

1. If the following numbers are rewritten by interchanging the digits in ten's place and hundred's place and then arranging them in the descending order. What will be the second digit of the newly formed fifth number from your right ?

479, 736, 895, 978, 389, 675

- (A) 3
- (B) 4 (C) 5
- (D) 6

Ans : (C)

2. P is 60 m South-East of Q. R is 60 m North-East of Q. Then R is in which direction of P ?

- (A) North
- (B) North-East
- (C) South
- (D) South-East

Ans : (A)

Directions (Q. 3-5) Read the following information for answering the questions that follow

On a playing ground A, B, C, D and E are standing as described below facing the North.

- (i) B is 50 metres to the right of D.
- (ii) A is 60 metres to the South of B
- (iii) C is 40 metres to the West of D.
- (iv) E is 80 metres to the North of A.

3. If a boy walks from C, meets D followed by B, A and then E, how many metres has he walked if he has travelled the straight distance all through ?

- (A) 120
- (B) 150
- (C) 170
- (D) 230

Ans : (D)

4. What is the minimum distance (in metre approximately) between C and E?

- (A) 53
- (B) 78
- (C) 92
- (D) 120

Ans : (C)

5. Who is to the South-East of the person who is to the left of D ?

- (A) A
- (B) B
- (C) C
- (D) E

Ans : (A)

6. A man was walking in the evening just before the sun set. His wife said that, his shadow fell on his right. If the wife was walking in the opposite direction of the man, then which direction the wife was facing ?

- (A) North
- (B) West

(C) South
(D) East
Ans : (C)

Directions (Q. 7-11) In each of the following questions choose the set of numbers from the four alternative sets that is similar to the given set.

7. Given set : (4, 9, 18)
(A) (8, 14, 22)
(B) (10, 15, 25)
(C) (6, 12, 23)
(D) (12, 17, 26)
Ans : (D)

8. Given set : (10, 14, 17)
(A) (4, 11, 14)
(B) (9, 12,
(C) (8, 13, 18)
(D) (6, 9, 12)
Ans : (A)

9. Given set : (7, 27, 55)
(A) (21, 35, 52)
(B) (18, 42, 65)
(C) (16, 40, 72)
(D) (13, 30, 58)
Ans : (C)

10. Given set : (39, 28, 19)
(A) (84, 67, 52)
(B) (52, 25, 17)
(C) (70, 49, 36)
(D) (65, 45, 21)
Ans : (A)

11. Given set : (246, 257, 358)
(A) (233, 343, 345)
(B) (273, 365, 367)
(C) (143, 226, 237)
(D) (145, 235, 325)
Ans : (A)

Directions (Q. 12-16) Each question contains six or seven statements followed by four sets of combinations of three. Choose the set in which the statements are logically related.

12.
(1) All books are having pages.
(2) All kings are having pages.
(3) All kings are books.
(B) 4, 2, 6
(C) 1, 5, 3
(D) 2, 4, 5
Ans : (B)

Directions (Q. 17-21) Each of the questions below consists of a question and two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Give answers

- (A) If the data in statement (I) alone are sufficient to answer the question, while the data in statement (II) alone are not sufficient to answer the question;
- (B) If the data in statement (II) alone are sufficient to answer the question, while the data in statement (I) alone are not sufficient to answer the questions;
- (C) If the data even in both statements (I) and (II) together are not sufficient to answer the question;
- (D) If the data in both statement (I) and (II) together are necessary to answer the question.

17. In which direction is Mahatmaji's statue facing ?

- I. The statue is towards the northern end of the city.
- II. The statue's shadow falls towards East at 5 O'clock in the evening.

Ans : (C)

18. What is the total number of pupils in the final year class ?

- I. The number of boys in the final year class is twice as much as the number of girls in that class.
- II. The sum of the ages of all the pupils in the class is 399 years and their average age is 19 years.

Ans : (B)

19. Who is the tallest among A, B, C and D ?

- I. A is taller than C.
- II. B is taller than C and D.

Ans : (C)

20. How many Sundays are there in a particular month of a particular year?

- I. The month begins on Monday.
- II. The month ends on Wednesday.

