

SBI PO 2016 Sample Questions

SBI PO Prelims 2016

REASONING

(Q.No 1-5) Study the following information carefully to answer the given questions.

Seven different boxes A, B, C, D, E, F and G of different colours viz., Green, Red, Blue, Yellow, Purple, Pink and Orange are arranged one above the other. The box at the bottom of arrangement is numbered 1, the above box is numbered 2 and so on. B is immediately above E. More than two boxes are above the Green box. The Yellow box is immediately below A. Only one box is between the Green box and F. G is immediately above the Pink box. Only one box is between B and the Red box. Only two boxes are between the Red and the Orange box. Only two boxes are between the Yellow box and the Green box. The blue box is neither at the top nor at the bottom of the arrangement. B is above Red box. C is immediately above F. Neither C nor G is a Yellow box. G is not a Green box.

Explanation:

Position	Box	Colour
7	C	Purple
6	F	Orange
5	B	Blue
4	E	Green
3	G	Red
2	A	Pink
1	D	Yellow

1. As per the given arrangement, G is related to F and A is related to E in a certain way. To which of the following is D related to the same way?

- A. D
- B. B
- C. A
- D. C
- E. None of the Above

Answer – C. A

2. Which of the following pairs of people occupy the top and bottom positions of the arrangement?

- A. G, A
- B. D, C
- C. C, B
- D. B, D
- E. A, D

Answer – B. D, C

3. Which combination represents the position of C and its colour?

- A. 5 – Purple
- B. 4 – Pink
- C. 1 – Yellow
- D. 4 – Green
- E. 7 – Purple

Answer – **E. 7 – Purple**

4. Which amongst the following arranged exactly in the middle?

- A. A
- B. D
- C. B
- D. E
- E. Other than those given as options

Answer – **D. E**

5. Which of the following is the colour of Box “A”?

- A. Red
- B. Purple
- C. Pink
- D. Green
- E. None of the Above

Answer – **C. Pink**

Directions (6-8): Study the following information carefully to answer the given questions:

Seven persons – P, Q, R, S, T, U and V – are seated in ascending order of their salaries. Q earns more than S and U. Q earns more than P but he does not earn the highest. R earns more than S. The person who earns the second highest receives a salary of Rs. 30,000 while the third lowest earner receives Rs. 24,000. T earn less than S but more than U. V earns Rs. 16,000. U is not the lowest earner.

Explanation:

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

6. Who among the following earn(s) more than Rs. 24,000 but less than Rs. 30,000?

- (a) Only R
- (b) Only S
- (c) R and S
- (d) T and S
- (e) R and Q

Ans - (c) **R and S**

7. Who among the following may earn Rs. 22,000?

- (a) T
- (b) U
- (c) S
- (d) V
- (e) Q

Ans - (b) U

8. Who among the following earns Rs. 30,000?

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

Ans - (e) Q

Directions (9-13): Study the following information carefully and answer the questions given below:

Seven representatives of a company – A, B, C, D, E, F and G – travelled to three different countries i.e. US, UK and Canada. Each of them travelled on different days of the week (no two persons travelled on the same day), starting on Monday and ending on Sunday, Minimum two people travelled to each country and US is the only country to which three people travelled. A travelled to US on Monday. F travelled to UK but neither on Tuesday nor on Saturday. G travelled on Sunday but not to Canada. The one who travelled to UK travelled on Tuesday and the one who travelled to Canada travelled on Saturday. E travelled on Wednesday. C travelled to US but not on Thursday. B did not travel to Canada.

Explanation:

- A Monday US
- B Tuesday UK
- C Friday US
- D Saturday Canada
- E Wednesday Canada
- F Thursday UK
- G Sunday US

9. If everyone's trip is postponed by one day, who will be travelling on Wednesday?

- (a) F
- (b) C
- (c) B
- (d) E
- (e) None of these

Ans - (c) B

10. Who amongst the seven representatives travelled on Saturday?

- (a) D
- (b) C
- (c) B
- (d) Cannot be determined
- (e) None of these

Ans - (a) D

11. Which one of the following combinations is true according to the given information?

- (a) F – Thursday – US

- (b) D – Wednesday – Canada
- (c) G – Monday – US
- (d) C – Friday – UK
- (e) None of these

Ans - (e) **None of these**

12. To which country and on which day did B travel?

- (a) Wednesday, US
- (b) Friday, UK
- (c) Thursday, UK
- (d) Tuesday, UK
- (e) None of these

Ans - (d) **Tuesday, UK**

13. Who was the last one to travel?

- (a) P
- (b) R
- (c) V
- (d) S
- (e) None of these

Ans - (c) **G – Monday – US**

14. Who amongst the following representative travel to US?

- (a) Q
- (b) S
- (c) V
- (d) U
- (e) None of these.

Ans - (c) **Thursday, UK**

Directions (Q. 15-20): Study the following information carefully and answer the question given below:

Eight persons - A, B, C, D, E, F, G and H - are standing in a straight line at equidistant. Some of them are facing north while others are facing south. F is standing third to the right to A. F is standing at one of the extreme ends. E is standing third to the left of A. The immediate neighbours of C face north. G is not an immediate neighbour of H. The persons standing at the extreme ends face the same direction (both are facing either North or South). The immediate neighbours of H face just opposite direction as that of F. The immediate neighbours of H face opposite direction with respect to each other. D is one of the immediate neighbour of E and is facing north. B is standing between C and F. Not more than four persons are facing north. E is immediate right of D.

D E G H A C B F



15. Who among the following is third to the left of G?

A. D

- B. C
- C. A
- D. B
- E. H

Ans - B. C

16. The immediate neighbours of E are

- A. F and G
- B. G and H
- C. D and G
- D. G and A
- E. C and A

Ans - C. D and G

17. How many persons are standing exactly between B and H?

- A. Three
- B. Four
- C. One
- D. Two
- E. None

Ans - D. Two

18. Four of the following five are alike in a certain way based on the above arrangement and hence form a group. Which of the following does not belong to that group?

- A. G
- B. E
- C. H
- D. C
- E. D

Ans - E. D

19. Who among the following is exactly between E and C?

- A. G
- B. H
- C. A
- D. B
- E. None

Ans - B. H

20. Who among the following is fourth to the right of C?

- A. G
- B. B
- C. J
- D. E
- E. D

Ans - D. E

(Q.no. 21-25) Study the following information carefully to answer the given questions.

Seven People namely A, B, C, D, E, F and G went to tour on seven different months of the same year namely February, March, April, June, September, October and November. Each of them also likes a different Chocolate namely 5Star, Dairy Milk, Munch, Kit-kat, Milky Bar, Luv it and Perk but not necessarily in the same order.

F went to tour on the month which has more than 30 days. A went to tour immediately before the one who likes Dairy Milk. Only one person went to tour between F and the one who likes 5Star. Both G and C went to tour on one of the months after the one who likes 5Star. G went to tour immediately before C. The one who likes Munch went to tour on the month which has less than 30 days. Only three people went to tour between the one who likes Munch and the one who likes Perk. Only two people went to tour between G and the one who likes Kit-kat. D went to tour immediately after the one who likes Kit-kat. Only two people went to tour between D and E. C does not like Luv it.

Explanation

Month	Person	Chocolate
February	E	Munch
March	F	Luv it
April	B	Kit-kat
June	D	5Star
September	A	Perk
October	G	Dairy Milk
November	C	Milky Bar

21. Which of the following represents the month in which G went to tour?

- A. October
- B. March
- C. April
- D. September
- E. Can not be determined

Answer – A. October

22. Which of the following does C like?

- A. 5Star
- B. Kit-kat
- C. Dairy Milk
- D. Munch
- E. Milky bar

Answer – E. Milky bar

23. As per the given arrangement, Munch is related to April and Kit-kat is related to September following a certain pattern, which of the following is Perk related to following the same pattern?

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

Answer – D. November

24. Which of the following represents the people who went to tour April and November respectively?

- A. A,B
- B. C,D
- C. E,F
- D. B,C
- E. B,G

Answer – D. B,C

25. How many people went to tour between E and A ?

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

Answer – C. Three

26. Statements: $E < L \leq P = B$; $L = Q$ Conclusions: i. $B > E$, ii. $Q \leq P$

- A. Only I is true
- B. Only II is true
- C. Either I or II true
- D. Neither I nor II is true
- E. Both I and II are true

Answer – E. Both I and II are true

27. Statements: $B > I = S \geq A < J \leq H$; $J > Q$; $K < Z$

Conclusions: i. $H > Q$, ii. $B < A$

- A. Only I is true
- B. Only II is true
- C. Either I or II true
- D. Neither I nor II is true
- E. Both I and II are true

Answer – A. Only I is true

28. Statements: $Z \geq Y \geq S > C \leq Q \leq L$

Conclusions: i. $Z > Q$, ii. $Y \leq L$

- A. Only I is true
- B. Only II is true
- C. Either I or II true
- D. Neither I nor II is true
- E. Both I and II are true

Answer – D. Neither I nor II is true

29. Statements: $C < R \leq N = M \geq F$; $Q \geq M < O$; $D \geq L$

Conclusions: i. $R \leq F$, ii. $C < Q$

- A. Only I is true
- B. Only II is true
- C. Either I or II true
- D. Neither I nor II is true
- E. Both I and II are true

Answer – B. Only II is true

30. Statements: $C < R \leq N = M \geq F$; $Q \geq M < O$; $D \geq L$

Conclusions: i. $Q \geq D$, ii. $F < O$

- A. Only I is true
- B. Only II is true
- C. Either I or II true
- D. Neither I nor II is true
- E. Both I and II are true

Answer – B. Only II is true

(Q. 31-33): Study the following information and answer the given questions.

