

120+ Aptitude and Reasoning Questions & Answers by PythonLife.

1. The average age of 8 men increases by 2 years when two women are included in place of two men of ages 20 and 24 years. Find the average age of the women?
- A. 18 years
 - B. 24 years
 - C. 30 years
 - D. 36 years

Answer: C. 30 years

Explanation: $20 + 24 + 8 * 2 = 60/2 = 30$

2. Mohan correctly remembers that his father's birthday is before 20th January but after 16th January, whereas his sister correctly remembers that their father's birthday is after 18th January but before 23rd January. On which date in January is definitely their father's birthday?
- A. 18th
 - B. 19th
 - C. 20th
 - D. Missing data

Answer: B. 19th

Explanation: According to Mohan 17th, 18th, or 19th ...(i)

According to his sister 19th, 20th, 21st or 22nd ...(ii)

From (i) and (ii) => 19th

3. The average age of husband, wife and their child 3 years ago was 27 years and that of wife and the child 5 years ago was 20 years. The present age of the husband is:
- A. 35 years
 - B. 40 years
 - C. 45 years
 - D. 55 years

Answer: B. 40 years

Explanation: Sum of the present ages of husband, wife and child = $(27 * 3 + 3 * 3)$ years = 90 years.

Sum of the present ages of wife and child = $(20 * 2 + 5 * 2)$ years = 50 years.

Therefore, Husband's present age = $(90 - 50)$ years = 40 years

4. A is 2 years older than B who is twice as old as C. If the total of the ages of A, B and C be 27, then how old is B?

A. 7 years
B. 8 years
C. 9 years
D. 10 years

Answer: D. 10 years

Explanation: Let C's age be x years

Then, B's age = $2x$ years

A's age = $(2x + 2)$ years

$$(2x + 2) + 2x + x = 27$$

$$5x = 25 \Rightarrow x = 5$$

Hence, B's age = $2x = 10$ years

5. The ratio between the school ages of Pratosh and Satheesh is 5:6 respectively. If the ratio between the one-third age of Pratosh and half of Satheesh's age of 5:9, then what is the school age of Satheesh?

A. 25 years
B. 30 years
C. 36 years
D. Cannot be determined

Answer: D. Cannot be determined

Explanation: Let the school ages of Neelam and Shaan be $5x$ and $6x$ years respectively.

$$\text{Then, } (1/3 * 5x) / (1/2 * 6x) = 5/9$$

$$15 = 15$$

Thus, Shaan's age cannot be determined.

6. A person's present age is two-fifth of the age of his mother. After 8 years, he will be one-half of the age of his mother. How old id the mother at present?

A. 32 years
B. 36 years

- C. 40 years
- D. 48 years

Answer: C. 40 years

Explanation: Let the mother's present age be x years. Then, the person's present age = $\frac{2}{5}x$ years.

$$\left(\frac{2}{5}x + 8\right) = \frac{1}{2}(x + 8)$$

$$2(2x + 40) = 5(x + 8) \Rightarrow x = 40$$

7. The total age of A and B is 12 years more than the total age of B and C. C is how many years younger than A?
- A. 12
 - B. 24
 - C. C is elder than A
 - D. Data inadequate

Answer: A. 12

Explanation: $(A + B) - (B + C) = 12$

$$A - C = 12$$

8. A father said to his son, 'I was as old as you are at present at the time of your birth.' If the father's age is 38 years now, the son's age five years back was:
- A. 14 years
 - B. 19 years
 - C. 33 years
 - D. 38 years

Answer: A. 14 years

Explanation: Let the son's present age be x years.

$$\text{Then, } (38 - x) = x$$

$$2x = 38 \Rightarrow x = 19$$

$$\text{Son's age 5 years back} = (19 - 5) = 14 \text{ years}$$

9. A person was asked to state his age in years. His reply was, 'Take my age three years hence, multiply it by 3 and then subtract three times my age three years ago and you will know how old I am.' What was the age of the person?
- A. 18 years
 - B. 20 years

- C. 24 years
- D. 32 years

Answer: A. 18 years

Explanation: Let the present age of the person be x years.

Then, $3(x + 3) - 3(x - 3) = x$

$$3x + 9 - 3x + 9 = x \Rightarrow x = 18$$

10. The sum of the ages of a son and father is 56 years after four years the age of the father will be three times that of the son. Their ages respectively are:
- A. 12 years, 44 years
 - B. 16 years, 42 years
 - C. 16 years, 48 years
 - D. 18 years, 36 years

Answer: A. 12 years, 44 years

Explanation: Present ages of son and father be x years $(56 - x)$ years

$$(56 - x + 4) = 3(x + 4) \text{ or } 4x = 48 \text{ or } x = 12$$

Ages are 12 years, 44 years

11. A batsman in his 17th innings makes a score of 85 and thereby increasing his average by 3. What is his average after the 17th innings?
- A. 34
 - B. 35
 - C. 36
 - D. 37

Answer: D. 37

Explanation: $16x + 85 = 17(x + 3)$

$$x = 34 + 3 = 37$$

12. The average of first 10 natural numbers is?
- A. 5
 - B. 5.5
 - C. 6
 - D. 6.5

Answer: B. 5.5

Explanation: Sum of 10 natural no. = $110/2 = 55$

Average = $55/10 = 5.5$

13. The average age of three boys is 15 years and their ages are in proportion 3:5:7. What is the age in years of the youngest boy?

- A. 9
- B. 12
- C. 15
- D. 18

Answer: A. 9

Explanation: $3x + 5x + 7x = 45$

$$x = 3$$

$$3x = 9$$

14. The average of 9 observations was 9, that of the 1st of 5 being 10 and that of the last 5 being 8. What was the 5th observation?

- A. 6
- B. 7
- C. 8
- D. 9

Answer: D. 9

Explanation: 1 to 9 = $9 * 9 = 81$

$$1 \text{ to } 5 = 5 * 10 = 50$$

$$5 \text{ to } 9 = 5 * 8 = 40$$

$$5\text{th} = 50 + 40 = 90 - 81 = 9$$

15. A team of eight entered for a shooting competition. The best marks man scored 85 points. If he had scored 92 points, the average scores for the team would have been 84. How many points altogether did the team score?