Ans : (D)

21. What is the total number of pages in this book ?

- I. I counted 132 pages from the beginning of this book.
- II. My wife counted 138 pages starting from the end of the same book.

Ans : (C)

Directions (Q. 22-26) In each of the questions given below, there is a statement followed by three assumptions numbered I, II and III. An assumption is something supposed or taken for granted. You have to consider the statement and assumptions and then decide, which of the assumption(s) is/are implicit in the statement.

22. Statement : During pre-harvest kharif seasons, the government has decided to release vast quantity of foodgrains from FCI.

- Assumptions : I. There may be a shortage of foodgrains in the market during this season.
- II. The kharif crop may be able to replenish the stock of FCI.
- III. There may be a demand from the farmers to procure kharif crop immediately after harvest.

- (A) None is implicit
- (B) Only I and II are implicit
- (C) Only II and III are implicit
- (D) All are implicit

Ans : (D)

23. Statement : To improve the employment situation in India, there is a need to recast the present educational system towards implementation of scientific discoveries in daily life.

Assumptions :I. The students after completing such education may be able to earn their livelihood.

II. This may bring meaning of education in the minds of the youth.

III. The state may earn more revenue as more and more people will engage themselves in self employment.

(A) Only I and II are implicit

(B) Only III is implicit

(C) Only I and III are implicit

(D) None is implicit

Ans : (A)

24. Statement : To increase profit, the oil exporting countries decided to reduce the production of crude by 5 million barrels per day. Assumptions :I. The price of crude may increase due to less production. II. The demand of crude may remain same in future.

III. Other countries may continue buying crude from these countries. (A) All are implicit

(B) Only II and III are implicit (C) Only I and II are implicit (D) None is implicit

Ans : (C)

25. Statement : □We do not want you to see our product on newspaper, visit our shop to get a full view.□ □ an advertisement.

Assumptions :I. People generally decide to purchase any product after seeing the name in the advertisement.

II. Uncommon appeal may attract the customers. III. People may come to see the product.

(A) All are implicit

(B) None is implicit

(C) Only II and III are implicit

(D) Only I and II are implicit

Ans : (A)

26. Statement : The Reserve Bank of India has directed the banks to refuse fresh loans to major defaulters.

Assumptions :I. The banks may still give loans to the defaulters.

II. The defaulters may repay the earlier loan to get fresh loan.

III. The banks may recover the bad loans through such harsh measures.

(A) All are implicit

(B) None is implicit

(C) Both II and III are implicit

(D) Both I and II are implicit

Ans : (C)

Directions□(Q. 27□31) In questions given below, statements 1 and 2 are followed by conclusions I and II. Taking the statements to be right although they may seem at variance with commonly accepted facts, mark your answers as under□

(A) If only conclusion I follows.

(B) If only conclusion II follows.

(C) If both I and II follows.

(D) Neither I nor II follows.

27. Statements :

1. All hands are machines.

2. All machines are wheels.

Conclusions :I. All wheels are hands.

II. All hands are wheels.

Ans : (B)

28. Statements :

1. Some buds are leaves.
 2. Some leaves are red. Conclusions :
- I. Some buds are red.
 - II. Some leaves are not buds.

Ans : (B)

29. Statements :

1. Some stones are shells.
2. All shells are pearls.

Conclusions :

- I. Some stones are pearls.
- II. All pearls are shells.

Ans : (A)

30. Statements :

1. Brown is red and blue is green.
2. Green is pink and yellow is red. Conclusions :

- I. Yellow is brown.
- II. Pink is blue.

