Placement Classes

Telegram - https://t.me/placementclasses

AMCAT APTITUDE QUESTIONS

SET - 4

Question 1 :- Choose the correct answer.

A polygon has 44 diagonals, the number of its sides is

Option 1 : 10

Option 2 : 11

Option 3 : 12

Option 4 : 22

Answer :- B

Question 2 :- Choose the correct answer.

The number of triangles that can be formed by choosing the vertices from a set of 12 points, seven of which lie on the same straight line is

Option 1 : 105

Option 2 : 115

Option 3 : 175

Option 4 : 185

Answer :- D

Question 3 :- Choose the correct answer.

There are 5 letters and five addressed envelopes. the number of ways in which all the letters can be put in wrong envelopes is

Option 1 : 119

Option 2 : 44

Option 3 : 59

Option 4 : 40

Answer :- B

Question 4 :- Choose the correct answer.

The number of ways in which 8 different flowers can be strung to form a garland so that 4 particular flowers are never separated is

Option 1 : 960

Option 2 : 2880

Option 3 : 288

Option 4 : 576

Answer :- B

Question 5 :- Choose the correct answer.

At an election there are five candidates and three members to be elected , and a voter may vote for any number of candidates not greater than the number to be elected. Then the number of ways in which a voter may vote is

Option 1 : 25

Option 2 : 30

Option 3 : 32

Option 4 : none of these

Answer :- D

Question 6 :- Choose the correct answer.

There are n different books and p copies of each. the number of ways in which a selection can be made from them is

Option 1 : np

Option 2 : pn

Option 3 : (p+1)n -1

Option 4 : (n+1)p-1

Answer :- C

Question 7 :- Choose the correct answer.

The sides AB, BC, CA of a triangle ABC have 3,4 and 5 interior points respectively on them. The total number of triangles that can be constructed by using these points as vertices is

Option 1 : 220

Option 2 : 204

Option 3 : 205

Option 4 : 195

Answer :- C

Question 8 :- Choose the correct answer.

A lady gives dinner party to five guests to be selected from 9 friends .The number of ways of forming the party of 5,given that two of the friends will not attend the party together is

Option 1 : 56

Option 2 : 126

Option 3 : 91

Option 4 : none of these

Answer :- C

Question 9 :- Choose the correct answer.

Each question has four choices out of which only one is correct. A candidate has to answer four questions. The number of ways he fails to give all answers correctly, is

Option 1 : 15

Option 2 : 81

Option 3 : 255

Option 4 : 256

Answer :- C

Question 10 :- Choose the correct answer.

A college has 10 basketball players. A 5-member team and a captain will be selected out of these 10 players. How many different selections can be made?

Option 1 : 1260

Option 2 : 210

Option 3 : 10C6 * 6!

Option 4 : 10C5 * 6

Answer :- A

Question 11 :- Choose the correct answer.

There are 10 yes or no questions. How many ways can these be answered?

Option 1 : 1084

Option 2 : 2048

Option 3 : 1024

Option 4 : 100

Answer :- C

Question 12 :- Choose the correct answer.

If the letters of the word CHASM are rearranged to form 5 letter words such that none of the word repeat and the results arranged in ascending order as in a dictionary what is the rank of the word CHASM?

Option 1 : 24

Option 2 : 31

Option 3 : 32

Option 4 : 30

Answer :- C

Question 13 :- Choose the correct answer.

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:

Option 1 : 1/22

Option 2 : 3/22

Option 3 : 2/91

Option 4 : 2/77

Answer :- C

Question 14 :- Choose the correct answer.

A box contains 20 electric bulbs, out of which 4 are defective. Two bulbs are chosen at random from this box. The probability that at least one of these is defective, is:

Option 1 : 4/19

Option 2 : 7/19

Option 3 : 12/19

Option 4 : 21/95

Answer :- B

Question 15 :- Choose the correct answer.

In a class, 30% of the students offered English, 20% offered Hindi and 10% offered both. If a student is selected at random, what is the probability that he has offered English or Hindi ?

Option 1 : 2/5

Option 2 : 3/4

Option 3 : 3/5

Option 4 : 3/10

Answer :- A

Question 16 :- Choose the correct answer.

A box contains 6 red balls, 7 green balls and 5 blue balls. Each ball is of a different size. The probability that the red ball being selected is the smallest red ball, is

Option 1 : 1/18

Option 2 : 1/3

Option 3 : 1/6

Option 4 : 2/3

Answer :- C

Question 17 :- Choose the correct answer.

If A and B are 2 independent events and P(A)=0.5 and P(B) = 0.4, find P(A/B):

Option 1 : 0.5

Option 2 : 0.4

Option 3 : 0.88

Option 4 : None of these

Answer :- A

Question 18 :- Choose the correct answer.