- A. 625
- B. 632
- C. 656
- D. 665

Answer: D. 665

Explanation: $8 * 84 = 672 - 7 = 665$

16. A batsman makes a score of 64 runs in the 16th innings and thus increased his average by 3. Find his average after the 16th inning?

- A. 17
- B. 18
- C. 19
- D. 20

Answer: C. 19

Explanation: Let the average after the 16th inning be P.

So, the average after the 15th inning will be (P-3)

Hence, $15(P-3) + 64 = 16P \Rightarrow P = 19$

17. The average of 10 numbers is 23. If each number is increased by 4, what will the new average be?

- A. 23
- B. 25
- C. 27
- D. 29

Answer: C. 27

Explanation: Sum of the 10 numbers = 230

If each number is increased by 4, the total increase = $4 * 10 = 40$

The new sum = $230 + 40 = 270$ The new average = $270/10 = 27$

18. Find the average of the series : 312, 162, 132, 142 and 122?

- A. 162
- B. 174
- C. 186
- D. 198

Answer: B. 174

Explanation: $(312 + 162 + 132 + 142 + 122)/5 = 870/5 = 174$

19. In the first 10 overs of a cricket game, the run rate was only 3.2. What should be the run rate in the remaining 40 overs to reach the target of 282 runs?
- A. 5.75
 - B. 6.25
 - C. 6.75
 - D. 7.25

Answer: B. 6.25

Explanation: Required run rate = $282 - (3.2 * 10) / 40 = 250 / 40 = 6.25$

20. The average weight of 8 person's increases by 2.5 kg when a new person comes in place of one of them weighing 65 kg. What might be the weight of the new person?
- A. 75 kgs
 - B. 80 kgs
 - C. 85 kgs
 - D. Data inadequate

Answer: C. 85 kgs

Explanation: Total weight increased = $(8 * 2.5)$ kg = 20 kgs

Weight of new person = $(65 + 20)$ kg = 85 kgs

21. QAR, RAS, SAT, TAU, _____
- A. TAS
 - B. TAT
 - C. UAT
 - D. UAV

Answer: D. UAV

Explanation: In this series, the third letter is repeated as the first letter of the next segment. The middle letter, A, remains static. The third letters are in alphabetical order, beginning with R.

22. CMM, EOO, GQQ, _____, KUU
- A. GRR
 - B. GSS
 - C. ISS
 - D. ITT

Answer: C. ISS

Explanation: The first letters are in alphabetical order with a letter skipped in between each segment: C, E, G, I, K. The second and third letters are repeated; they are also in order with a skipped letter: M, O, Q, S, U.

23. ELFA, GLHA, ILJA, _____, MLNA

- A. KLLA
- B. KLMA
- C. LLMA
- D. OLPA

Answer: A. KLLA

Explanation: The second and forth letters in the series, L and A, are static. The first and third letters consist of an alphabetical order beginning with the letter E.

24. FAG, GAF, HAI, IAH, _____

- A. JAI
- B. JAK
- C. HAK
- D. HAL

Answer: B. JAK

Explanation: The middle letters are static, so concentrate on the first and third letters. The series involves an alphabetical order with a reversal of the letters. The first letters are in alphabetical order: F, G, H, I, J. The second and fourth segments are reversals of the first and third segments. The missing segment begins with a new letter.

25. The number in the question below is to be codified in the following code.

Digit: 5 3 7 1 4 9 6 2 8

Letter: C J O X N Q T Z F

Find the code for 163542

- A. TXJCNZ
- B. XTCJNZ
- C. XTJCNZ
- D. XTJCZN

Answer: C. XTJCNZ

Explanation: As given 1 is coded as X, 6 is coded as T, 3 is coded as J, 5 is coded as C, 4 is coded as N and 2 is coded as Z. So 163542 is coded as XTJCNZ.

26. SCD, TEF, UGH, _____, WKL

- A. CMN
- B. IJT
- C. UJI
- D. VIJ

Answer: D. VIJ

Explanation: There are two alphabetical series here. The first series is with the first letters only: STUVW. The second series involves the remaining letters: CD, EF, GH, IJ, KL.

27. If 'P' means 'division', 'T' means 'addition', 'M' means 'subtraction', and 'D' means 'multiplication', then what will be the value of the following expression?

12 M 12 D 28 P 7 T 15 = ?

- A. -30
- B. -21
- C. 15
- D. 45

Answer: B. -21

Explanation: $12 - 12 \times 28 / 7 + 15$
 $= 12 - 12 \times 4 + 15 = 12 - 48 + 15 = -21$

28. In a certain language, if Violet is called as Green, Green is called as Red, Red is called as Brown, Brown is called as Orange, Orange is called as Yellow, Yellow is called as Blue and Blue is called as Indigo, then what is the colour of human blood in that language?

- A. Blue
- B. Brown
- C. Red
- D. Violet

Answer: B. Brown

Explanation: Human blood is Red in colour and Red is called Brown in that language.

29. If JOSEPH is coded as FKOALD, then GEORGE will be coded as:

- A. CAKNCA

- B. CALNCA
- C. CBKNCA
- D. HAKNCA

Answer: A. CAKNCA

Explanation: Each letter of the word is moved four step back to decode it. So, GEORGE will be CAKNCA.

30. In a code, CORNER is written as GSVRIV. How can CENTRAL be written in that code?

- A. DFOUSBM
- B. GIRXVEP
- C. GJRYVEP
- D. GNFJKER

Answer: B. GIRXVEP

Explanation: Each letter of the word is moved four steps forward to obtain the code.

31. How many 4-letter words with or without meaning, can be formed out of the letters of the word, 'LOGARITHMS', if repetition of letters is not allowed?

