. Let the sum of their present ages = x years

After replacing, sum of their ages = $x - (4 \times 3) = x - 12$ years

28. Ramesh borrowed 830 Rs. from Sanjeev at 12% p.a. S.I. for 3 years. He then added some more money to the borrowed sum and lent it to Rajesh for the same period of time at 14% p.a. S.I. If Ramesh gains Rs. 93.90 in the whole transaction, how much money did he add from his side ?

(a) Rs. 35 (b) Rs. 55 (c) Rs.80 (d) Rs. 105 (e) None of these

Ans.(d)

Sol. Let the added money be X $\frac{(830+x)}{100} - \frac{830 \times 12 \times 3}{100} = 93.90 \quad x = 105$

29. In what time will be Rs. 390625 amount to Rs. 456976 at 4% compound interest ?

(a) 2 years (b) 3 years (c) 4 years (d) 5 years (e) None of these

Ans.(c)

Sol. $456976 = 390625 \left(1 + \frac{4}{100}\right)^n$ n= 4 years

30. The length of rectangular floor is twice its breadth. If Rs 256 is required to paint the floor at the rate Rs 2 per sq m, then what would be the length of floor?

(a) 16 m (b) 8 m (c) 12 m (d) 32 m (e) 20 m

Ans.(a)

Sol. Area = $2x^2 m^2$
 $2x^2 \times 2 = 256$
 $X=8$ Required Length $2 * 8 = 16m$

Directions (Q.31-35): In each of the following questions, 2 statements are given , you have to determine that which statement/statements are necessary to answer the question and give answer:

- (a) If statement I alone is sufficient but statement II alone is not sufficient
- (b) If statement II alone is sufficient but statement I alone is not sufficient
- (c) Either statement I or statement II alone is sufficient
- (d) Statement I and statement II even together are not sufficient
- (e) Statement I and statement II together are sufficient

31. What is the area of the rectangle?

Statement I → Length of the rectangle is equal to the radius of a circle whose circumference is 132 cm.

Statement II → breadth of the rectangle is of the perimeter of the rectangle.

Ans.(e)

Sol. I. → $l = r = \frac{132}{44} \times 7 = 21$

$$2l + \left(\frac{5}{24}P\right) \times 2 = P$$

$$\text{AREA } 21 * 15 = 315 \text{ Cm}^2$$

32. Statement I → $\frac{x^2}{7} - x + \frac{12}{7} = 0$

Statement II → $x + y = 9, \frac{1}{x} + \frac{1}{y} = \frac{1}{2}$

Ans.(b)

Sol. I. → $x = 3, 4$

II. → $x = 3, y = 6$ or $y = 3, x = 6 \quad x^2 + y^2 = 45$

33. In what time the 2 trains cross each other while running in the same direction?

Statement I → The first train crosses a pole in 9 seconds

Statement II → The 1st train crosses the second running in opposite direction in 45 seconds, Ratio of speed of 1st train to 2nd train is 2 : 3

Ans.(b)

Sol. Let length of first train = L1

Length of second train = L2

1. $\frac{L1}{2x} = 9$
2. $\frac{L1+L2}{3x+2x} = 45$ when both trains runs in the same direction $\frac{L1+L2}{x} = 45 \times 5 = 225$
Hence Statement two alone is sufficient

34. What is the marked price of the article?

Statement I → The article is sold at 15% discount on market price still making a gain of 16 Rs

Statement II → The difference between the marked price and selling price is 50% more than the difference between Selling price and cost price.

Ans.(d) Sol. From the statement 1. Discount = 15% ∴, SP – CP = 16 Rs

From the statement 2. MP-SP = (150/100)*16=24 Rs.

Even by both the statements we can't MP.

35. 40 students sit in rows and columns. How many students are seated in each column?

Statement I- The number of rows is 62.50% of the number of columns.

Statement II- The number of rows is 5/8 of the number of columns.

Ans. (c) Sol. Let there are x no. of columns

$$1. 625x \times x = 40$$

$$x^2 = 64 \quad x=8, \text{ no of rows} = 5$$

Student in each column =5

$$\text{From statement two } \frac{5}{8}x \times x = 40, x^2 = 64, x = 8$$

So either statement 1 or 2 is sufficient to answer the question.

