



Permutation & Combination

Probability & Mensuration



Statements:

I Standard of living among the middle class society is constantly going up since part of few years.

II Indian Economy is observing remarkable growth.

- A. Statement I is the cause and statement II is its effect.
- B. Statement II is the cause and statement I is its effect.
- C. Both the statements I and II are independent causes.
- D. Both the statements I and II are effects of independent causes.

Answer: Option A

Statements:

I Importance of Yoga and exercise is being realized by all sections of the society.

II There is an increasing awareness about health in the society particularly among middle ages group of people.

- A. Statement I is the cause and statement II is its effect.
- B. Statement II is the cause and statement I is its effect.
- C. Both the statements I and II are independent causes.
- D. Both the statements I and II are effects of independent causes.

Answer: Option B

Statements: Some actors are singers. All the singers are dancers.

Conclusions:

Some actors are dancers.

No singer is actor.

- A. Only (1) conclusion follows

- B. Only (2) conclusion follows
- C. Either (1) or (2) follows
- D. Neither (1) nor (2) follows

Answer: Option A

Statements: All the harmoniums are instruments. All the instruments are flutes.

Conclusions:

All the flutes are instruments.

All the harmoniums are flutes.

- A. Only (1) conclusion follows
- B. Only (2) conclusion follows
- C. Either (1) or (2) follows
- D. Neither (1) nor (2) follows

Answer: Option B

Question: In which year was Rahul born ?

Statements:

Rahul at present is 25 years younger to his mother.

Rahul's brother, who was born in 1964, is 35 years younger to his mother.

- A. I alone is sufficient while II alone is not sufficient
- B. II alone is sufficient while I alone is not sufficient
- C. Either I or II is sufficient
- D. Both I and II are sufficient

Answer: Option D

Question: How much was the total sale of the company ?

Statements:

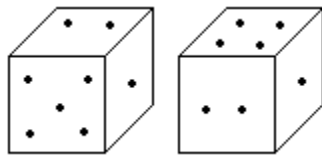
The company sold 8000 units of product A each costing Rs. 25.

This company has no other product line.

- A. I alone is sufficient while II alone is not sufficient
- B. II alone is sufficient while I alone is not sufficient
- C. Either I or II is sufficient
- D. Both I and II are sufficient

Answer: Option D

Two positions of dice are shown below. How many points will appear on the opposite to the face containing 5 points?



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

Answer: Option D

If the odd numbered dice have even number of dots on their top faces, then what would be the total number of dots on the top faces of their dice?

- A. 8
- B. 10
- C. 12
- D. 14

Answer: Option A

If the dice (I), (II) and (III) have even number of dots on their bottom faces, then what would be the total number of dots on their top faces?

- A. 7
- B. 11

C. 12

D. 14

Answer: Option B

Statement:

Anger is energy, in a more proactive way and how to channelize it is in itself a skill.

Assumptions:

I. Anger needs to be channelized.

II. Only skillful people can channelize anger to energy.

A. if only assumption I is implicit.

B. if only assumption II is implicit.

C. if either I or II is implicit.

D. if neither I nor II is implicit.

Answer: Option B

Statement:

"Enjoy your challenges" - an advertisement of a car brand.

Assumptions:

I. People wish to enjoy challenges.

II. There are people who are willing to buy a car.

A. if only assumption I is implicit.

B. if only assumption II is implicit.

C. if either I or II is implicit.

D. if neither I nor II is implicit.

Answer: Option D

Statement:

The car dealer found that there was a tremendous response for the new XYZ's car booking with long queues of people complaining about the duration of business hours and arrangements.

Courses of action:

I. People should make their arrangement of lunch and snacks while going for car XYZ's booking and be ready to spend several hours.

II. Arrangement should be made for more booking desks and increase business hours to serve more people in less time.

- A. If only I follows
- B. If only II follows
- C. If either I or II follows
- D. If neither I nor II follows

Answer: Option B

Statement:

The vegetable traders feel that the prices of onion will again go up shortly in the state P.

Courses of action:

I. The 'P' state government should purchase and store sufficient quantity of onion in advance to control price.

II. The 'P' state government should make available network of fair price shops for the sale of onions during period of shortage.