A is the sister of B. C is wife of B. C has only one son D. E is mother of C. E is married to F. F has only one son and only one daughter.

31. If C is sister of J, how is J related to B?

- A. Sister-in-law
- B. Cannot be determined
- C. Brother
- D. Brother-in-law
- E. Uncle

Answer – D. Brother-in-law

32. As per the given information, how is B related to E?

- A. Son
- B. Son-in-law
- C. Niece
- D. Nephew
- E. Daughter-in-law

Answer – B. Son-in-law

33. As per the given information, how is D related to A?

- A. Nephew
- B. Cannot be determined
- C. Uncle
- D. Niece
- E. Aunt

Answer – A. Nephew

Arun starts running from point P and run 10 km towards North. It takes a right turn and runs 15 km. It now runs 6 km after taking a left turn. It takes a left turn, runs 15 km. Finally it takes right turn and run 5 km. Arun stops at Ravi's house.

34. How far is Ravi's house with respect to point P?

- A. 16 km
- B. 25 km
- C. 4 km
- D. 21 km
- E. None of these

Answer – D. 21 km

35. Towards which direction was the Arun running before it stopped at Ravi's house?

- A. North
- B. East
- C. South
- D. West
- E. North – West

Answer – A. North

QUANTITATIVE APTITUDE

Directions (1-5): What approximate value should come in place of the question mark (?) in the following questions? (You are not expected to calculate the exact value.)

1. $(4438 - 2874 - 559) \div (269 - 106 - 83) = ?$

- A. 14.5
- B. 12.5
- C. 20.5
- D. 27.5
- E. None of these

Answer– B. 12.5

Explanation :

$$4438 - 2874 - 559 = 1005 ; 269 - 106 - 83 = 80; 1005 \div 80 = 12.5$$

2. $(755\% \text{ of } 523) \div 777 = ?$

- A. 5
- B. 6
- C. 8
- D. 7
- E. None of these

Answer– A. 5

Explanation :

$$(755/100 * 523) = 3948.65$$

$$3948.65 \div 777 = 5$$

3. $(\sqrt{7921} - \sqrt{2070.25}) * (1/4) = ?$

- A. 15
- B. 16
- C. 17
- D. 19
- E. 11

Answer – E. 11

Explanation :

$$\sqrt{7921} = 89 ; \sqrt{2070.25} = 45.5 = 43.5/4 = 10.8 \approx 11$$

4. $22240 \div \sqrt{?} = 34 * 12$

- A. 3065
- B. 3085
- C. 3025
- D. 3075
- E. None of these

Answer – C. 3025

Explanation :

$$34 * 12 = 408$$

$$\sqrt{?} = 22240/408 = 54.5 = 55 \Rightarrow x = 3025$$

5. $6999 \div 70.005 \times 94.998 = ? \times 19.999$

- A. 475
- B. 380
- C. 640
- D. 720
- E. None of these

Answer – A. 475

Explanation :

$$7000 \div 70 \times 95 = ? \times 20 \approx 475$$

Directions (06-10): What should come in place of question mark (?) in the following number series?

6. 12, 8, 16, 48, 184, ?

- A. 560
- B. 420
- C. 860
- D. 550
- E. None of these

Answer – C. 860

Explanation :

$$12 * 0.5 + 2 = 8$$

$$8 * 1.5 + 4 = 16$$

$$16 * 2.5 + 8 = 48.....$$

7. 12 19 33 61 ? 229

- A. 117
- B. 113
- C. 107
- D. 163
- E. None of these

Answer – **A. 117**

Explanation :

$$19 - 12 = 7$$

$$33 - 19 = 14$$

$$61 - 33 = 28 \dots\dots$$

8. 18, 8, 6, 8, 22 ?

- A. 125
- B. 100
- C. 150
- D. 145
- E. None of these

Answer – **B. 100**

Explanation :

$$18 * 1 - 10 = 8; 8 * 2 - 10 = 6; 6 * 3 - 10 = 8 \dots\dots$$

9. 5 12 33 136 675 ?

- A. 3850
- B. 3950
- C. 3460
- D. 4056
- E. None of these

Answer – **D. 4056**

Explanation :

$$5 * 2 + 2 = 12$$

$$12 * 3 - 3 = 33$$

$$33 * 4 + 4 = 136$$

$$136 * 5 - 5 = 675 \dots\dots$$

10. 20, 10, 12, 24, 75, ?

- A. 320.5
- B. 325.5
- C. 330.5
- D. 335.5
- E. None of these

Answer – **B. 325.5**

Explanation :

$$20 * 0.5 - 0 = 10$$

$$10 * 1.5 - 3 = 12$$

$$12 * 2.5 - 6 = 24$$

$$24 * 3.5 - 9 = 75$$

Directions (11-15): Solve the equations given below

11. $X^2 - 10x + 24 = 0$, $Y^2 - 14y + 48 = 0$

A. $X > Y$

B. $X < Y$

C. $X \geq Y$

D. $X \leq Y$

E. $X = Y$ or relation cannot be established

Ans - **D. $X \leq Y$**

Explanation:

$$x^2 - 10x + 24 = 0$$

$$x^2 - 6x - 4x + 24 = 0$$

$$x = 4, 6$$

$$y^2 - 14y + 48 = 0$$

$$y^2 - 6y - 8y + 48 = 0$$

$$y = 6, 8$$

12. $x^2 + x - 20 = 0$, $y^2 + y - 30 = 0$

A. $X > Y$

B. $X < Y$

C. $X \geq Y$

D. $X \leq Y$

E. $X = Y$ or relation cannot be established

Answer - **E. $X = Y$ or relation cannot be established**

Explanation:

$$X^2 + x - 20 = 0$$

$$X^2 + 5x - 4x + 20 = 0$$

$$x = -5, 4$$

$$y^2 + y - 30 = 0$$

$$y^2 + 6y - 5y - 30 = 0$$

$$y = -6, 5$$

13. $2x^2 - 15x + 27 = 0$

$5y^2 - 26y + 33 = 0$

A. $X > Y$

B. $X < Y$

C. $X \geq Y$

D. $X \leq Y$

E. $X = Y$ or relation cannot be established

Answer - **C. $X \geq Y$**

Explanation:

$$2x^2 - 15x + 27 = 0$$

$$2x^2 - 6x - 9x + 27 = 0$$

$$x = 3, 4.5$$

$$5y^2 - 26y + 33 = 0$$

$$5y^2 - 11y - 15y + 33 = 0$$

$$y = 3, 2.2$$

$$14. 2x^2 + 11x + 14 = 0$$

$$4y^2 + 12y + 9 = 0$$

A. $X > Y$

B. $X < Y$

C. $X \geq Y$

D. $X \leq Y$

E. $X = Y$ or relation cannot be established

Ans - **B. $X < Y$**

Explanation:

$$2x^2 + 11x + 14 = 0$$

$$x = -3.5, -2$$

$$4y^2 + 12y + 9 = 0$$

$$y = -1.5, -1.5$$

$$15. x^2 - 9x + 20 = 0$$

$$2y^2 - 11y + 14 = 0$$

A. $X > Y$

B. $X < Y$

C. $X \geq Y$

D. $X \leq Y$

E. $X = Y$ or relation cannot be established

Answer - **A. $X > Y$**

Explanation:

$$x^2 - 9x + 20 = 0$$

$$x = 5, 4$$

$$2y^2 - 11y + 14 = 0$$

$$y = 3.5, 2$$

16. In a bag there are 4 white, 4 red and 2 green balls. Two balls are drawn at random. What is the probability that at least one ball is of red colour?

A. $4/3$

B. $7/3$

C. $1/3$

D. $2/3$

Answer - **D. $2/3$**

Explanation :

$$\text{Total Balls} = 10$$

$$\text{Other than red ball} = 6C_2$$

$$6C_2/10C_2 = 1/3 \rightarrow 1 - 1/3 = 2/3$$

17. A starts business with Rs. 7000 and after 5 months, B joins with A as his partner. After 1 year, the profit is divided in the ratio 2 : 3. What is B's contribution in the capital?