Directions (Q. 36-40): In each of these questions, two equations (I) and (II) are given. You have to solve both the equations and give answer

(a) if $x > y$

(b) if $x \geq y$

(c) if $x < y$

(d) if $x \leq y$

(e) if $x = y$ or If there is no relation between 'x' and 'y'.

36. $x^2 - 21x + 54 = 0, y^2 - 14y + 49 = 0$

Ans.C

$$\text{Sol. } (2x^2 - 12x - 9x + 54 = 0) \quad 2x(x - 6) - 9(x - 6) = 0 \text{ ∴, } X = 6, 9/2$$

$$y^2 - 7y - 7y + 49 = 0 \quad y = 7, 7 \text{ hence } x < y$$

37. $x^2 - 19x + 70 = 0, 2y^2 - 17y + 35 = 0$

Ans. (b)

$$\text{Sol. } x^2 - 14x - 5x + 70 = 0$$

$$x(x - 14) - 5(x - 14) = 0$$

$$X = 5, x = 14$$

$$2y^2 - 10y - 7y + 35 = 0$$

$$2y(y - 5) - 7(y - 5) = 0$$

$$Y = 5, 7/2 \text{ Hence } x \geq y$$

38. $3x^2 + 5x - 8 = 0, y^2 - 4y + 3 = 0$

Ans. (d)

$$\text{Sol. } 3x^2 - 8x - 3x - 8 = 0$$

$$x(3x + 8) - 1(3x + 8) = 0$$

$$X = 1, -8/3$$

$$y^2 - y - 3y + 3 = 0$$

$$y(y - 1) - 3(y - 1) = 0$$

$$Y = 1, 3$$

Hence $x \leq y$

39. $12x^2 - 16x + 5 = 0, 18y^2 - 45y + 25 = 0$

Ans. (d)

Sol. $12x^2 - 6x - 10x + 5 = 0$
 $6x(2x - 1) - 5(2x - 1) = 0$
 $X = \frac{1}{2}, \frac{5}{6}$
 $18y^2 - 30y - 15y + 25 = 0$
 $6y(3y - 5) - 5(3y - 5) = 0$
 $Y = \frac{5}{3}, \frac{5}{6}$

40). $3x^2 - 11x + 8 = 0, 3y^2 - 20y + 32 = 0$

Ans. (a)

Sol. $3x^2 - 3x - 8x + 8 = 0$
 $X = 1, \frac{8}{3}$
 $3y^2 + 12y + 8y + 32 = 0$
 $3y(y + 4) + 8(y + 4) = 0$
 $Y = -4, -\frac{8}{3}$

Hence $x > y$

Logical Reasoning

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

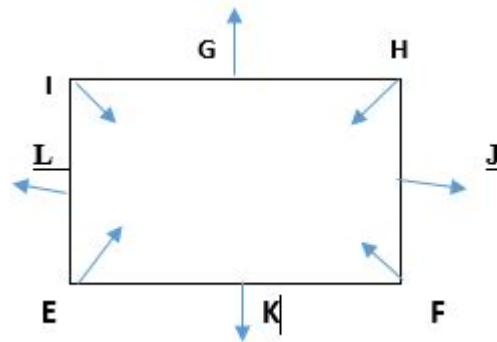
E, F, G, H, I, J, K and L are sitting around a square table in such a way that four of them sit at four corners of the square while four sit in the middle of each of the four sides. The ones who sit at the four corners face the Centre, while those who sit in the middle of the sides face outside. E who faces the Centre sits third to the right of J. I, who faces the Centre, is not an immediate neighbor of J. Only one person sits between J and K. H sits second to right of F. F faces the Centre. G is not an immediate neighbor of E.

1. Who sits second to the left of F?

(a) J (b) E (c) I (d) L (e) Cannot be determined

Ans: (b)

Explanation:



2. What is the position of I with respect to J?

(a) Fourth to the left (b) Second to the left (c) Third to the left (d) Third to the right (e) Second to the right

Ans.(c)

3. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?

(a) G (b) K (c) J (d) H (e) L

Ans.(d)

4. Which of the following will come in place of the question mark (?) based upon the given seating arrangement?

KE, IG, FK, GH, ?