- A. 1480
- B. 2520
- C. 5040
- D. 7020

Answer: C. 5040

Explanation: The Word LOGARITHMS contain 10 letters.

To find how many 4 letter word we can find from that = $10 \times 9 \times 8 \times 7 = 5040$

32. A delegation of 5 members has to be formed from 3 ladies and 5 gentlemen. In how many ways the delegation can be formed, if 2 particular ladies are always included in the delegation?

- A. 16
- B. 20
- C. 24
- D. 28

Answer: B. 20

Explanation: There are three ladies and five gentlemen and a committee of 5 members to be formed.

Number of ways such that two ladies are always included in the committee =
 ${}^6C_3 = (6 * 5 * 4) / 6 = 20$

33. How many 4 digit numbers can be formed using the digits (1, 3, 4, 5, 7, 9) when repetition of digits is not allowed?
- A. 300
 - B. 320
 - C. 340
 - D. 360

Answer: D. 360

Explanation: The given digits are six.

The number of 4 digit numbers that can be formed using six digits is ${}^6P_4 = 6 * 5 * 4 * 3 = 360$

34. Using all the letters of the word 'THURSDAY', how many different words can be formed?
- A. 7
 - B. 7!
 - C. 8
 - D. 8!

Answer: D. 8!

Explanation: Total number of letters = 8

Using these letters the number of 8 letters words formed is ${}^8P_8 = 8!$

35. There are 18 stations between Hyderabad and Bangalore. How many second class tickets have to be printed, so that a passenger can travel from any station to any other station?
- A. 280
 - B. 330
 - C. 380
 - D. 430

Answer: C. 380

Explanation: The total number of stations = 20

From 20 stations we have to choose any two stations and the direction of travel (i.e., Hyderabad to Bangalore is different from Bangalore to Hyderabad) in ${}^{20}P_2$ ways.

${}^{20}P_2 = 20 * 19 = 380$

36. The number of new words that can be formed by rearranging the letters of the word 'ALIVE' is:
- A. 117
 - B. 118
 - C. 119
 - D. 120

Answer: C. 119

Explanation: Number of words which can be formed = $5! - 1 = 120 - 1 = 119$

37. Six points are marked on a straight line and five points are marked on another line which is parallel to the first line. How many straight lines, including the first two, can be formed with these points?
- A. 30
 - B. 32
 - C. 34
 - D. 36

Answer: B. 32

Explanation: We know that, the number of straight lines that can be formed by the 11 points in which 6 points are collinear except those that can be selected out of these 6 points are collinear.

Hence, the required number of straight lines

$$= {}^{11}C_2 - {}^6C_2 - 5C_2 + 1 + 1$$

$$= 55 - 15 - 10 + 2 = 32$$

38. A selection is to be made for one post of principal and two posts of vice-principal amongst the six candidates called for the interview only two are eligible for the post of principal while they all are eligible for the post of vice-principal. The number of possible combinations of selectees is:
- A. 4
 - B. 12
 - C. 18
 - D. 20

Answer: D. 20

Explanation: Total number of ways = ${}^2C_1 \cdot {}^5C_2 = 2 \cdot \frac{5!}{3!2!} = 2 \cdot 10 = 20$

39. In how many ways can the letters of the word 'LEADER' be arranged?
- A. 72
 - B. 144
 - C. 360
 - D. 720

Answer: C. 360

Explanation: The word 'LEADER' contains 6 letters, namely 1L, 2E, 1A, 1D and 1R.

Required number of ways = $6! / (1!)(2!)(1!)(1!)(1!) = 360$

40. How many 3-digit numbers can be formed from the digits 2, 3, 5, 6, 7 and 9, which are divisible by 5 and none of the digits is repeated?

- A. 5
- B. 10
- C. 15
- D. 20

Answer: D. 20

Explanation: Since each desired number is divisible by 5, so we must have 5 at the unit place. So, there is 1 way of doing it.

The tens place can now be filled by any of the remaining 5 digits (2, 3, 6, 7, 9).

So, there are 5 ways of filling the tens place.

The hundreds place can now be filled by any of the remaining 4 digits. So, there are 4 ways of filling it.

Required number of numbers = $(1 * 5 * 4) = 20$

41. Two pipes A and B can fill a cistern in 20 and 30 minutes respectively, and a third pipe C can empty it in 40 minutes. How long will it take to fill the cistern if all the 3 pipes are opened at the same time?

- A. $7 \frac{1}{7}$ mins.
- B. $15 \frac{1}{7}$ mins.
- C. $17 \frac{1}{7}$ mins.
- D. $19 \frac{1}{7}$ mins.

Answer: B. $17 \frac{1}{7}$ mins

Explanation: $\frac{1}{20} + \frac{1}{30} - \frac{1}{40} = \frac{7}{120}$

$\Rightarrow 120/7 = 17 \frac{1}{7}$

42. Two taps can separately fill a cistern 10 minutes and 15 minutes respectively and when the waste pipe is open, they can together fill it in 18 minutes. The waste pipe can empty the full cistern in?

- A. 7 mins.
- B. 9 mins.
- C. 13 mins.
- D. 23 mins.

Answer: B. 9 mins

Explanation: $1/10 + 1/15 - 1/x = 1/18$
 $x = 9$

43. A cistern is normally filled in 8 hours but takes two hours longer to fill because of a leak in its bottom. If the cistern is full, the leak will empty it in?
- A. 16 hrs
 - B. 20 hrs
 - C. 25 hrs
 - D. 40 hrs

Answer: D. 40 hrs

Explanation: $1/8 - 1/x = 1/10$
 $x = 40$

44. Two pipes can fill a tank in 18 minutes and 15 minutes. An outlet pipe can empty the tank in 45 minutes. If all the pipes are opened when the tank is empty, then how many minutes will it take to fill the tank?
- A. 9 mins.
 - B. 10 mins.
 - C. 11 mins.
 - D. 12 mins.