A. Rs 13000

- B. Rs 12000
- C. Rs 15000
- D. Rs 18000
- E. None of these

Answer – **D. Rs 18000**

Explanation:

Let B's capital be Rs. x. Then.

$$(7000 \times 12) / 7x = 2/3 \text{ [capital ratio} = \text{profit ratio]} \quad 14x = 252000 \quad x = 18000$$

18. A vendor sold two magazines namely A and B. He sold magazine 'A' at a loss of 20% and magazine 'B' at a profit of 25% but finally there is no loss or no gain. If the total Selling Price of both magazines is Rs.450. Find the difference between the Cost Price of Magazine 'A' and 'B'?

- A. Rs. 60
- B. Rs. 50
- C. Rs. 75
- D. Rs. 85
- E. None of the Above

Answer – **B. Rs. 50**

Explanation :

$$20\% \text{ of } x = 25\% \text{ of } y ; x + y = 450$$

$$x/y = 5/4$$

$$\text{Difference} = \text{Rs.}50$$

19. Two trains P and Q start from Delhi and Mumbai towards Mumbai and Delhi respectively. After passing each other they take 19 hours 30 minutes and 8 hours 40 minutes to reach Mumbai and Delhi respectively. If the train from Delhi is moving at 80 km/hr then find the speed of the train from Mumbai?

- A. 110 kmph
- B. 100 kmph
- C. 90 kmph
- D. 120 kmph
- E. None of these

Answer: **D. 120 kmph**

Explanation:

$$\text{Speed of train Q} = \text{Speed of train P} * \text{Square root of } (t_1/t_2)$$

$$\text{Speed of train Q} = 80 * \text{Square root of } ((39/2)/26/3)$$

$$\text{Speed of train Q} = 80 * 3/2 = 120 \text{ kmph}$$

20. Bharat borrowed Rs.180,000 on a condition that he had to pay 7.5% interest every year. He also agreed to pay the principal in equal annual instalments over 21 years. After a certain number of years, however, the rate of interest has been reduced to 7%. It is also known that at the end of the agreed period, he will have paid in all Rs.2,70,900 in interest. For how many years does he pay at the reduced interest rate?

- A. 10 years
- B. 12 years
- C. 13 years

- D. 14 years
E. None of the Above

Answer: **D. 14 years**

Explanation:

x = interest paid at 7.5%

(21-x) years interest paid at 7%

$$((180000 * x * 7.5) / 100) + ((180000 * 7 * (21 - x)) / 100) = 270900$$

$$x = 7$$

21 - 7 = 14 years he paid at the reduced interest rate.

(Q.no: 21 - 25). Study the table carefully to answer the questions that follow:

Distance (in Km) travelled by six cars on six different days of the week.

	A	B	C	D	E	F
Monday	240	250	320	325	330	300
Tuesday	320	264	308	314	318	314
Wednesday	324	294	330	312	310	325
Thursday	288	300	310	278	260	275
Friday	366	302	288	292	270	268
Saturday	292	284	260	274	280	242

21. What is the difference between the average distance covered by Car D in all the days together and the average distance covered by all the cars together on Saturday?

- A. 25.16
B. 26.16
C. 27.16
D. 28.16
E. None of the Above

Answer – **C. 27.16**

Explanation:

Average distance covered by Car D in all the days together = $1795/6 = 299.16$

Average distance covered by all the cars together on Saturday = $1632/6 = 272$

Difference = $299.16 - 272 = 27.16$

22. If the speed of the car A on Monday was 19.2 Km/hr, and the speed on Wednesday was 20 Km/hr and on Friday was 30 Km/hr. What was the approximate average time taken(in hours) by it to cover the distance on given days?

- A. 16 hours
B. 15 hours
C. 18 hours
D. 13 hours
E. None of the Above

Answer – **D. 13 hours**

Explanation :

Required Time(Monday) = $240/19.2 = 12.5$

Required Time(Wednesday) = $324/20 = 16.2$

Required Time(Friday) = $366/30 = 12.2$

23. If to travel the given distance, the time taken by Car B on all the days was 8 hours, What was the average speed of the Car on all the days together?

- A. 45.27 kmph
- B. 35.29 kmph
- C. 25.27 kmph
- D. 15.26 kmph
- E. None of the Above

Answer – **B. 35.29 kmph**

Explanation :

$250/8 = 31.25$ kmph ; $264/8 = 33$ kmph ; $294/8 = 36.75$; $300/8 = 37.5$; $302/8 = 37.75$; $284/8 = 35.5$
Average Speed of Car B on all the days together = 35.29 kmph

24. Total distance travelled by all the cars together on Friday and Saturday is what percent of total distance travelled by all the cars together on Monday and Tuesday?

- A. 94%
- B. 92%
- C. 90%
- D. 93%
- E. None of the Above

Answer – **A. 94%**

Explanation :

Total distance travelled by all the cars together on Friday & Saturday = $1786 + 1632 = 3418$

Total distance travelled by all the cars together on Monday and Tuesday = $1765 + 1838 = 3603$

Required % = $(3418/3603) * 100 = 94\%$

25. If on Tuesday, Car C and Car E travelled at the same speed, what was the ratio of the time taken by Car C and that taken by Car E to cover their respective distances?

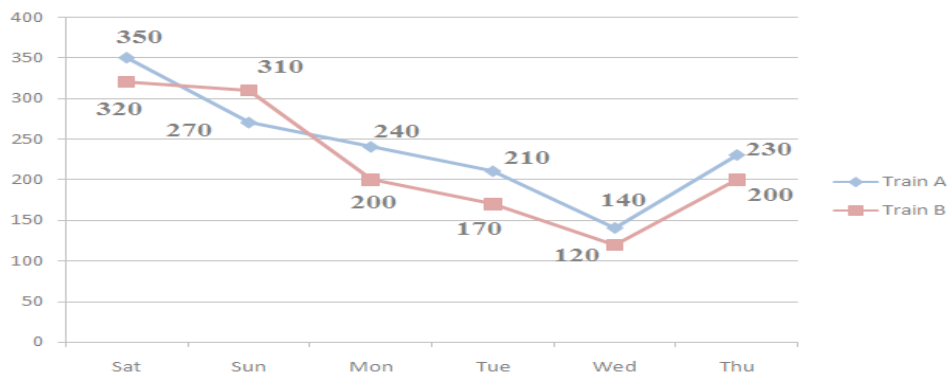
- A. 161 : 173
- B. 173 : 159
- C. 154 : 159
- D. 161 : 154
- E. None of the Above

Answer – **C. 154 : 159**

Explanation :

= $[308/x] : [318/x] = 154 : 159$

(Q.no: 26-30). Refer to the following Line Graph and answer the given questions.



26. The number of people who travelled by Train B on Friday is 20% more than the people who travelled by the same train on Thursday. What is the respective ratio between the number of people who travelled on Friday and those who travelled on Saturday by the same train?

- A. 4:5
- B. 3:4
- C. 5:6
- D. 3:4
- E. 1:4

Answer – **B. 3:4**

Explanation :

$$20\% \text{ of } 200 = 40$$

People travelled by Train B on Friday = 240

$$240 : 320 = 3 : 4$$

27. What is the difference between the total number of people who travelled by Train B on Monday and Tuesday together and the total number of people who travelled by Train A on Saturday and Sunday together?

- A. 200
- B. 230
- C. 210
- D. 250
- E. 240

Answer – **D. 250**

Explanation :

$$\text{Train B on Monday and Tuesday together} = 200 + 170 = 370$$

$$\text{Train A on Saturday and Sunday together} = 350 + 310 = 620$$

$$\text{Difference} = 620 - 370 = 250$$

28. What is the average number of people travelling by Train A on Monday, Tuesday, Wednesday and Thursday?

- A. 200
- B. 230
- C. 205
- D. 250

E. 240

Answer – C. 205

Explanation :

$$240 + 210 + 140 + 230 \\ = 820/4 = 205$$

29. The number of people who travelled by Train A decreased by what percent from Saturday to Tuesday?

A. 30%

B. 40%

C. 30%

D. 42%

E. 33%

Answer – B. 40%

Explanation :

$$[(350 - 210)/350]*100 \\ = [140/350]*100 = 40\%$$

30. The total number of people who travelled by both the given trains together on Sunday is approximately what percent more than the total number of people who travelled by both the given trains together on Wednesday?

A. 128%

B. 123%

C. 142%

D. 118%

E. 135%

Answer – A. 74%

Explanation :

$$(580 - 260)*100 \\ = 320/260 * 100 \\ = 123\%$$

31. A man can row a certain distance downstream in 12 hour and return the same distance in 18 hour. If the speed of a man in still water is 12 kmph, Find the speed of the stream?