(a) LI (b) JL (c) JF (d) EL (e) FJ

Ans.(a)

5. Which of the following is true regarding G?

(a) G is an immediate neighbor of J (b) G faces the Centre (c) G sits exactly between I and H (d) F sits third to left of G (e) None is true
Ans.(c)

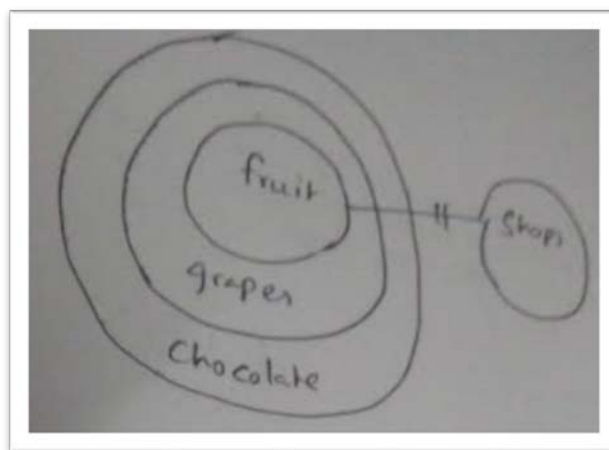
Directions (6-10): In each question below are given three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance with commonly known facts and then decide which of the given conclusions logically follows from the given statements, disregarding commonly known facts. Give answer

- (a) If only conclusion II follows.
- (b) If neither conclusion I nor II follows.
- (c) If either conclusion I or II follows.
- (d) If only conclusion I follows.
- (e) If both conclusions I and II follow.

6. **Statements:** No fruits are shops. All grapes are chocolate. All fruits are grapes.

Conclusions: I. Some chocolates are not shops. II. No grapes are shops.

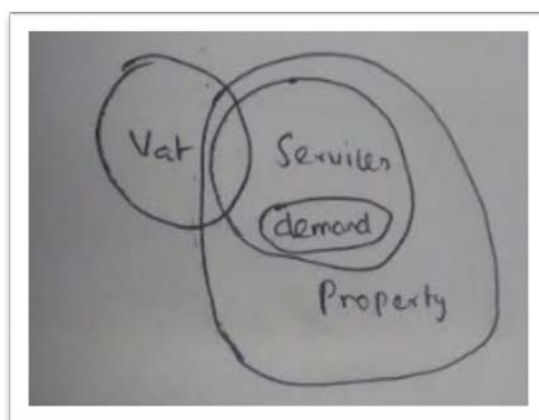
Ans.(d)



7. **Statements:** Some vats are services. All services are property. All demands are services.

Conclusions: I. Some vats are demands. II. All demands are property.

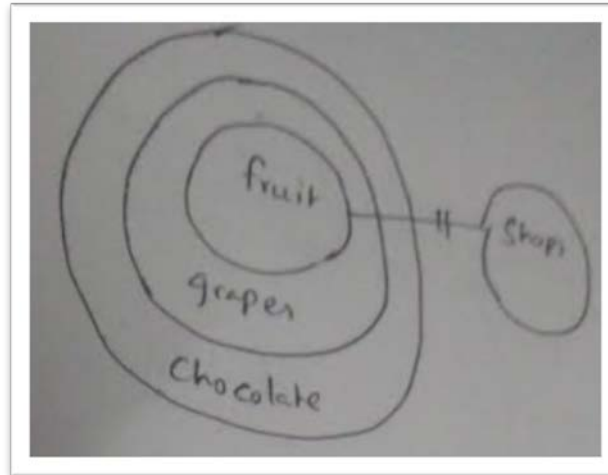
Ans.(a)



8. **Statements:** No fruits are shops. All grapes are chocolate. All fruits are grapes.

Conclusions: I. All shops can be grapes. II. Some chocolates are fruits.

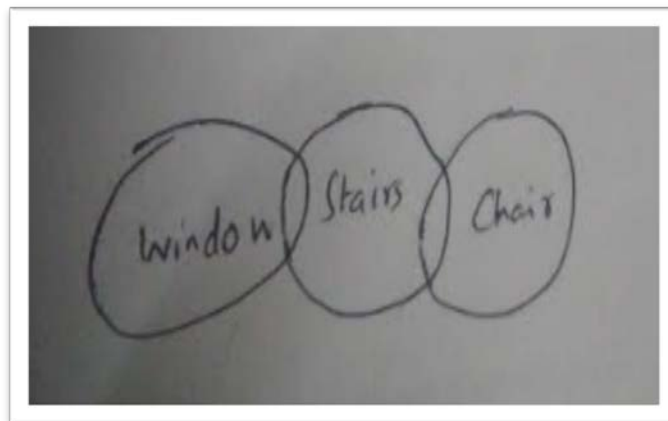
Ans.(e)



9. **Statements:** Some windows are stairs. Some chairs are stairs.