Answer: B. 10 mins

Explanation: Part of the filled by all the three pipes in one minute
 $= 1/18 + 1/15 - 1/45 = (5 + 6 - 2)/90 = 9/90 = 1/10$
So, the tank becomes full in 10 minutes

45. Pipe A can fill a tank in 16 minutes and pipe B can empty it in 24 minutes. If both the pipes are opened together after how many minutes should pipe B be closed, so that the tank is filled in 30 minutes?
- A. 19 mins.
 - B. 20 mins.
 - C. 21 mins.
 - D. 22 mins.

Answer: C. 21 mins

Explanation: Let the pipe B be closed after x minutes.
 $30/16 - x/24 = 1 \Rightarrow x/24 = 30/16 - 1 = 14/16$
 $\Rightarrow x = 14/16 * 24 = 21$

46. Three pipes A, B and C can fill a tank from empty to full in 30 minutes, 20 minutes and 10 minutes respectively. When the tank is empty, all the three pipes are opened. A, B and C discharge chemical solutions P, Q and R respectively. What is the proportion of solution R in the liquid in the tank after 3 minutes?
- A. 5/11
 - B. 6/11
 - C. 7/11
 - D. 8/11

Answer: B. 6/11

Explanation: Part filled by (A + B + C) in 3 minutes = $3(1/30 + 1/20 + 1/10) = 11/20$

Part filled by C in 3 minutes = $3/10$

Required ratio = $3/10 * 20/11 = 6/11$

47. Three pipes A, B and C can fill a tank from empty to full in 30 minutes, 20 minutes, and 10 minutes respectively. When the tank is empty, all the three pipes are opened. A, B and C discharge chemical solutions P, Q and R respectively. What is the proportion of the solution R in the liquid in the tank after 3 minutes?
- A. 5/11
 - B. 6/11
 - C. 7/11
 - D. 8/11

Answer: B. 6/11

Explanation: Part filled by (A + B + C) in 3 minutes = $3(1/30 + 1/20 + 1/10) = (3 * 11 / 60) = 11 / 20$

Part filled by C in 3 minutes = $3 / 10$

Therefore, required ratio = $(3 / 10 * 20 / 11) = 6/11$

48. Pipes A and B can fill a tank in 5 and 6 hours respectively. Pipe C can empty it in 12 hours. If all the three pipes are opened together, then the tank will be filled in:
- A. 1 13/17 hrs
 - B. 2 8/11 hrs
 - C. 3 9/17 hrs
 - D. 4 1/2 hrs

Answer: C. 3 9/17 hrs

Explanation: Net part filled in 1 hour $(1/5 + 1/6 - 1/12) = 17/60$

Therefore, the tank will be full in $60 / 17$ hours i.e., 3 9/17 hrs

49. A pump can fill a tank with water in 2 hours. Because of a leak, it took $2\frac{1}{3}$ hours to fill the tank. The leak can drain all the water of the tank in:
- A. 10 hrs
 - B. 12 hrs
 - C. 14 hrs
 - D. 16 hrs

Answer: C. 14 hrs

Explanation: Work done by the leak in 1 hour = $(\frac{1}{2} - \frac{3}{7}) = \frac{1}{14}$
Leak will empty the tank in 14 hrs

50. Two pipes A and B can fill a cistern in $37\frac{1}{2}$ minutes and 45 minutes respectively. Both pipes are opened. The cistern will be filled in just half an hour, if the B is turned off after:
- A. 6 mins.
 - B. 9 mins.
 - C. 12 mins.
 - D. 15 mins.

Answer: B. 9 mins.

Explanation: Let B be turned off after x minutes. Then,
Part filled by (A + B) in x min. + Part filled by A in (30 - x) min. = 1
Therefore, $x(\frac{2}{75} + \frac{1}{45}) + (30 - x) = \frac{2}{75} = 1$
 $\Rightarrow \frac{11x}{225} + (60 - 2x)/75 = 1$
 $\Rightarrow 11x + 180 - 6x = 225$
 $\Rightarrow x = 9$

Reasoning Aptitude Verbal Reasoning Blood Relation Questions Answers Aptitude Question

51. Pointing to a photograph Nikita said, "She is the only granddaughter of my grandmother's daughter". How is the girl in photograph related to Nikita?
- (a) Sister
 - (b) Niece/daughter
 - (c) Aunt
 - (d) Mother

Ans: b

Direction for Q3 to Q6: *Read the following information and answer the questions given below it:*

- (i) 'A + B' means 'A is the father of B'
- (ii) 'A – B' means 'A is the wife of B'
- (iii) 'A ´ B' means 'A is the brother of B'
- (iv) 'A , B' means 'A is the daughter of B'

52. If $P , R + S + Q$, which of the following is true?

- a) P is the daughter of Q
- b) P is the aunt of Q
- c) P is the mother of Q
- d) Q is the aunt of P

Ans: b

53. If $P - R + Q$, which of the following statement is true?

- (a) P is the mother of Q
- (b) P is the sister of Q
- (c) Q is the daughter of P
- (d) P is the aunt of Q

Ans: a

54. If ' $P ´ R , Q$ ', which of the following is true?

- (a) P is the uncle of Q
- (b) P is the father of Q
- (c) P is the son of Q
- (d) P is the brother of Q

Ans: c

55. If ' $P ´ R - Q$ ', which of the following is true?

- (a) P is the brother-in-law of Q
- (b) P is the father of Q
- (c) P is the brother of Q
- (d) P is the uncle of Q

Ans: a

56. Pointing to a photograph, a man said, "I have no brother or sister but that man's father is my father's son." Whose photograph was it?

- a) His own
- b) His son's
- c) His father's
- d) His nephew's

Ans: b

57. Anil introduces Rohit as the only brother of his father's wife. How is Rohit related to Anil?

- a) Cousin
- b) Son
- c) Brother
- d) Uncle

Ans: d

58. X introduces Y saying, "He is the husband of the granddaughter of the father of my father." How is Y related to X?

- a) Brother
- b) Son
- c) Brother-in-law
- d) Son-in-law

Ans: c

59. A woman introduces a man as the son of the brother of her mother. How is the man, related to the woman?

- a) Nephew
- b) Son
- c) Cousin
- d) Grandson

Ans: c

60. Pointing to a gentleman, Deepak said, "His only brother is the father of my daughter's father." How is the gentleman related to Deepak?