A. 2.1 kmph

B. 1.5 kmph

C. 4.4 kmph

D. 2.4 kmph

E. None of these

Ans - D. 2.4 kmph

Explanation:

Let the speed of the stream be x kmph

Down stream = $(12+x)$

Up stream = $(12-x)$

$y/(12+x) = 12$ ---(1)

$y/(12-x) = 18$ ----(2)

From eqn (1) and (2)

$$x = 2.4 \text{ kmph}$$

32. The respective ratio of curved surface area and total surface area of a cylinder is 4:5. If the curved surface area of the cylinder is 1232cm², What is the height?

- A. 14 cm
- B. 28 cm
- C. 7 cm
- D. 56 cm
- E. 24 cm

Answer – **B. 28 cm**

Explanation :

$$4x = \text{curved surface area} = 1232$$

$$x = 308$$

$$5x = \text{total surface area} = 1540$$

$$\text{curved surface area} = 2\pi rh$$

$$\text{total surface area} = 2\pi r(r + h)$$

$$2\pi r(r + h) = 1540$$

$$2\pi r^2 + 2\pi rh = 1540$$

$$2\pi r^2 = 1540 - 1232$$

$$r = 7; h = 28$$

33. The average salary of the entire staff in a office is Rs 250 per month. The average salary of officers is Rs 520 and that of non-officers is Rs. 200. If the number of officers is 15, then find the number of non-officers in the office

- A. 823
- B. 81
- C. 87
- D. 56
- E. 62

Answer – **B. 81**

Explanation:

Let the required number of non-officers = x

$$200x + 520 \times 15 = 250 (15 + x)$$

$$250x - 200x = 520 \times 15 - 250 \times 15$$

$$50x = 4050$$

$$x = 81$$

34. In an election 10% of the voters on the voters' list did not cast votes and 60 voters cast their ballot papers blank. There were only two candidates. The winner was supported by 47% of all voters in the list and he got 308 votes more than his rival. The number of voters on the list was:

- A. 3600
- B. 6200
- C. 4575
- D. 6028

Answer - **B. 6200**

Explanation:

Let total number of voters = x

People who voted for the winner are = $0.47x$

People who voted for the loser are = $0.47x - 308$

People who cast blanks are = 60

and people who did not vote are = $0.1x$

solve the following equation

$$0.47x + 0.47x - 308 + 60 + 0.1x = x \Rightarrow x = 6200$$

35. 60 kg of a certain variety of Sugar at Rs.32 per kg is mixed with 48 kg of another variety of sugar and the mixture is sold at the average price of Rs.28 per kg. If there be no profit or no loss due to the new selling price, then what is the price of second variety of Sugar?

A. Rs.25

B. Rs.23

C. Rs.29

D. Rs.27

E. None of the Above

Answer – **B. Rs.23**

Explanation :

Total CP of first variety = $60 * 32 = 1920$

Total CP of second variety = $48 * x = 48x$

SP of Mixture = $1920 + (108 * 28) = 3024$

$$1920 + 48x = 3024 \Rightarrow x = 23$$

ENGLISH**Para Jumble (5 Questions)**

- A. Earlier this year BMW advertised on WeChat, a popular messaging app in China with around 550m monthly users.
- B. But its ads were shown only to those whose profiles suggested they were potential buyers of expensive cars.
- C. Others were shown ads for more affordable stuff, such as smartphones. The campaign bruised a few egos.
- D. Some of those not shown the BMW ad complained, referring to themselves as diao, or (putting it politely) losers.
- E. The carmaker's experience shows the complexities of advertising today, when it is so easy for dissatisfied customers to make their voices heard.

Cloze Test (5 Questions)

Some research suggests that the **lower** use of financial services by women can be explained by other gender-based differences. Men are likely to be in better-paying jobs, and so are more likely to need savings accounts. Female entrepreneurs may also choose to enter less capital-**intensive** industries which require less debt and therefore less finance. In sum, there may be no direct gender-based financial discrimination (the question of indirect discrimination is less clear).

But other issues may directly **affect** women's access to financial services in developing countries. The paper looks at legal obstacles. The raw data are alarming. In 10 out of a sample of 90 developing countries, women are legally required to obey their husbands. Men and women are treated equally by the law in only 80% of countries.

Legal and cultural norms have a big **impact** on the chance of women getting equal (or any) access to financial services. A few isolated examples make for **uncomfortable** reading. In many Middle Eastern and South Asian countries, a woman requires a husband or male family member to co-sign a loan. Other research suggests that in Pakistan banks require two male guarantors who are not family members before they loan money to women.

In the given passage, answer the following questions according to the idea expressed in the passage(10 Questions)

Until the 1960s boys spent longer and went further in school than girls, and were more likely to graduate from university. Now, across the rich world and in a growing number of poor countries, the balance has tilted the other way. Policymakers who once fretted about girls' lack of confidence in science now spend their time dangling copies of "Harry Potter" before surly boys. Sweden has commissioned research into its "boy crisis". Australia has devised a reading programme called "Boys, Blokes, Books & Bytes". In just a couple of generations, one gender gap has closed, only for another to open up.

The reversal is laid out in a report published on March 5th by the OECD, a Paris-based rich-country think-tank. Boys' dominance just about endures in maths: at age 15 they are, on average, the equivalent of three months' schooling ahead of girls. In science the results are fairly even. But in reading, where girls have been ahead for some time, a gulf has appeared. In all 64 countries and economies in the study, girls outperform boys. The average gap is equivalent to an extra year of schooling.

The OECD deems literacy to be the **most important** skill that it assesses, since further learning depends on it. Sure enough, teenage boys are 50% more likely than girls to fail to achieve basic proficiency in any of maths, reading and science (see chart 1). Youngsters in this group, with nothing to build on or shine at, are **prone** to drop out of school altogether.

To see why boys and girls fare so differently in the classroom, first look at what they do outside it. The average 15-year-old girl devotes five-and-a-half hours a week to homework, an hour more than the average boy, who spends more time playing video games and trawling the internet. Three-quarters of girls read for pleasure, compared with little more than half of boys. Reading rates are falling everywhere as screens **draw** eyes from pages, but boys are giving up faster. The OECD found that, among boys who do as much homework as the average girl, the gender gap in reading fell by nearly a quarter.

Once in the classroom, boys long to be out of it. They are twice as likely as girls to report that school is a "waste of time", and more often turn up late. Just as teachers used to struggle to persuade girls that science is not only for men, the OECD now urges parents and policymakers to steer boys away from a version of masculinity that ignores academic achievement. "There are different pressures on boys," says Mr Yip. "Unfortunately there's a tendency where they try to live up to certain expectations in terms of [bad] behaviour."

Boys' disdain for school might have been less irrational when there were plenty of jobs for uneducated men. But those days have long gone. It may be that a bit of swagger helps in maths, where confidence plays a part in boys' lead (though it sometimes extends to **delusion**: 12% of boys told the OECD that they were familiar with the mathematical concept of "subjunctive scaling", a red herring that fooled only 7% of girls). But their lack of self-discipline drives teachers crazy.

Perhaps because they can be so insufferable, teenage boys are often marked down. The OECD found that boys did much better in its anonymised tests than in teacher assessments. The gap with girls in reading was a third smaller, and the gap in maths—where boys were already ahead—opened up further. In another finding that suggests a lack of even-handedness among teachers, boys are more likely than girls to be forced to repeat a year, even when they are of equal ability.

What is behind this discrimination? One possibility is that teachers mark up students who are polite, eager and stay out of fights, all attributes that are more common among girls. In some countries, academic points can even be **docked** for bad behaviour. Another is that women, who make up eight out of ten primary-school teachers and nearly seven in ten lower-secondary teachers, favour their own sex, just as male bosses have been shown to favour male underlings.

1. Which among the following is false according to the passage given above?

1. Three-quarters of girls read for pleasure, compared with little more than half of boys.
2. Boys' dominance just about endures in maths and science only.
3. Only 1
4. Both 1 and 2
5. Neither 1 or 2

Answer – 3. only 1

2. What according to the passage can be said about the school education?

1. In just a couple of generations, one gender gap has closed, only for another to open up.
2. girls are doing better at school as compared to boys on some parameters
3. boys and girls fare so differently in the classroom
4. boys are doing much better in its anonymised tests than in teacher assessments
5. All of the above

Answer - 2) girls are doing better at school as compared to boys on some parameters

3. The author's main objective in writing the passage is to:

1. exhort the reasons behind the discrimination in education and reveal new gender gap in education
2. warn about gender gap in education
3. societal attitude towards educational achievement and boys
4. criticize the education policy of rich countries
5. None of above

Answer - 1. exhort the reasons behind the discrimination in education and reveal new gender gap in education

4. Which among the following is TRUE according to the passage given above?

1. Three-fourth of girls read for pleasure, compared with little more than the boys.
2. among boys who do as much homework as the average girl, the gender gap in reading fell by nearly a quarter.
3. The gap with girls in reading was a second smaller, and the gap in English where boys were already ahead opened up further.
4. In all 58 countries and economies in the study, girls outperform boys.
5. All of above

Answer - 2. among boys who do as much homework as the average girl, the gender gap in reading fell by nearly a quarter.