Conclusions: I. No windows are chairs. II. Some chairs are windows.

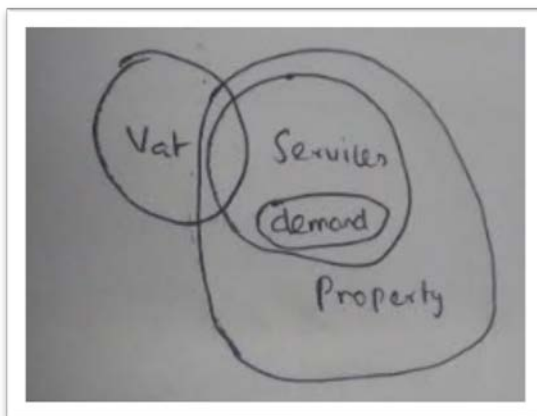
Ans.(c)



10. **Statements:** Some vats are services. All services are property. All demands are services.

Conclusions: I. No vats are demands II. Some demands are not vats.

Ans.(b)



Directions (11-15): Study the following information carefully and answer the question given below:

Seven Persons P, Q, R, S, T, U and V live on eight different floors of a building, but not necessarily in the same order. The lowermost floor of the building is numbered one; the one above it is number two and so on till the topmost floor is number seven and one floor is vacant. V lives on fifth floor. P lives below U. Two person lives between V and T. Neither R nor U lives on sixth number floor. Q does not live on third number floor. S lives immediate below T. R lives above U. Q does not live on even numbered floor. More than one person lives between U and R.

11. Who among the following person lives on floor number Eight?

(a) R (b) P (c) S (d) T (e) Q

Ans.(a)

Explanation:

Floor	Person
8	R
7	Q
6	Vacant floor
5	V
4	U
3	P
2	T
1	S

Q12. Who lives immediate below P?

(a) S (b) V (c) T (d) Q (e) None of these

Ans.(c)

13. Who lives on floor number Seven?

(a) S (b) The floor is vacant. (c) The person, who is immediate above vacant floor. (d) T (e) None of these

Ans.(c)

14. How many persons live between Q and R?

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

Ans.(a)

15. If U is related to T in a certain way and P is related to S in the same way, then which of the following is related to R? (a) V (b) Q (c) None of these (d) U (e) Vacant floor

Ans.(e)

Directions (16-18): Each of the questions given below consists of a question and two statements numbered I and II. You have to decide whether the data provided in the statements are sufficient to answer the question.

(a) If statement II by itself is sufficient to answer the question, but statement I alone is not sufficient to answer the question.

(b) If statement either I or II is sufficient to answer the question.

(c) If statement I alone is sufficient to answer the question, but statement II by itself is not sufficient to answer the question.

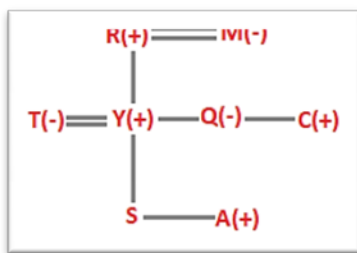
- (d) If both the statements I and II taken together are not sufficient to answer the question.
(e) If both the statements I and II taken together are sufficient to answer the question.

16. How is M related to S?

- I. Y is the son of R, who is father of Q. S is the children of Y. C is the brother of Q.
II. A is the son of Y, who is the husband of T. M is mother-in-law of T. Q is aunt of A.

Ans.(e)

From I and II-



17. A, B, C, D, E, F and G are sitting in a row facing north. Who among them is in the middle?

- I. G is second from the left end. E is second from the right end of the row. Neither G nor E sits next to A.
II. D sits between A and C. Neither A nor C sits at the extreme end. G is third to the left of D and immediate right of F. C is right of A.

Ans.(b)

18. Which of the five movies P, Q, R, S and T is the best?

- I. S movie is better than T, P and R movies but not as good as Q movie. II. S movie is better than R movie but not as good as Q which is better than T movie.