- a) Grandfather
- b) Father
- c) Uncle
- d) Brother-in-law

Ans: c

61. Pointing to a girl, Nidhi said, 'She is the daughter of my grandmother's only child.' How is the girl related to Nidhi?

- a) Sister
- b) Self
- c) Cousin sister
- d) Data inadequate

Ans: d

62. Directions for Q13 to 14: Study the following information and answer the questions given below:

- (i) 'P ÷ Q' means 'P is sister of Q'.
- (ii) 'P x Q' means 'P is brother of Q'.
- (iii) 'P - Q' means 'P is mother of Q'.
- (iv) 'P + Q' means 'P is father of Q'.

63. Which of the following means 'M is maternal uncle of T'?

- a) $M \div K + T$
- b) $M \times K + T$
- c) $M \times K - T$
- d) $M \div K - T$

Ans: d

64. Which of the following means 'H is paternal grandfather of T'?

- a) $H + J + T$
- b) $T \times K + H$
- c) $H + J \times T$
- d) $H - J + T$

Ans: a

65. Pointing to a lady in the photograph "Seema said" Her son's father is the son-in-law of my mother". How is Seema related to that lady?

- a) Sister
- b) Mother
- c) Cousin
- d) Aunt

Ans: a

66. Introducing a girl, Vipin said " Her mother is the only daughter of my mother-in-law ". How is Vipin related to that girl?

- a) Uncle
- b) Father
- c) Brother
- d) Husband

Ans: b

67. A man said to a lady, "Your mother's husband's sister is my aunt". How is that lady related to the man?

- a) Daughter
- b) Sister
- c) Granddaughter
- d) Mother

Ans: b

68. Introducing a man, a woman said, "His wife is the only daughter of my father". How is the man related to the woman?

- a) Husband
- b) Brother
- c) Father-in-law
- d) Maternal uncle

Ans: a

69. Introducing a man, a woman said, "He is the only son of my mother's mother". How is the woman related to that man?

- a) Mother
- b) Cousin
- c) Niece
- d) Aunt

Ans: c

70. If B says that his mother is the only daughter of A's mother, how is B related to A?

- a) Son
- b) Uncle
- c) Nephew
- d) Grandfather

Ans: c

71. Pointing to a man, a woman said, "He is the brother of my uncle's daughter". How is that man related to woman?

- a) Cousin
- b) Son
- c) Brother-in-law
- d) Nephew

Ans: a

72. Pointing to a person, Rohit said to Neha, "His mother is the only daughter of your father". How is Neha related to that person?

- a) Aunt
- b) Mother
- c) Daughter
- d) Wife

Ans: b

73. A told B, "Yesterday I met the only brother of the daughter of my grandmother". Whom did A met?

- a) Father
- b) Brother
- c) Nephew
- d) Son

Ans: a

74. Q's mother is the sister of R and daughter of S and N is the daughter of R and sister of M. How is M related to S?

- a) Daughter's son
- b) Son's son
- c) Brother
- d) Data inadequate

Ans: d

75. If A+B means that A is the brother of B,
A/B means that A is the father of B
A*B means that A is the sister of B.
Which of the following means M is the uncle of P?

- a) M/N*P
- b) N*P/M
- c) M+S/R/P
- d) M+K/T*P

Ans: d

76. P+Q means that P is the brother of Q, P-Q means that P is the mother of Q and P*Q means that P is sister of Q. Which of the following means that M is the maternal uncle of R?

- a) M-R+K
- b) M+K-R
- c) M+K*Q
- d) There is no such symbol

Ans: b

77. If $S*T$ means that S is the brother of T, $S+T$ means that S is the father of T. Which of the following shows that O is the cousin of R?

- a) $R*T+O$
- b) $R+T*O$
- c) $R*O*T$
- d) None of these

Ans: d

78. If $P+Q$ means that P is the sister of Q, $P-Q$ means that P is the mother of Q, $P*Q$ means that P is the brother of Q, P/Q means that P is the father of Q. Which of the following means that M is the maternal uncle of R?

- a) $M/N+J$
- b) $M/T*R$
- c) $M+T/K-R$
- d) $M*T-R$

Ans: d

79. $A+B$ means that A is the son of B, $A-B$ means that A is the wife of B, $A*B$ means that A is the brother of B, A/B means that A is the mother of B, $A=B$ means that A is the sister of B. Which of the following represents P is the maternal uncle of Q?

- a) $R*P/Q$
- b) $P*R/Q$
- c) $P+R/Q$
- d) $P+R*Q$

Ans: b

80. Rajiv is the brother of Atul. Sonia is the sister of Sunil. Atul is the son of Sonia. How is Rajiv related to Sunil?

- a) Nephew
- b) Son
- c) Brother
- d) Father

Ans: a

81. A and B are sisters. R and S are brothers. A's daughter is R's sister. How is B related to S?

- a) Mother
- b) Grandmother
- c) Sister
- d) Aunt

Ans: d

82. Pointing to a lady in the photograph, Seema said, "Her son's father is the son-in-law of my mother". How is Seema related to that lady?

- a) Sister
- b) Mother
- c) Cousin
- d) Aunt

Ans: a

83. If A+B means that A is the mother of B, A/B means that A is the brother of B, A*B means that A is the son of B, A-B means that A is the sister of B. Which of the following means that C is the sister of D?

- a) C-T/D
- b) P+D/C
- c) D*T-C
- d) D-C

Ans: a

84. A and B are sisters. A is the mother of D. B has a daughter C who is married to F. G is the husband of A. How is B related to F?