Ans : (C)

Quantitative Aptitude

- If a pipe A fills a tank in 10 hours and a pipe B fills it in 15 hours, then the tank will be filled by A and B together in how much time?
A. 10 hrs. B. 9 hrs C. 6 hrs D. 8 hrs
- Two pipes P & Q can separately fill a cistern in 12 minutes and 18 minutes respectively. In how many minutes can both the pipes fill the cistern, if opened together?
A. $7\frac{1}{5}$ min B. 7 min C. $7\frac{1}{2}$ min D. 10 min
- Two pipes A & B can fill a tank in 36 hrs and 45 hrs respectively. If both pipes are opened simultaneously, how much time will be taken to fill the tank?
A. 20 hrs B. 21 hrs C. 22 hrs D. None
- A pipe can fill a tank in 15hrs. Due to leak in the bottom, it is filled in 20 hrs. If the tank is full, how much time will the leak take to empty it?
A. 55 hrs B. 60 hrs C. 61 hrs D. None
- If a pipe A fills a tank in 10 hrs and pipe B empties it in 15 hrs, then in how much time will the tank be filled up if A & B are both opened?
A. 4 hrs B. 14 hrs C. 20 hrs D. 30 hrs
- Two taps A & B can fill a water reservoir in 12 and 15 hrs respectively. How long would the two taps take to fill this reservoir if both are opened together?
A. $6\frac{1}{4}$ hrs B. $6\frac{1}{2}$ hrs C. $7\frac{1}{3}$ hrs D. None
- Two taps can fill a tank in 24 minutes and 30 minutes respectively. Both of them are opened together, but the first tap is turned off after 8 minutes. Now find how long would the second tap take to fill the tank.
A. $24\frac{1}{2}$ min B. 12 min C. $13\frac{2}{3}$ min D. 16 min
- Two pipes A & B can fill a tank in 24 min and 32 min respectively. If both the pipes are opened simultaneously, the time after which B should be closed so that tank is filled in 18 minutes would be?
A. 18 min B. 10 min C. 9 min D. 8 min
- Two pipes A & B can fill a tank in 24 minutes and 36 minutes respectively. If both the pipes are opened simultaneously, the time after which A should be closed so that tank is filled in 18 min would be?
A. 12 min B. 10 min C. 9 min D. None
- Two pipes A & B separately fill a cistern in 12 and 15 min respectively while a 3rd pipe C can empty it in 10 minutes. How long will it take to fill the cistern if all pipes are opened?
A. 10 min B. 20 min C. 30 min D. 22 min
- A pipe fills a tank in 2 hrs and another fills the tank in 3hrs but a 3rd pipe empties the filled tank in 5 hrs. Then if three pipes are opened, the tank will be filled in:
A. 1 hr B. $1\frac{11}{19}$ hr C. $2\frac{1}{9}$ D. None
- What is the value of: $1\frac{1}{2}$
$$1 + \frac{1}{1 + \frac{1}{4}}$$

A. $\frac{3}{2}$ B. $\frac{5}{4}$ C. $\frac{5}{6}$ D. 1
- $\sqrt{342/36} * \sqrt{729/9} * \sqrt{25/196} =$
A. $\frac{135}{14}$ B. $\frac{18}{5}$ C. $\frac{18}{7}$ D. None
- $9.75 + 25.88 + x = 41.18$
A. 5.55 B. 5.75 C. 6.57 D. 4.23
- $30\% \text{ of } 270 + \frac{5}{8} \text{ of } 64 = x$
A. 120 B. 81 C. 121 D. 242
- $73.85 + 215.345 - 167.2134 = x$
A. 456.4084 B. 121.6711 C. 120.8296 D. None
- $x\% \text{ of } 150 + 250 = 280$
A. 30 B. 10 C. 40 D. 20
- $25\% \text{ of } 40 \div 4\% \text{ of } 25 = x$
A. 1 B. 10 C. 0 D. 2
- Simplify: $(3^4 * 3^7) \div 3^{10}$
A. 3 B. 9 C. 27 D. 81
- Find the value of: $\frac{2.70 * 2.70 + 4.30 * 4.30 + 8.60 * 2.70}{2.70 + 4.30}$
A. 6.8 B. 7.6 C. 7.0 D. 8.5

Answers:

- 1.
2. C
3. A
4. A
5. B
6. D
7. B
8. C
9. A
10. A
11. B
12. B
13. C
14. D
15. A
16. C
17. D
18. D
19. B

$$t = y \left(\frac{1+z}{x} \right)$$

$$t = x \left(\frac{1-zy}{y} \right)$$