5. What do the OECD statics in the passage indicate?

1. Schools dropout rates among boys are higher in developing countries than in rich countries
2. Despite the perception that girls are doing better than boys in school is not true
3. Today boys are more at risk than girls in terms of educational achievement in developed countries
4. Enrolment of girls in schools has doubled while that of boys has fallen
5. By and large teenagers have very low education achievement in rich countries

Answer - 4. Enrolment of girls in schools has doubled while that of boys has fallen

6. Which of the following would be a suitable title of the passage?

1. Views to watch
2. education gap between boys and girls

- 3.the gender gap in education
- 4.Attention ! A new gender gap
- 5.Pay and job flexibility

Answer - 4.Attention ! A new gender gap

7. Which among the following is MOST OPPOSITE in meaning to the word “prone”?

1. reclining
- 2.supine
- 3.resupine
- 4.recumbent
- 5.straight

Answer - 5.straight

8. Which among the following is MOST SIMILAR in meaning to the word “docked”?

- 1.appraise
- 2.concrete
- 3.replete
- 4.defective
- 5.deficient

Answer - 3.replete

9. Which among the following is MOST OPPOSITE in meaning to the word “delusion”?

- 1.certainty
- 2.mirage
- 3.eidolon
- 4.deception
- 5.casuistry

Answer - 1.certainty

10. Which among the following is MOST SIMILAR in meaning to the word “draw”?

- 1.fallacy
- 2.stalemate
- 3.impression
- 4.apparition
- 5.None of these

Answer - 2.stalemate

SBI PO Main 2016

REASONING

(Q. 1-5) In each of the following questions, two rows of numbers are given. The resultant number in each row is to be worked out separately based on the following rules and the questions below the rows of numbers are to be answered. The operations of numbers progress from the left to the right.

Rules:

- (i) If an odd number is followed by another composite odd number, they are to be multiplied.
- (ii) If an even number is followed by an odd number they are to be added.
- (iii) If an even number is followed by a number which is the perfect square, the even number is to be subtracted from the perfect square.
- (iv) If an odd number is followed by a prime odd number, the first number is to be divided by the second number.
- (v) If an odd number is followed by an even number the second one is to be subtracted from the first number.

1.I. 58 17 5

II. 85 5 a

If 'a' is the resultant of the first row what is the resultant of second row?

- A. 255
- B. 32
- C. 49
- D. 34
- E. None of the Above

Answer - **A. 255**

Explanation:

$58 + 17 = 75$ [Rule II] $75 / 5 = 15$ [Rule IV] $a = 15$

$85 / 5 = 17$ [Rule IV] $17 * 15 = 255$ [Rule I]

2. I. 24 64 15

II. b 11 15

If b is the resultant of the first row, what will be the resultant of the second row?

- A. 165
- B. 75
- C. 20
- D. 3
- E. None of the Above

Answer - **B. 75**

Explanation:

$64 - 24 = 40$ [Rule III] $40 + 15 = 55$ [Rule II] $b = 55$

$55 / 11 = 5$ [Rule IV] $5 * 15 = 75$ [Rule I]

3. I. 7 21 3

II. c 7 33

If c is the resultant of the first row, what will be the resultant of the second row?

- A. 40
- B. 138
- C. 231
- D. 80
- E. None of the Above

Answer - **C. 231**

Explanation:

$7 * 21 = 147$ [Rule I] $147 / 3 = 49$ [Rule IV] $c = 49$

$49 / 7 = 7$ [Rule IV] $7 * 33 = 231$ [Rule I]

4. I. 73 34 13

II. 32 d 15

If d is the resultant of the first row, what will be the resultant of the second row?

- A. 713
- B. 50
- C. 20
- D. 525
- E. None of the Above

Answer - **D. 525**

Explanation:

$73 - 34 = 39$ [Rule V] $39 / 13 = 3$ [Rule IV] $d = 3$

$32 + 3 = 35$ [Rule II] $35 * 15 = 525$ [Rule I]

5. I. 14 5 9

II. 24 e 88

If e is the resultant of the first row, what will be the resultant of the second row?

- A. 171
- B. 283
- C. 195
- D. 165
- E. None of the Above

Answer - **E. None of the Above**

Explanation:

$14 + 5 = 19$ [Rule II] $19 * 9 = 171$ [Rule I] $e = 171$

$24 + 171 = 195$ [Rule II] $195 - 88 = 107$ [Rule V]

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

For a recruitment process in an organization, the candidates need to possess the following qualifications/criteria.

- I. A graduate in science with atleast 60% marks.
- II. An age of at least 25 years and not more than 40 years as on 01.08.2016
- III. Have a post-qualification work experience of at least 2 years.
- IV. Should have secured 55% marks in the selection procedure.

However, if the candidate fulfils the above mentioned criteria except

(A) at (I) and if the candidate is not a graduate in Science but has a post graduation degree with minimum of 60% marks, he/she should be referred to the HR Manager of the organization.

(B) at (III) and if the candidate fulfils all the eligibility criteria but of post-qualification work experience but has secured 75% of marks in the selection process, he/she may be referred to the Director of the organization

Based on the above information study carefully whether the following candidates are eligible for the recruitment process and mark your answer. You are not to assume anything other than the information provided in each question. All the cases are given to you as on 01.08.2016

6. Shalini has 4 years of post qualification work experience in a top organization. She has secured 59% marks in the selection process. Born on 5.10.1990. she has completed her Bachelor's degree in Physics and secured 66% marks in it.

Mark answer

- A. if the candidate is to be selected.
- B. if the candidate is not to be selected.
- C. if the candidate may be referred to the HR – Manager.
- D. if the candidate may be referred to the Director.
- E. if the data provided is inadequate to take the decision

Answer - **A. if the candidate is to be selected.**

7. Peter has 6 years of post qualification work experience. His Date of Birth is 12.04.1988. He has secured 58% marks in the selection process. He has completed graduation in Science and scored 76% in it.

Mark answer

- A. if the candidate is to be selected.
- B. if the candidate is not to be selected.
- C. if the candidate may be referred to the HR – Manager
- D. if the candidate may be referred to the Director.
- E. if the data provided is inadequate to take the decision

Answer- **A. if the candidate is to be selected.**

8. Ahmed has completed graduation and post graduation in Economics from Bhopal in and has secured 51% and 68% marks respectively. His Date of Birth is 26.11.1980. He has been working as an executive in a reputed firm since 2006 till date. He has secured 56% marks in the selection process.

Mark answer

- A. if the candidate is to be selected.
- B. if the candidate is not to be selected.
- C. if the candidate may be referred to the HR – Manager
- D. if the candidate may be referred to the Director.
- E. if the data provided is inadequate to take the decision

Answer - **C. if the candidate may be referred to the HR – Manager**

9. Harshita has done graduation and post graduation in Physics and has secured 57% and 65% marks respectively. She has secured 59% marks in the selection process, and has a post-qualification work experience of three years.

Mark answer

- A. if the candidate is to be selected.
- B. if the candidate is not to be selected.
- C. if the candidate may be referred to the HR – Manager
- D. if the candidate may be referred to the Director.
- E. if the data provided is inadequate to take the decision

Answer - **E. if the data provided is inadequate to take the decision**

10. Deepak has completed graduation and post graduation in Geography with 68% and has secured 57% marks in the selection process. His Date of Birth is 11.11.1985.

Mark answer

- A. if the candidate is to be selected.
- B. if the candidate is not to be selected.
- C. if the candidate may be referred to the HR – Manager
- D. if the candidate may be referred to the Director.
- E. if the data provided is inadequate to take the decision

Answer - **E. if the data provided is inadequate to take the decision**

(Q. 11-15): Study the following information carefully and answer the given questions.

Seven people, namely A,B,C,D,E,F and G like seven different flowers namely Rose, Jasmine, Lily, Sun flower, Orchid, Marigold and Daffodil but not necessarily in the same order. Each person also works in the same office but at a different department on the basis of experience namely Administration (ADMIN), Marketing & Sales, (M&S), Accounts (ACC), Production (PO), Quality Management (QM), Human Resources (HR), and Public Relations (PR), but not necessarily in the same order.

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

G likes Daffodil and has more experience than the one who likes Rose. Only one person has more experience than A. Only one person has less experience than F. B does not work in QM. The one who has less experience than F likes Sun flower. The one in HR likes Orchid. D has less experience than the one in PO, but more experience than the one who likes Lily. E neither has the least experience than the one who likes Lily nor he works in QM. The one who likes Jasmine does not work in PO. Only two people have more experience than the one who likes Rose.

Explanation

Person	Job	Flower
G	PR	Daffodil
A	HR	Orchid
C	QM	Rose
E	PO	Mari gold
D	ACC	Jasmine
F	M&S	Lily

B ADMIN Sun flower

11. As per the given arrangement, ADMIN is related to Lily and PO is related to Rose in a certain way. To which of the following is ACC related to the same way?