- a) Mother
- b) Mother-in-law
- c) Sister-in-law
- d) Aunt

Ans: b

85. Stations P and Q are situated 200km apart. Two trains start from stations P and Q simultaneously. The train starting from station P goes towards station Q at 100 km per hour. The train starting from station Q goes towards station P at 150 km per hour. At what distance from station P will the two trains cross each other?

- a) 40km
- b) 20km
- c) 80km
- d) 30km

Ans: c

86. A is 40 m south-west of B. C is 40 m south-east of B. C is in which direction of A?

- a) South
- b) West
- c) East

d) North-east

Ans: c

87. Rama starts from a point, walks 3 km towards north-east direction, turns right and walks 4 km and again turns right and walks. What is the direction he is now facing?

- a) South
- b) South-west
- c) South-east
- d) East

Ans: b

88. A girl, running after her pet dog, covered 20 ft westward. She found the dog, and then turned left and she ran another 15 ft distance. The dog got into another lane on the left and she followed for 25 ft. she succeeded in catching the dog, only after it ran for another 8 ft on the right side. She also went in same side and then She walked straight for 23 ft in the opposite direction. How far, and in which direction, has she to go in order to reach her home?

- a) 8 ft towards north
- b) 7 ft towards south-east
- c) 15 ft towards south-west
- d) 5 ft towards west

Ans: d

89. I am facing north-west. I turn 90 degree in the clockwise direction. Then 180 degree in the anti-clockwise direction and then another 90 degree in the same direction. Which direction am I facing now?

- a) East
- b) South
- c) South-West
- d) South-east

Ans: d

90. I am facing west. I turn 45 degree in the clockwise direction and then another 180 degree in the same direction and then 270 degree in the anti-clockwise direction. Which direction am I facing now?

- a) West
- b) South
- c) South-west
- d) North-east

Ans: south west

91. A man starts from his office and goes 4 km northwards, and then he turns left and goes 3 km and reaches a point 'X'. At what distance is he from the starting point?

- a) 5km
- b) 4km
- c) 3km
- d) 6km

Ans: a

92. Shantha and Uma from a fixed point. Shantha moves 3 km northward and turns right and then covers 4 km. Uma moves 5 km westwards. Turn right and walks 3 km. the distance between Shantha and Uma now is

- a) 10km
- b) 9km
- c) 8km
- d) 6km

Ans: b

93. A man starts walking in north-easterly direction from a particular point. After walking a distance of 500 metres. He turns southwards and walks a distance of 400 metres. At the end of this walk, he is situated

- a) 300 metres north of the starting point.
- b) 100 metres north-east of the starting point
- c) 300 metres east of the starting point
- d) 100 metres east of the starting point

Ans: c

94. Deepu went 20meters to the east. He turned left and walked 15 meters. He again turned right and went 35 meters. He again turned right and walked 15 meters. How far was he from his starting point?

- a) 35m
- b) 50m
- c) 55m
- d) 60m

Ans: b

95. A rat runs 20 meters towards east and turns to right runs 10m and turns to right, runs 9m and again turns left, turns to left runs 5 m and then turns to left runs 12m and finally turns to left and runs 6 m. Now which direction is the rat facing?

- a) East
- b) North
- c) West

d) South

Ans: b

96. Two towns A and B are 60km apart. A school has to be built to serve 150 students of A, 50 students of town B. If the total distances to be travelled by all the 200 students to be as small as possible, then where is the school to be built?

- a) In town B
- b) 45km from town B
- c) In town A
- d) 45km from town B

Ans: c

97. From a point P, Samir started walking towards south and walked 40 m. He then turned towards his left and walked 30m and reached a point Q. The point Q is at what minimum distance from the point P?

- a) 50m South-west
- b) 45m South-east
- c) 35m South-East
- d) None of these

Ans: a

98. After walking 6 km, I turned right and covered a distance of 2 km, then turned left and covered a distance of 10 km. In the end, I was moving towards the north, from which direction did I start my journey?

- a) North
- b) South
- c) East
- d) West

Ans: a

99. Anish started to move in the direction of West and moved 10 m. Then he turned to his left and moved 5 m. After this he turned to his left and walked 10 m. In the end he turned to his right and walked 7m. Now how far is he and in what direction from his starting place?

- a) 5m, South
- b) 7m, South
- c) 12m, South
- d) None of these

Ans: c

100. Piyush walked 7 m in the direction of North and he turned to his right and walked 6 m. After this he turned to his right and moved 15 m. Now how far is he from the starting point?

- a) 10m
- b) 8m
- c) 19m
- d) 6m

Ans: a

101. Menjita started to move in the direction of North-East and moved 10 $\sqrt{2}$ m. After this he turned to the south and moved 10 m. Then she turned to her left and moved 12 m. In the end she turned to her right and moved 7 m. Now how far is she from her starting point?

- a) 16m
- b) 18m
- c) 23m
- d) 25m

Ans: c

102. Kundan moved 3 km in the West. Then he turned to his left and moved 4 km. Again he turned to his right and moved 2 km. After this he turned to his right and moved 9 km. Now how far is he and in what direction from the starting point?

- a) $5\sqrt{2}$ km, North-West
- b) 12 km, North-East
- c) 10 km, North-West
- d) None of these

Ans: a

103. The door of Suraj's house is towards the East. He walks straight 100 m after coming out of the door and then goes 125 m in the reverse direction due to some reason. After this he turns to his right and goes 50 m. In what direction is he now?

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

Ans: c

104. Rajesh moved 6 km to East. Then he moved 10 km after turning to his right. He then moved 6 km after turning to his right. Again he moved 15 km after turning to his left. Now in what direction and how far is he from the starting point?

- a) 15 km, south
- b) 21 km, North

- c) 25km, South
- d) 21km, South

Ans: c

105. Ashok started to move in the direction of North. After moving 30m, he turned to his left and moved 40 m. Again he turned to his left and moved 30 m. now how far is he from the starting point?