Ans.(c)

Sol. Using only first statement, we can say that Q is the best movie.

Directions (19-23): Study the following information to answer the given questions. In a certain code language, ‘ram played the cricket’ is written as ‘mb gv hu st’ ‘played bat on ground’ is written as ‘tm hu da pu’ ‘on ram good behavior’ is written as ‘nh mk tm gv’ ‘ground goes the on’ is written as ‘da st rx tm’ (All codes are two letter codes only)

19. In the given code language, what does the code ‘mk’ stand for?

- (a) Either ‘ram’ or ‘the’ (b) cricket (c) on (d) Either ‘behavior’ or ‘good’ (e) goes

Ans.(d)

Explanation:

Word	Code
Ram	gv
Played	hu
The	st
On	tm
Cricket	mb
Ground	da
Bat	pu
Goes	rx
Good/ behavior	mk/nh

20. What is the code for ‘ground’ in the given code language?

- (a) tm (b) rx (c) st (d) da (e) Other than those given as options

Ans.(d)

21. What is the code for ‘played’ in the given code language?

- (a) nh (b) hu (c) gv (d) pu (e) rx

Ans.(b)

22. What may be the possible code for ‘ground bat’ in the given code language?

- (a) ve be (b) da nh (c) nh ve (d) pu da (e) mb da

Ans.(d)

23. If ‘on the home’ is written as ‘aj tm st’ in the given code language, then what is the code for ‘home bat cricket’?

(a) aj gv nh (b) pu aj mb (c) nh mb pu (d) mb da aj (e) aj hu pu

Ans.(b)

Directions (24-28): Study the given information carefully and answer the given questions.

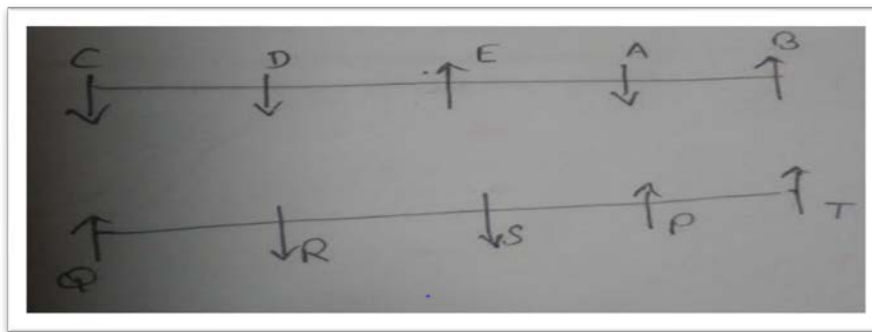
Ten people are sitting in two parallel rows containing five people each, in such a way that there is an equal distance between adjacent persons. In Row-1- A, B, C, D and E are seated (not necessarily in the same order). In Row-2-P, Q, R, S and T are seated (not necessarily in the same order). Some members are facing south and some members are facing north. Therefore, in the given seated arrangement each member seated in a row sits opposite to another member of the other row either facing to north or south. Q is sitting extreme end of the row. P is third to the right of Q. D is an immediate left of E. Q faces north. R is not an immediate neighbour of P. T faces opposite direction to R. D sits immediate left of the person, who sits opposite to Q. Only one person sits between D and A. B is an immediate left of A. T is second to the left of S. Two persons sit between A and C. E does not sit opposite to T. D and P faces opposite directions. T is an immediate right of P. E sits second to the left of B. T is third to the left of R.

24. Who amongst the following sits opposite to E?

(a) T (b) Q (c) None of these (d) S (e) P

Ans.(d)

Explanation:



25. Which of the following statements is true regarding D?

- (a) D sits opposite to S.
- (b) D faces south and sits immediate left of C.
- (c) None of the given statements is true.
- (d) Q sits opposite to the one, who sits immediate left of D.
- (e) Only two person sits between D and A.

Ans.(b)

26. Who amongst the following sits opposite to C?

(a) R (b) S (c) Q (d) T (e) P

Ans.(c)

27. What is the position of S with respect to T?

- (a) Third to the right (b) Second to the right (c) Immediate left (d) Immediate right (e) Second to the left

Ans.(e)

28. Four of the given five are alike in a certain way based on the given arrangement and hence form a group.

Which of them does not belong to that group?

(a) D (b) T (c) R (d) C (e) S

Ans.(b)

Directions (29-30): Study the following information carefully to answer the given questions.