- A. If only I follows
- B. If only II follows
- C. If either I or II follows
- D. If both I and II follow

Answer: Option D

Statement:

The board of directors of the company 'K' has decided in principle to wind up or sell off its business in all but core competency areas.

Courses of action:

- I. The top management will have to first identify core competency areas of its operation.
 - II. It will have to identify and shift its people from core competency areas to non core area.
- A. If only I follows
 - B. If only II follows
 - C. If either I or II follows
 - D. If neither I nor II follows

Answer: Option A

Statement:

Should vacations of court judges be reduced?

Arguments:

- I. Yes, it will speed up judicial process and many people are likely to get justice in reasonable time.
 - II. Yes, it is a sign of British legacy, why should we carry it further?
- A. If only argument I is strong
 - B. If only argument II is strong
 - C. If either I or II is strong
 - D. If neither I nor II is strong

Answer: Option A

Statement:

Although we have rating agencies like Crisil, ICRA, there is demand to have a separate rating agency of IT companies to protect investors.

Conclusions:

- I. Assessment of financial worth of IT companies calls for separate, set of skills, insight and competencies.
 - II. Now the investors investing in IT companies will get protection of their investment.
- A. If only conclusion I follows

- B. If only conclusion II follows
- C. If either I or II follows
- D. If neither I nor II follows

Answer: Option A

Statement:

Population increase coupled with depleting resources is going to be the scenario of many developing countries in days to come.

Conclusions:

- I. The population of developing countries will not continue to increase in future.
- II. It will be very difficult for the governments of developing countries to provide decent quality of life.

- A. If only conclusion I follows
- B. If only conclusion II follows
- C. If either I or II follows
- D. If neither I nor II follows

Answer: Option B

The cause of corruption in medical education is shortage of seats, and fewer doctors than required for the population and even fewer specialists.

Which of the following can be inferred from the above?

- A. Students pay bribes to the management of institutions to avail seats.
- B. The criteria to select students to fill medical seats are flexible.
- C. There is a set standard regarding the doctors to population ratio.
- D. Most of the doctors are general physicians.

Answer: Option C

1.site 2. Plan 3. Rent 4. Money 5. Building

- A. 4,1,2,5,3
- B. 3,4,2,5,1
- C. 2,3,5,1,4
- D. 1,2,3,5,4

Answer: Option A

1. Milky way 2. Sun 3. Moon 4. Earth 5. Stars

- A. 4,3,2,5,1
- B. 3,4,2,5,1
- C. 2,3,4,5,1
- D. 1,4,3,2,5

Answer: Option B

Statement:

Should Indian scientists working abroad be called back to India?

Arguments:

I. Yes, they must serve the motherland first and forget about discoveries, honours, facilities and all.

II. No, we have enough talent, let them stay where they want.

- A. If only argument I is strong
- B. If only argument II is strong
- C. If either I or II is strong
- D. If neither I nor II is strong

Answer: Option D

Statements:

No door is dog.

All the dogs are cats.

Conclusions:

No door is cat.

No cat is door.

Some cats are dogs.

All the cats are dogs.

- A. Only (2) and (4)
- B. Only (1) and (3)
- C. Only (3) and (4)
- D. Only (3)

Answer: Option D

Statements:

All green are blue.

All blue are white.

Conclusions:

Some blue are green.

Some white are green.

Some green are not white.

All white are blue.

- A. Only (1) and (2)
- B. Only (1) and (3)
- C. Only (1) and (4)
- D. Only (2) and (4)

Answer: Option A

Question: What will be the total weight of 10 poles, each of the same weight ?

Statements:

One-fourth of the weight of each pole is 5 kg.

The total weight of three poles is 20 kilograms more than the total weight of two poles.

- A. I alone is sufficient while II alone is not sufficient
- B. II alone is sufficient while I alone is not sufficient
- C. Either I or II is sufficient
- D. Neither I nor II is sufficient

Answer: Option C

Question: Among T, V, B, E and C, who is the third from the top when arranged in the descending order of their weights?

Statements:

B is heavier than T and C and is less heavier than V who is not the heaviest.

C is heavier than only T.