- a) 50m
- b) 40m
- c) 30m
- d) 20m

Ans: b

106. Vijyan started to move in the direction of south. After moving 15 m, he turned to his left and moved 15 m. again he turned to his left and moved 15 m. Now how far is he from his starting point and in what direction?

- a) 15m, North
- b) 15m, west
- c) 30m, east
- d) None of these

Ans: d

107. Shanaz has to go to the market. From her house which is in the North direction, she comes to the crossing. A road to her left goes to the park and direct straight is the office. In what direction is the market?

- a) North
- b) East
- c) South
- d) Data inadequate

Ans: d

108. Mohit moves 5 km in the direction of South then he moves 3 km after turning to his right. Again he turns to his right and moves 5 km. after this he turns to his left and goes 5 km. now how far is he from his starting point and in what direction?

- a) 5km, west
- b) 3km, north
- c) 8km, east
- d) None of these

Ans: d

109. Anoop starts walking towards south. After walking 15m he turns towards north. After walking 20m, he turns towards east and walks 10m. He then turns towards south and walks 5m. How far is he from his original position and in which direction?

- a) 10m North
- b) 10m South
- c) 10m west
- d) 10m East

Ans: d

110. Rakesh is standing at a point. He walks 20m towards East and further 10m towards south. Then he walks 35m towards West and further 5m towards North then he walks 50m towards the East. What is the straight distance in meters between his starting point and the point where he reached?

- a) 0
- b) 5
- c) 10
- d) Cannot be determined

Ans: b

111. Starting from a point, Raju walked 12 m North, he turned right and walked 10 m, he again turned right and walked 12 m, then he turned left and walked 5 m. How far is he now and in which direction from the starting point?

- a) 27 m towards East
- b) 5 m towards East
- c) 10 m towards West
- d) 15 m towards East

Ans: d

112. Facing towards South, Ram started walking and turned left after walking 30 m, he walked 25 m and turned left and walked 30 m. How far is he from his starting position and in which direction?

- a) At the starting point only
- b) 25 m, West
- c) 25 m, East
- d) 30 m, East

Ans: c

113. A started from a place. After walking for 1 km, he turns to the left, then walking for $\frac{1}{2}$ km, he again turns to left. Now, he is going Eastward direction. In which direction, did he originally start?

- a) West
- b) East

- c) South
- d) North

Ans: a

114. From point P, Akshay starts walking towards East. After walking 30 m, he turns to his right and walks 10 m. He then turns to his right and walks for 30 m. He again turns to his right and walks 30 m. How far is he from point P and in which direction?

- a) Point P itself
- b) 10 m, North
- c) 20 m, West
- d) 20 m, North

Ans: d

115. A man starts from his house and walks 10 km in South direction, then he turns right and goes 6 km, again he turns right and goes 10 km and finally turns right and goes 6 km. at which distance is he from the starting point and in which direction?

- a) 2 km, North
- b) 3 km, South
- c) At the starting point
- d) 4 Km, East

Ans: c

116. 'A' walks 10 m towards East and then 10 m to his right. Then every time turning to his left, he walks 5, 15 and 15 m respectively. How far is he from his starting point?

- a) 5 m
- b) 10 m
- c) 15 m
- d) 20 m

Ans: a

117. On a playing ground Dev, Kumar, Nilesh, Ankur and Pintu are standing as directed below facing the north:

- i) Kumar is 40m to the right of Ankur
- ii) Dev is 60m to the south of Kumar
- iii) Nilesh is 25m to the west of Ankur
- iv) Pintu is 90m to the north of Dev

Who is the North-east of the person, who is to the left of Kumar

- a) Nilesh
- b) Ankur
- c) Dev

d) None of these

Ans: d

118. If a boy walks from Nilesh, meets Ankur followed by Kumar, Dev and then Pintu, how many metres has he walked if he has travelled the straight distance all through?

- a) 215m
- b) 155m
- c) 245m
- d) 185m

Ans: a

119. Village Chimur is 20km to the North of village Rewa. Village Rahate is 18km to the East of village Rewa. Village Angner is 12km to the West of village Chimur. If Sanjay starts from village Rahate and goes to the village Angne, in which direction is he from the starting point?

- a) North
- b) North-west
- c) South
- d) South-east

Ans: b

120. B is to the South – West of A, C is to the East of B and South – East of A and D is to the North of C in line with B and A. In which direction of A is D located?

- a) North
- b) East
- c) South - East
- d) North – East

Ans: d

121. From the original position given in the figure 'A' and 'B' moves one arm length clockwise and cross over to the diagonally opposite corners. 'C' and 'D' move one arm length anticlockwise and cross over the diagonally opposite corners. The original configuration A, D, B, C has now changed to:

- a) CBDA
- b) BDAC
- c) DACB
- d) BCAD

Ans: a

122. From the position in original figure. 'A' and 'C' move diagonally to opposite corners and then one side each clockwise and anticlockwise respectively. Where is 'A' now?

- a) At the North – East corner
- b) At the North – West corner
- c) At the South – West corner
- d) At the South – East corner

Ans: d

123. From the original position, D and B move one and half-length of sides, clockwise and anticlockwise respectively. Which one of the following statement is true?

- a) B and D are both at the midpoint between A and C
- b) D is the midpoint between original position of A and C and B is at the corner originally occupied by C. is
- c) B is the midpoint between original position of A and D is at the midpoint between original positions of B and C
- d) B is at the midpoint between A and C and D is at the midpoint between original positions of B and C.

Ans: c

124. The town of Paranda is located on Green lake. The town of Akram but West of Paranda. Tokhanda is East of Akram but West of Paranda. Kokran is East of Bopri but West of Tokhanda and Akram. If they are all in the same district, which town is the farthest West?

- a) Paranda
- b) Bopri
- c) Akram
- d) Tokhanda

Ans: b

125. Ravi travelled 4km straight towards South. He turned left and travelled 6km straight, then turned right and travelled 4km straight. How far is he from the starting point?

- a) 8km
- b) 10km
- c) 12km
- d) 18km

Ans: b

Read the following information carefully and then answer the questions based on it.