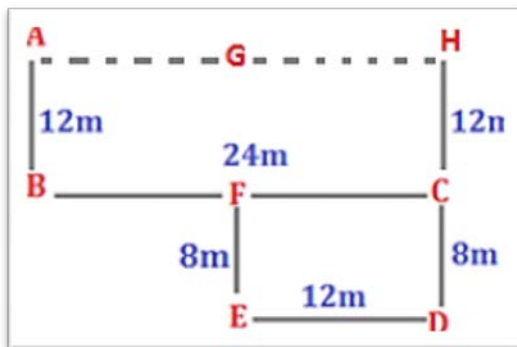
Point B is 12 m South of Point A. Point C is 24 m East of Point B. Point D is 8 m South of Point C. Point D is 12 m East of Point E and Point F is 8 m North of Point E. Point H is 20 m North of Point D. Point G is midpoint of the line A to H.

29. If a man has to travel to Point E from Point A (through these points by the shortest distance), which of the following points will be pass through first?

(a) Point C (b) Point D (c) Point F (d) Point B (e) None of these

Ans.(d)

Explanation:



30. In which direction Point G with respect to Point B?

- (a) West (b) South-East (c) North-East (d) North-West (e) None of these

Ans.(c)

Directions (31-35): Study the following information carefully to answer the given questions:

Seven persons – A, B, C, D, E, F and G – are selling books in an order. A sells more books than G and D but less than E. C sells more books than F. D is not the third lowest person in the order. G or D is not the lowest person in the order. B is the second lowest person in the order. E does not sell the highest number of books. The Third lowest person sells 26 books and E sells 50 books.

31. How many possible number of books are sold by C?

- (a) 49 (b) 46 (c) 61 (d) 26 (e) None of these

Ans.(c)

Explanation:

C>E (50 kg)>A>D>G(26)>B>F

32. How many persons sell books more than G?

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

Ans.(b)

33. If G and F are together sell 34 books. Then how many possible books are sold by B?

- (a) 7 (b) 17 (c) 26 (d) 35 (e) None of these

Ans.(b)

34. Which of the following statement is/are true?

- (a) Only two persons sell books more than D.
(b) D sells 24 books.
(c) Only four persons sell books more than G.
(d) None are true.
(e) Only E sell books less than C.

Ans.(c)

35. Who sells third highest number of books?

- (a) D (b) E (c) A (d) None of these (e) B

Ans.(c)

Directions (36-40): Study the following information carefully to answer the given questions:

Ten persons A, B, C, D, E, P, Q, R, S and T attend seminar on different days of the week. Only two persons attend seminar on a day in the morning and in the evening. There are two times on a day in which seminars are organized i.e. 10 a.m. and 3 p.m. The days are starting from Monday to Friday. P attend seminar on Wednesday on 3p.m. A attend seminar above P but not immediate above and he does not attend seminar on 3p.m. C does not attend seminar on Tuesday. T does not attend seminar on 3p.m. Only four persons attend seminar between C and R. C attends seminar above R. Only three persons attend seminar between Q and C. Q attends seminar in the morning. There are only four seminar are held between T and D. D does not attend seminar on Monday. There are two days gap between S and E . S attends seminar in the evening.

36. Who attend seminar on the Tuesday evening?

(a) D (b) T (c) A (d) None of these (e) B

Ans.(e)

Explanation:

Day	Morning- 10a.m.	Evening- 3p.m.
Monday	A-10a.m.	S-3p.m.
Tuesday	T-10a.m.	B-3p.m.
Wednesday	C-10a.m.	P-3p.m.
Thursday	E-10a.m.	D-3p.m.
Friday	Q-10a.m.	R-3p.m.

37. How many seminars are held between Monday evening seminar and Thursday evening seminar?

(a) Two (b) Five (c) Four (d) Six (e) None of these

Ans.(b)

38. If Q is related to D in the same way as C is related to B. then which of the following is T related to, following the same pattern?

(a) E (b) P (c) A (d) S (e) None of these

Ans.(d)

39. How many days are there between A's seminar and D's seminar?

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

Ans.(a)

40. Four of the following five are alike in a certain way and thus form a group. Which is the one that does not belong to that group?

(a) AB (b) QD (c) CD (d) TC (e) TP

Ans.(d)