- A. I alone is sufficient while II alone is not sufficient
- B. II alone is sufficient while I alone is not sufficient
- C. Either I or II is sufficient
- D. Neither I nor II is sufficient

Answer: Option A

Question: How many students in a class play football?

Statements:

Only boys play football.

There are forty boys and thirty girls in the class.

- A. I alone is sufficient while II alone is not sufficient
- B. II alone is sufficient while I alone is not sufficient
- C. Either I or II is sufficient
- D. Neither I nor II is sufficient

Answer: Option D

Statement:

The 'M' state government has decided hence forth to award the road construction contracts through open tenders only.

Courses of action:

I. The 'M' state will not be able to get the work done swiftly as it will have to go through tender and other procedures.

II. Hence forth the quality of roads constructed may be far better.

A. If only I follows

B. If only II follows

C. If either I or II follows

D. If neither I nor II follows

Answer: Option D

Statement:

Should vacations of court judges be reduced?

Arguments:

I. Yes, it will speed up judicial process and many people are likely to get justice in reasonable time.

II. Yes, it is a sign of British legacy, why should we carry it further?

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Answer: Option A

Statement:

Should Indian scientists working abroad be called back to India?

Arguments:

I. Yes, they must serve the motherland first and forget about discoveries, honours, facilities and all.

II. No, we have enough talent, let them stay where they want.

A. If only argument I is strong

B. If only argument II is strong

C. If either I or II is strong

D. If neither I nor II is strong

Answer: Option D

Statement:

Should metropolitan corporations be changed to public limited companies to enhance their efficiency and reduce expenditure?

Arguments:

I. Yes, it will bring in commercial management and citizens would expect good service at reasonable rates.

II. No, it will end the local elections because there will be no elected corporator.

A. If only argument I is strong

B. If only argument II is strong

C. If either I or II is strong

D. If neither I nor II is strong

Answer: Option A

Two dice are thrown simultaneously. What is the probability of getting two numbers whose product is even?

A. $\frac{1}{2}$

B. $\frac{3}{4}$

4

C. $\frac{3}{8}$

D. $\frac{5}{16}$

In a class, there are 15 boys and 10 girls. Three students are selected at random. The probability that 1 girl and 2 boys are selected, is:

A. $\frac{21}{46}$

B. $\frac{25}{117}$

C. $\frac{1}{50}$

D. $\frac{3}{25}$

In a lottery, there are 10 prizes and 25 blanks. A lottery is drawn at random. What is the probability of getting a prize?

A. $\frac{1}{10}$

B. $\frac{2}{5}$

C. $\frac{2}{7}$

D. $\frac{5}{7}$

From a pack of 52 cards, two cards are drawn together at random. What is the probability of both the cards being kings?

- A. $\frac{1}{15}$
- B. $\frac{25}{57}$
- C. $\frac{35}{256}$
- D. $\frac{1}{221}$**

Two dice are tossed. The probability that the total score is a prime number is:

- A. $\frac{1}{6}$
- B. $\frac{5}{12}$**
- C. $\frac{1}{2}$
- D. $\frac{7}{9}$

A card is drawn from a pack of 52 cards. The probability of getting a queen of club or a king of heart is:

- A. $\frac{1}{13}$
- B. $\frac{2}{13}$
- C. $\frac{1}{26}$**
- D. $\frac{1}{52}$

A bag contains 4 white, 5 red and 6 blue balls. Three balls are drawn at random from the bag. The probability that all of them are red, is:

- A. $\frac{1}{22}$
- B. $\frac{3}{22}$
- C. $\frac{2}{91}$**
- D. $\frac{2}{77}$

One card is drawn at random from a pack of 52 cards. What is the probability that the card drawn is a face card (Jack, Queen and King only)?

- A. $\frac{1}{13}$
- B. $\frac{3}{13}$**
- C. $\frac{1}{4}$
- D. $\frac{9}{52}$

Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is a multiple of 3 or 5?

- A. $\frac{1}{2}$
- B. $\frac{2}{5}$
- C. $\frac{8}{15}$

D. $\frac{9}{20}$

What is the probability of getting a sum 9 from two throws of a dice?

A. $\frac{1}{6}$

B. $\frac{1}{8}$

C. $\frac{1}{9}$

D. $\frac{1}{12}$