- A. Jasmine
- B. Lily
- C. Sun flower
- D. Orchid
- E. Marigold

Answer – **E. Marigold**

12. Which of the following pairs of people who have more experience than C less experience than E?

- A. F, G
- B. F, B
- C. G, A
- D. A, D
- E. None of the Above

Answer – **D. A, D**

13. Which combination represents the department that C works in and the flower he likes?

- A. QM – Rose
- B. PO – Lily
- C. PO – Marigold
- D. ACC – Sunflower
- E. ADMIN – Sunflower

Answer – **A. QM – Rose**

14. Who amongst the following works in ADMIN?

- A. A
- B. E
- C. G
- D. B
- E. Other than those given as options

Answer – **D. B**

15. Which of the following flowers does D like?

- A. Lily
- B. Marigold
- C. Rose
- D. Sunflower
- E. Jasmine

Answer – **E. Jasmine**

(Q. 16-20): Study the following information carefully to answer the given questions.

Ten famous sports personalities are sitting in twelve seats in two parallel rows containing five people each, in such a way that there is an equal distance between adjacent persons. In Row – 1: Sardara Singh, M.S.Dhoni, P.V.Sindhu, Sania Mirza, and Sakshi Malik are seated and all of them are facing south, and in Row 2 : Mary Kom, Sathish, Dipa Karmakar, Sandeep and Abhinav Bindra are sitting and all of them are facing north. One seat is vacant in each row. Therefore, in the given seating arrangement each member seated in a row faces another member of the other row. All of them like different sports like i.e. Hockey, Cricket, Badminton, Tennis, Wrestling, Boxing, Weight lifting, Gymnastics, Swimming and Shooting.

Sandeep sits third to the right of Dipa Karmakar and likes Tennis. Only two people sit between Sathish and Vacant seat. Sathish sits at one of the extreme ends. Dipa Karmakar does not like Hockey and Gymnastics. Sathish does not like Wrestling and Badminton. Sakshi Malik is not an immediate neighbour of P.V.Sindhu. M.S.Dhoni likes Shooting. The one who likes Badminton faces the one who likes Gymnastics. Vacant seat of row-1 does not face Sandeep also does not sit at any of the extreme ends.

The one who likes Badminton sits opposite to the one, who sits third right of the one, who sits opposite to Sandeep . P.V.Sindhu is not an immediate neighbour of Sania Mirza. Abhinav Bindra, who likes neither Wrestling nor Boxing, does not face vacant seat.

Neither Sandeep nor Dipa Karmakar sits at an extreme ends. Sania Mirza faces Dipa Karmakar. Vacant seats are not opposite to each other. Two seats are there between P.V.Sindhu and M.S.Dhoni, who sits third right of the one, who likes Weight lifting.

The one who likes Swimming faces the one, who likes Tennis.

The person who likes Hockey and Gymnastics are adjacent to each other.

Vacant seat of row-1 is not an immediate neighbour of Sania Mirza.

16. Who among the following sits second to the right of the person who faces the vacant seat ?

- A. One who likes Cricket
- B. One who likes Boxing
- C. Sardana Singh
- D. P.V.Sindhu
- E. One who likes Weight lifting

Answer – B. One who likes Boxing

17. Which of the following is true regarding Sardana Singh ?

- A. MSD and P.V.Sindhu are immediate neighbours of Sardana Singh
- B. Only two people sit between Sardana Singh and P.V.Sindhu
- C. Sardana Singh is an immediate neighbour of the person who faces Dipa Karmakar
- D. Sardana Singh sits second to left of MSD
- E. None of the given options is true

Answer – D. Sardana Singh sits second to left of MSD

18. Which of the following groups of people represents the people sitting at extreme ends of both the rows ?

- A. MSD, P.V.Sindhu, Sardana Singh, Dipa Karmakar
- B. Sakshi Malik, Abhinav Bindra, Sathish,P.V.Sindhu
- C. Sakshi Malik, P.V.Sindhu, Sardana Singh, Dipa Karmakar
- D. MSD, P.V.Sindhu, Sardana Singh, Abhinav Bindra
- E. Sathish, P.V.Sindhu, Sardana Singh, Dipa Karmakar

Answer – B. Sakshi Malik, Abhinav Bindra, Sathish,P.V.Sindhu

19. Who amongst the following faces vacant seat of first row?

- A. MSD
- B. P.V.Sindhu
- C. Mary Kom
- D. Sardana Singh
- E. Dipa Karmakar

Answer – C. Mary Kom.

20. Which of the following is true with respect to the given information ?

- A. Mary Kom sits exactly between Abhinav Bindra and Dipa Karmakar
- B. Sania Mirza faces immediate neighbour of Abhinav Bindra
- C. Sathish is an immediate neighbour of Mary Kom
- D. P.V.Sindhu faces Vacant seat

E. None of the given options is true

Answer – Sania Mirza faces immediate neighbour of Abhinav Bindra.

Direction (21-23): Study the following information carefully and answer the questions which follow—

In a certain code language, some statements are coded as follow:

'Visual effects of colour' is coded as 'C11 F73 T86 K93'

'Visual for one's eye' is coded as 'T86 L23 N27 M18'

'Retinal detachment curtain effects' is coded as 'B15 K93 G14 S21'

'Areas for vision development' is coded as 'A10 H32 Y16 L23'.

21. Which among the following option can be used for getting the code of 'eye'?

(i) L23 T86 Y16 H32

(ii) N27 M18 L23 A10

(iii) F73 M18 L23 G14

(iv) S21 B15 T86 N27

(v) None of these

A. Only (i) and (ii)

B. Only (ii) and (iii)

C. Only (iii) and (iv)

D. Only (iv) and (v)

E. Only (ii) and (iv)

Answer - C. Only (iii) and (iv)

22. Which among the following option cannot be used for getting the code of 'Eagle'?

A. H32 F73 G14 S21

B. K93 H32 Y16 B15

C. Y16 M18 C11 N27

D. A10 B15 T86 S21

E. None of these

Answer - B. K93 H32 Y16 B15

23. If 'Retinal' can be coded as B15, then which among the following option can be used for getting the code of 'Ball'?

A. B15 G14 S21 H32

B. L23 S21 B15 G14

C. C11 G14 Y16 S21

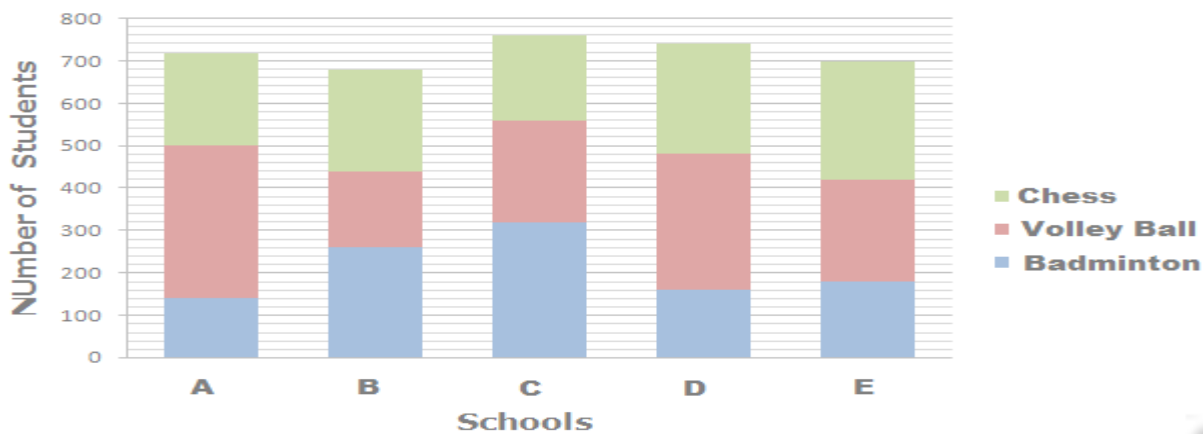
D. Y16 G14 N27 B15

E. None of these

Ans - D. Y16 G14 N27 B15

QUANTITATIVE APTITUDE

Directions(Q.No: 1 - 5). Study the following graph carefully and answer accordingly.
Number of students playing Chess, Volley Ball, Badminton from different Schools



1. Total number of students playing Chess and Badminton together from school A is what % of the total number of students playing these two games together from School D?

1. 900/7 %
2. 800/7 %
3. 600/7 %
4. 500/7 %
5. None of these

Answer – 3. 600/7 %

Explanation :

Total number of students playing Carrom and Hockey together from school A = $220+140 = 360$

Total number of students playing Carrom and Hockey together from School D = $260+160 = 420$

Percentage = $(360/420)*100 = 600/7 \%$

2. If the number of students playing each game in school B is increased by 15% and the number of students playing each game in school C is decreased by 10% then what will be the difference between number of students in School D and B?