125. Seven boys A, B, C, D, E, F and G are standing in a line.

- (i) G is between A and E.
- (ii) F and A have one boy between them.
- (iii) E and C have two boys between them.
- (iv) D is to the immediate right of F
- (v) C and B have three boys between them.

Who is second from left?

- a) C
- b) G
- c) E
- d) A

Ans: c

C is standing between

- a) A and F
- b) D and G
- c) A and D
- d) F and G

Ans: a

126. Read the following information and answer the questions based on it.

Ten students A, B, C, D, E, F, G, H, I and J are sitting in a row facing west.

- (i) B and F are not sitting on either of the edges.
- (ii) G is sitting to the left of D and H is sitting to the right of J.
- (iii) There are four persons between E and A.
- (iv) I is to the north of B and F is to the south of D.
- (v) There are two persons between H and C.
- (vi) J is in between A and D and G is in between E and F.

Who is sitting at the seventh place counting from the left?

- a) H
- b) C
- c) J
- d) Either H or C

Ans: d

Who among the following is definitely sitting at one of the ends?

- a) C
- b) H
- c) E

d) Cannot be determined

Ans: c

Who are the immediate neighbours of I?

- a) B,C
- b) B,H
- c) A,H
- d) Cannot be determined

Ans: d

Who is sitting second left of D?

- a) G
- b) F
- c) E
- d) J

Ans: a

If G and A interchange their positions, then who become the immediate neighbours of E?

- a) G and F
- b) F only
- c) A only
- d) J and H

Ans: c

127. Read the following information and answer the questions based on it.

- (i) Eight friends A, B, C, D, E, F, G and H are seated in a circle facing centre.
- (ii) D is between B and G and F is between A and H.
- (iii) E is second to the right of A.

Which of the following is A's position?

- (a) Left of F
- (b) Right of F
- (c) Between E and F
- (d) Can't be determined

Ans: b

Which of the information statement are not required to ascertain the position of C?

- (a) (i) above
- (b) Either (ii) or (iii) above
- (c) (iii) above

(d) All are required

Ans: d

Which of the following is C's position?

- (a) Between E and F
- (b) Between G and E
- (c) Second to the left of B
- (d) None of these

Ans: c

128. Read the following information and answer the questions based on it.

- (i) Seven students P, Q, R, S, T, U and V take a series of tests.
- (ii) No two students get similar marks.
- (iii) V always scores more than P.
- (iv) P always scores more than Q.
- (v) Each time either R scores the highest and T gets the least or alternatively S scores the highest and U or Q scores the least.

If V is ranked fifth, which of these must be true?

- (a) S Scores the highest
- (b) R is ranked second
- (c) T is ranked third
- (d) Q is ranked fourth

Ans: a

If R gets the most, V should be ranked not lower than:

- a) Second
- b) Third
- c) Fourth
- d) Fifth

Ans: c

If S is ranked second, which of the following can be true?

- (a) P gets more than R
- (b) V gets more than S
- (c) P gets more than S
- (d) U gets more than V

Ans: d

If S is ranked sixth, and Q is ranked fifth, which of the following can be true?

- (a) V is ranked fifth or fourth
- (b) R is ranked second or third
- (c) P is ranked second or fifth
- (d) U is ranked third or fourth

Ans: d

If R is ranked second and Q is ranked fifth, which of these must be true?

- (a) S is ranked third
- (b) P is ranked third
- (c) V is ranked fourth
- (d) T is ranked sixth

Ans: d

129. The following information and answer the questions based on the basis of the information, select the correct alternative for each question given after the information:
A training college has to conduct a refresher course for teachers of seven different subjects - Mechanics, Psychology, Philosophy, Sociology, Economics, Science and Engineering from 22nd July to 29th July.

- (i) Course should start with Psychology
- (ii) 23rd July, being Sunday, should be a holiday.
- (iii) Science subject should be on the previous day of the Engineering subject.
- (iv) Course should end with Mechanics subject.
- (v) Philosophy should be immediately after holiday.
- (vi) There should be a gap of one day between Economics and Engineering.
- (vii) There should be a gap of two days between Sociology and Economics.

The refresher course will start with which one of the following subjects?

- (a) Psychology
- (b) Mechanics
- (c) Philosophy
- (d) Economics

Ans: a

Which subject will be on Tuesday?

- (a) Mechanics
- (b) Engineering
- (c) Economics
- (d) Psychology

Ans: c

Which subject is followed by Science?

- (a) Psychology

- (b) Philosophy
- (c) Economics
- (d) Engineering

Ans: d

Which subject precedes Mechanics?

- (a) Economics
- (b) Engineering
- (c) Philosophy
- (d) None of these

Ans: d

How many days' gap is there between Science and Philosophy?

- (a) One
- (b) Two
- (c) Three
- (d) No gap

Ans: a

130. Read the following information and answer the questions based on it. P, Q, R, S, T and U are six students procuring their master's degree in six different subjects: English, History, Philosophy, Physics, Statistics and Maths.

- (i) Two of them stay in hostels, two stay as paying guests and the remaining two stay at their home.
- (ii) R does not stay as paying guest and studies Philosophy
- (iii) The students studying Statistics and History don't stay as paying guest.
- (iv) T studies Maths and S studies Physics
- (v) U & S stay in hostel. T stays as paying guest and Q stays at home.

Which of the following pair of students stay one each at hostel and at home?

- (a) U, S
- (b) S, R
- (c) Q, R
- (d) Data inadequate

Ans: b

Who studies English?

- (a) S
- (b) T, Q
- (c) None
- (d) R

Ans: c

Which of the following pair of students stay at home?

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

Ans: b

Which of the following combination of subjects & places of stay is not correct?

- (a) Physics - Hostel
- (b) English - Hostel
- (c) Philosophy- Home
- (d) Maths -P.G

Ans: b

Which subject does Q studies?

- (a) History
- (b) Statistics
- (c) History or Statistics
- (d) Data inadequate

Ans: c