A 5-digit number is formed by the digits 1,2,3,4 and 5 without repetition. What is the probability that the number formed is a multiple of 4?

Option 1 : 1/4

Option 2 : 1/5

Option 3 : 2/5

Option 4 : 1/120

Option 5 : 4

Answer :- B

Question 19 :- Choose the correct answer.

In a single throw of dice, what is the probability to get a number greater or equal to 4?

Option 1 : 1/3

Option 2 : 2/3

Option 3 : 1/2

Option 4 : None of these

Answer :- C

Question 20 :- Choose the correct answer.

A bag contains 5 oranges, 4 bananas and 3 apples. Rohit wants to eat a banana or an apple. He draws a fruit from the bag randomly. What is the probability that he will get a fruit of his choice?

Option 1 : 3.5/12

Option 2 : 7/12

Option 3 : 5/12

Option 4 : None of these

Answer :- B

Question 21 :- Choose the correct answer

There are two boxes A and B. Box A has three red and four blue balls. Box B has five red and two blue balls. Anya draws a ball from each bag randomly. What is the probability that both balls are red?

Option 1 : 4/7

Option 2 : 8/49

Option 3 : 7/8

Option 4 : 15/49

Answer :- D

Question 22 :- Choose the correct answer.

Ravi has a bag full of 10 Nestle and 5 Cadbury chocolates. He draws two chocolates. What is the probability that he got at least one Nestle chocolate?

Option 1 : 2/3

Option 2 : 3/7

Option 3 : 2/21

Option 4 : None of these

Answer :- D

Question 23 :- Choose the correct answer.

The probability of having at least one tail in 5 throws of a coin is

Option 1 : 1/32

Option 2 : 31/32

Option 3 : 1/5

Option 4 : None of these

Answer :- B

Question 24 :- Choose the correct answer.

A bag contains 5 yellow and 4 brown pencils. If two pencils are drawn, what is the probability that the pencils are of the same colour?

Option 1 : 5/108

Option 2 : 1/6

Option 3 : 5/18

Option 4 : 4/9

Answer :- B

Question 25 :- Choose the correct answer.

A single letter is drawn at random from the word, "ASPIRATION", the probability that it is a vowel is?

Option 1 : 1/2

Option 2 : 1/3

Option 3 : 3/5

Option 4 : 2/5

Answer :- A

Question 26 :- Choose the correct answer.

The probability that a man can hit a target is 3/4. He tries 5 times. The probability that he will hit the target at least three times is:

Option 1 : 291/364

Option 2 : 371/464

Option 3 : 471/502

Option 4 : 459/512

Answer :- D

Question 27 :- Choose the correct answer

An unbiased dice is rolled 3 times. The probability that the value on the dice is not more than 4 in any of the 3 rolls is:

Option 1 : 8/27

Option 2 : 1/27

Option 3 : 26/27

Option 4 : 2/3

Answer :- A

Question 28 :- Choose the correct answer.

Probability of occurrence of event A is 0.5 and that of event B is 0.2. The

probability of occurrence of both A and B is 0.1. What is the probability that none of A and B occur?

Option 1 : 0.3

Option 2 : 0.4

Option 3 : 0.7

Option 4 : None of these

Answer :- B

Question 29 :- Choose the correct answer.

An unbiased coin is tossed 5 times. If tail appears on first four tosses, then probability of tail appearing on the fifth toss is:

Option 1 : 1/2

Option 2 : 1

Option 3 : 0

Option 4 : 4/5

Answer :- A

Question 30 :- Choose the correct answer.

X and Y are two independent events. The probability that X and Y occur is 1/12, and the probability that neither occur is 1/2, the probability of occurrence of X can be:

Option 1 : 1/3

Option 2 : 1/5

Option 3 : 1/2

Option 4 : 1/10

Answer :- A

Question 31 :- Choose the correct answer.

An unbiased coin is tossed n times. If the probability of getting 4 tails equals the probability of getting 7 tails, then the probability of getting two tails is:

Option 1 : 55/2048

Option 2 : 3/4096

Option 3 : 1/1024

Option 4 : None of these

Answer :- A

Question 32 :- Choose the correct answer.

Sudhanshu and Pankaj stand in a circle with 10 other persons. If the arrangement of the person is at random, then the probability that there are exactly 3 persons between Sudhanshu and Pankaj is?

Option 1 : 9/11

Option 2 : 2/11

Option 3 : 1/11

Option 4 : None of these

Answer :- B

Question 33 :- Choose the correct answer.

Three numbers are chosen from 1 to 30 randomly. The probability that they are not consecutive is:

Option 1 : 1/145

Option 2 : 144/145

Option 3 : 139/140

Option 4 : 1/140

Answer :- B

Question 34 :- Choose the correct answer.