1. 215
2. 105
3. 115
4. 167
5. None of these

Answer – 4. 167

Explanation :

Number of students in school B = 115% of 680 = 851

Number of students in school C = 90% of 760 = 684

Difference = $851 - 684 = 167$

3. If out of the students playing Volleyball from schools B, D and E 20%,25% and 15% respectively got selected for state level competition, what was the total number of students got selected for state level competition from these three schools together?

1. 194
2. 192
3. 250
4. 152
5. None of these

Answer – **4. 152**

Explanation :

Total number of students who got selected for state level competition from schools B D and E
= 20% of 180 + 25% of 320 + 15% of 240
= 36 + 80 + 36 = 152

4. Total number of students playing Badminton from all schools together is approximately, what percent of the total number of students playing Volleyball from all schools together?

1. 70%
2. 65%
3. 79%
4. 89%
5. None of these

Answer – **3. 79%**

Explanation :

Total number of students playing Badminton from all the schools together = 140 + 260 + 320 + 160 + 180 = 1060

Total number of students playing Volleyball from all the schools together = 360 + 180 + 240 + 320 + 240 = 1340

% = $(1060/1340) \times 100 = 79\%$ (approximately)

5. From School A, out of the students playing Chess, 40% got selected for state level competition out of which 25% further got selected for national level competition. From School E, out of the students playing Chess, 45% got selected for state level competition out of which two-third further got selected for national level competition. What is the total number of students playing Chess from these two schools who got selected for national level competition?

1. 108
2. 106
3. 103
4. 102
5. None of these

Answer – **2. 106**

Explanation :

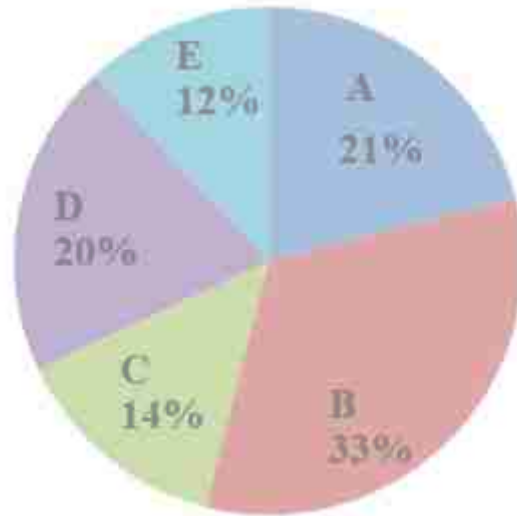
Number of students who got selected for national level competition from School A = 25% of 40% of 220 = 22

Number of students who got selected for national level competition from School E = $(2/3)$ of 45% of 280 = 84

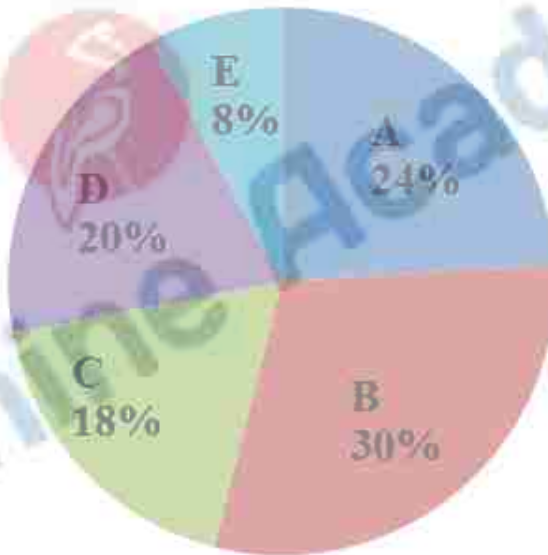
Total number of students playing Chess from these two schools who got selected for national level competition = 22 + 84 = 106

(Q.no: 6 - 10). Refer to the Pie-charts and answer the given questions.

Total Number of employees (both male and female) in 5 companies in 2014 = 6300



Total Number of male employees in 5 companies in 2014 = 3600



6. Only 25% of the members (both male and female) in company D have Full membership in IES. If the number of females in Company D who have full membership is 126, what percent of male members in Company D have full membership?

- A. $105/4$ %
- B. $103/4$ %
- C. $101/4$ %
- D. $107/4$ %
- E. None of the Above

Answer – A. $105/4$ %

Explanation :

Total = 6300

Total number of employees in D = 20% of 6300 = 1260

25% of D = 25% of 1260 = 315

Female employees who have IES membership = 126

Male employees who have IES membership = 315 – 126 = 189

Total number of male employees in D = 720

Required percentage = $(189/720) * 100 = 105/4$ %

7. What is the average number of female members in Companies A, B and C?

- A.564
- B.572
- C.568
- D.548
- E.None of the Above

Answer – **A.564**

Explanation :

Total = 6300

In Company A (both female and male) employees = 1323

In Company B (both female and male) employees = 2079

In Company C (both female and male) employees = 882

In Company A male employees = 864

In Company B male employees = 1080

In Company C male employees = 648

In Company A female employees = 459

In Company B female employees = 999

In Company C female employees = 234

$(459 + 999 + 234)/3 = 564$

8. Number of male employees in companies A and C increased by equal number from 2014 to 2015. If the respective ratio between number of male numbers in company A and that in C in 2015 is 13:10, what is the number of male employees in company C in 2015?

- A.690
- B.750
- C.720
- D.740
- E.None of the Above

Answer – **C.720**

Explanation :

$864 + x / 648 + x = 13 / 10$

$x = 72$

Number of male numbers in company C = $648 + 72 = 720$

9. What is the central angle corresponding to number of (both male and female) in company B?

- A.118.8°
- B.112.6°
- C.124.8°
- D.116.4°
- E.None of the Above

Answer – **A.118.8°**

Explanation :

$(33/100) * 360 = 118.8^\circ$

10. Number of female members in company E is what percent less than number of male members in company B?

- A. 160/3 %
- B. 170/3 %
- C. 140/3 %
- D. 190/3 %
- E. None of the Above

Answer – **B. 170/3 %**

Explanation :

Number of female members in company E = $756 - 288 = 468$
 $(612/1080) * 100 = 170/3\%$

11. I. If a pipe A can fill a tank 3 times faster than pipe B and takes 32 minutes less than pipe B to fill the tank. If both the pipes are opened simultaneously, then find the time taken to fill the tank?

II. Two pipes P and Q can fill a tank in 24 minutes and 27 minutes respectively. If both the pipes are opened simultaneously, after how much time should B be closed so that the tank is full in 8 minutes?

- A. Quantity I > Quantity II
- B. Quantity I < Quantity II
- C. Quantity I \leq Quantity II
- D. Quantity I = Quantity II or No relation
- E. Quantity I \geq Quantity II

Answer - **B. Quantity I < Quantity II**

Explanation :

$$3x - x = 32$$

$$x = 16$$

$$1/16 + 1/48 = 4/48$$

$$\text{Time taken to fill the tank} = 48/4 = 12 \text{ minutes}$$

$$\text{Required time} = y(1 - (t/x)) = 27(1 - (8/24)) = 18 \text{ minutes}$$

12. I. In a rectangle the ratio of the length and breadth is 3:2. If each of the length and breadth is increased by 3m their ratio becomes 10:7. The area of the original rectangle in m² is?

II. If each side pair of opposite sides of a square is increased by 10m, the ratio of the length and breadth of the rectangular so formed becomes 5:3. The area of the old square is?

- A. Quantity I > Quantity II
- B. Quantity I < Quantity II
- C. Quantity I \leq Quantity II
- D. Quantity I = quantity II or No relation
- E. Quantity I \geq Quantity II

Ans - **A. Quantity I > Quantity II**

Explanation :

$$\text{I. } [3x + 3 / 2x + 3] = 10/7$$

$$x = 9$$

$$\text{Area of the original rectangle} = 3x * 2x = 6x^2$$

$$\text{Area of the original rectangle} = 6 * 81 = 486\text{m}^2$$

$$\text{II. } (x+10) / x = 5 / 3$$

$$3x + 30 = 5x$$

$$x = 15\text{m}; \text{ Area} = 225\text{m}^2$$

13. I. The average age of a group of persons going for tour to Shimla is 22 years. 25 new persons with an average age of 10 years join the group and their average age becomes 12 years. The number of persons initially going for tour is?

II. Mr. Ravi's family has 10 males and a few females, the average monthly consumption of rice per head is 8 kg. If the average monthly consumption of rice per head be 10 kg in the case of males and 6 kg in the case of females, find the number of females in Ravi's family?

- A. Quantity I > Quantity II
- B. Quantity I < Quantity II
- C. Quantity I \leq Quantity II
- D. Quantity I = Quantity II or No relation
- E. Quantity I \geq Quantity II

Ans - **B. Quantity I < Quantity II**

Explanation :

$$\begin{aligned} \text{I. Initial number of persons} &= x \\ &= 22x + 25 * 10 - 12(x + 25) \\ &= 22x + 250 - 12x - 300 \\ 10x &= 50 \\ x &= 5 \end{aligned}$$

$$\begin{aligned} \text{II. Let number of females be } x. \\ (10 * 10 + x * 6) / (10 + x) &= 8 \\ \Rightarrow x &= 10 \end{aligned}$$

14. A basket contains 5 red 4 blue 3 green marbles. If two marbles picked up random, What is the probability that both are red?

- A. 4/33
- B. 5/33
- C. 7/33
- D. 8/33

Answer – B. 5/33

Explanation :

Total Marbles = 12

$$\text{Probability} = \frac{5c_2}{12c_2} = \frac{5}{33}$$

15. A bag contains 2 red caps, 4 blue caps, 3 yellow caps and 5 green caps. If three caps are picked at random, what is the probability that none is green?

- A. 2/13
- B. 3/13
- C. 1/13
- D. 5/13

Answer – B. 3/13

Explanation :

Total caps = 14

$$\text{Probability} = \frac{5c_0 * 9c_3}{14c_3} = \frac{3}{13}$$

ENGLISH

In the given passage, answer the following questions according to the idea expressed in the passage.

Britain and the European Union may be getting over the initial shock of the British demand for a divorce. Now comes the bitter fight. Already, both sides have staked out very different positions on immigration, an issue that promises to be the most contentious in the separation proceedings.

Germany, France and other union members have argued that Britain must maintain open borders if it is to enjoy favorable access to Europe's single market. Many British voters who chose to leave the bloc in June would like to see those borders more tightly regulated by the British government.

However this issue is resolved, both sides have an obligation to find ways to minimize the economic damage to Britain and the rest of the union that a new relationship could bring. Formal negotiations are expected to start by the end of March.

The British prime minister, Theresa May, wants **unfettered** access to the European market, the world's largest. Under her vision, Britain's manufacturers would be able to sell products to customers in the bloc without paying duties, and bankers in London could serve businesses and investors anywhere in the union. But she and her colleagues insist on restricting immigration from other European Union countries.

Those demands are unacceptable to leaders like Chancellor Angela Merkel of Germany and President François Hollande of France who insist that the union can accept the free movement of goods, services and capital only with countries that also accept the free movement of people. “There will be no compromises in this regard,” Donald Tusk, the president of the European Council said on Thursday. The union’s agreements with three nonmember countries — Iceland, Lichtenstein and Norway — include all four freedoms. Those countries also **abide** by the union’s regulations and contribute to its budget.

A common market cannot function properly if people are not allowed to move without having to obtain visas. Imagine how much more difficult it would be to do business in the United States if companies could not easily relocate employees to different states or if people could not freely move to take advantage of job opportunities. The indivisibility of the four freedoms is also necessary to send a clear message to politicians and voters in France, Italy and other countries in the bloc who argue that their countries should also leave the union. Allowing Britain to cherry-pick its membership rules would encourage these separatists, greatly undermining the European project and making the region less stable, less prosperous and less **tolerant**. It would also set a dangerous example for other, non-European countries, the United States included, where politicians have demonized immigrants at a time when many people have seen incomes stagnate and are increasingly fearful of terrorism.

Interestingly, polls show that many Britons would accept a deal that kept the country’s borders open to other Europeans. In July, after the **referendum**, two-thirds of respondents said access to the European market should be a priority in negotiations while only 31 percent said the same about restricting free movement. There are 2.9 million people from other European Union countries living in Britain, making up 4.6 percent of the country’s population. About 1.2 million Britons live elsewhere in the union. Even if it refuses to budge on immigration, Britain might still be able to negotiate a trade agreement with the union that gives it some modest economic benefits, like duty-free access for certain products. But the union is highly unlikely to give British banks and companies “passporting rights” to operate throughout the bloc. Losing these **privileges** would be a big blow to the economy, which is one reason the pound has fallen nearly 18 percent against the dollar since the referendum. That should be reason enough for Mrs. May to compromise on immigration.

1. Why according to the passage the pound has fallen against the dollar since the referendum?

1. the union is highly unlikely to give British banks and companies “passporting rights” to operate throughout the bloc
2. Losing these privileges would be a big blow to the economy
3. Because Germany, France and other union members have argued that Britain must maintain open borders if it is to enjoy favorable access to Europe’s single market
4. Both A and B
5. All of above

Answer - 4. Both A and B

2. Which among the following is TRUE according to the passage given above?

1. polls show that many Britons would accept a deal that kept the country’s borders open to other Europeans
2. Many British voters who chose to leave the bloc in June would like to see those borders more tightly regulated by the British government.
3. Both A and B
4. Either A or B
5. None of the above

Answer - 3. Both A and B

3. Why according to the passage a common market cannot function properly?

1. if it is to enjoy favorable access to Europe’s single market
2. if people are allowed to move without having to obtain visas.
3. if it refuses to budge on immigration
4. if people are not allowed to move without having to obtain visas.

5. None of these

Answer - 4. if people are not allowed to move without having to obtain visas.

4. How according to the passage it could be much more difficult to do business in the United States?

1. Britain's manufacturers would be able to sell products to customers in the bloc without paying duties, and bankers in London could serve businesses and investors anywhere in the union

2. the United States included, where politicians have demonized immigrants at a time when many people have seen incomes stagnate and are increasingly fearful of terrorism

3. if companies could not easily relocate employees to different states or if people could not freely move to take advantage of job opportunities

4. Britain might still be able to negotiate a trade agreement with the union that gives it some modest economic benefits, like duty-free access for certain products.

5. All of the above

Answer - 3. if companies could not easily relocate employees to different states or if people could not freely move to take advantage of job opportunities

5. Which of the following would be a suitable title of the passage?

1. Britain must be tough but empathetic toward the EU to secure a good Brexit for the City of London

2. Europe unimpressed by May's tough talk on Brexit

3. France Says EU Must Be Tough after Britain Opts for 'Hard' Brexit

4. EU Must Be Tough On Brexit

5. Brexit: Britain must be tough in its EU negotiations

Answer - 4. EU Must Be Tough On Brexit

Synonyms & Antonyms based on the above passage

6. Which among the following is MOST SIMILAR in meaning to the word “unfettered”?

1. hitch

2. truss

3. loose

4. fetter

5. clamp

Answer - 3. Loose

7. Which among the following is MOST OPPOSITE in meaning to the word “abide”?

1. bear with

2. withstand

3. despise

4. concede

5. endure

Answer - 3. Despise

8. Which among the following is MOST SIMILAR in meaning to the word “tolerant”?

1. prejudiced

2. advanced

3. biased

4. minded

5. narrow

Answer - 2. Advanced

9. Which among the following is MOST OPPOSITE in meaning to the word “referendum”?

1. veto

2. mandate

3. instruction

4. injunction

5. imperative

Answer - 1. Veto

10. Which among the following is MOST SIMILAR in meaning to the word “privileges”?

1. advantage

2. masterwork

3. showpiece

4. detriment

5. disadvantage

Answer - 1. advantage

Directions: Seven statements are given below, namely A, B, C, D, E, F and G. Among these, six statements are in logical order and form a coherent paragraph/passage. From the given options, choose the option that does not fit into the theme of the passage.

- A. In the industrialized nations, more and more companies are “going green” as they realized that they can reduce pollution and increase profit simultaneously.
- B. But the distance we have travelled will seem small when, in 30 years we look back at the 1990’s.
- C. We have come a long way.
- D. In the 1960’s and 1970’s, corporation were in a state of denial regarding their impact on the environment.
- E. The environment revolution has been almost three decades in the making, and it has changed forever how companies do business.
- F. Today many companies have accepted their responsibility to do no harm to the environment.
- G. However, not everything about nudge marketing is rosy. In their enthusiasm, marketers have overlooked some fundamental concerns about using nudges.

Ans: G

Directions : A short passage is given with one of the lines in the passage missing and represented by a blank. Select the best one out of the five answer choices given, to make the passage complete.

1. Over a decade of behavioral economics research shows that such nudges are effective in influencing consumer behaviors. Many nudges have virtuous effects,_____. For example, a supermarket places plastic mats with huge arrows marked “Follow the green arrow for your health” pointing shoppers toward the produce aisle. Within two weeks, produce purchases increase by 9%.

A. nudges that are poorly thought out could be ticking time bombs waiting to explode and damage the company’s reputation and credibility among its loyal customers.

B. encouraging consumers to donate their organs, reduce their consumption of energy, and save more money.

C. A restaurant lists a fish entree at a clearly overpriced \$35 on its menu

D. Today many companies have accepted their responsibility to do no harm to the environment.

E. None of these.

Ans – B.

Letter writing Questions

- 1. You have to write a letter to your parents to tell them about your success in your job and new life in new city.
- 2. Write a letter as a principal to the parents to tell them about the importance of parents in children education.
- 3. Write a letter to news editor to tell them about menace about selfie.