A bag is full of 20 bananas and no other fruit. Rajeev draws a fruit from the bag. What is the probability that he will draw a banana?

Option 1 : 1

Option 2 : 0

Option 3 : 1/2

Option 4 : None of these

Answer :- C

Question 35 :- Choose the correct answer.

An unbiased dice is rolled 5 times and the outcomes are 1, 2, 3, 4 and 5 respectively. If it is rolled again, what is the probability that the outcome is 6?

Option 1 : 1

Option 2 : 5/6

Option 3 : 1/6

Option 4 : None of these

Answer :- C

Question 36 :- Choose the correct answer.

The probability of drawing an apple from a bag of fruits is 6/25. How many apples should Ravi draw, so that there is a chance he will draw 12 apples on average?

Option 1 : 25

Option 2 : 50

Option 3 : 12

Option 4 : None of these

Answer :- B

Question 37 :- Choose the correct answer.

What is the probability for a day to be Sunday?

Option 1 : 1/7

Option 2 : 1/5

Option 3 : 52/365

Option 4 : None of these

Answer :- A

Question 38 :- Choose the correct answer.

Rani has a bag with three blue and three yellow coins. She takes out a coin, sees its colour and puts it back in the bag. She does this thrice. What is the probability that she saw all blue coins.

Option 1 : 1/8

Option 2 : 1/2

Option 3 : 1/3

Option 4 : None of these

Answer :- A

Question 39 :- Choose the correct answer.

Shikhar has a bag with 2 balls, each of which can be black or white with equal probability. Now, he draws out a ball and it turns out to be black. After this event, what is the probability that both balls are black?

Option 1 : 1/2

Option 2 : 1/4

Option 3 : 1

Option 4 : None of these

Answer :- A

Question 40 :- Choose the correct answer.

A coin is tossed thrice. What is the probability that the first toss of coin lands head, second tail and third lands tail as well?

Option 1 : 1/16

Option 2 : 3/8

Option 3 : 1/8

Option 4 : None of these

Answer :- B

Question 41 :- Choose the correct answer.

The probability of occurrence of event A is 0.3 and that of event B is 0.4. The events are independent. What is the probability of occurrence of both A and B?

Option 1 : 0.7

Option 2 : 0.1

Option 3 : 0.12

Option 4 : Cannot be determined

Answer :- C

Question 42 :- Choose the correct answer.

The probability of occurrence of event A is 0.1 and that of event B is 0.2. The events are mutually exclusive. What is the probability of occurrence of both A and B?

Option 1 : 0.1

Option 2 : 0

Option 3 : 1

Option 4 : Cannot be determined

Answer :- B

Question 43 :- Choose the correct answer.

The probability of occurrence of event X is 0.8 and that of event Y is 0.05. The events are mutually exclusive. What is the probability of occurrence of either X or Y?

Option 1 : 0.85

Option 2 : 0.75

Option 3 : 0

Option 4 : Cannot be determined

Answer :- A

Question 44 :- Choose the correct answer.

10% of the voters did not cast their vote in an election between two candidates. 10% of the votes polled were found invalid. The successful candidate got 54% of the valid votes and won by a majority of 1620 votes. The number of voters enrolled on the votes

Option 1 : 25000

Option 2 : 33000

Option 3 : 35000

Option 4 : 40000

Answer :- A

Question 45 :- Choose the correct answer.

A, B, C started a business with their investments in the ratio 1:3:5. After 4 months, A invested the same amount as before and B as well as C withdrew half of their investments. The ratio of their profits at the end of the year is:

Option 1 : 4:3:5

Option 2 : 5:6:10

Option 3 : 6:5:10

Option 4 : 10:5:6

Answer :- B

Question 46 :- Choose the correct answer.

Tea worth Rs. 126 per kg and Rs. 135 per kg are mixed with a third variety in the ratio 1:1:2. If the mixture is worth Rs. 153 per kg, the price of the third variety per kg will be:

Option 1 : Rs. 169.50

Option 2 : Rs. 170

Option 3 : Rs. 175.50

Option 4 : Rs. 180

Answer :- C

Question 47 :- Choose the correct answer.

A can contains a mixture of two liquids A and B in the ratio 7:5. When 9 litres of mixture are drawn off and the can is filled with B, the ratio of A and B becomes 7:9. How many litres of liquid A was contained by the can initially ?

Option 1 : 10

Option 2 : 20

Option 3 : 21

Option 4 : 25

Answer :- C

Question 48 :- Choose the correct answer.

A man bought a number of clips at 3 for a rupee and an equal number at 2 for a rupee. At what price per dozen should he sell them to make a profit of 20% ?

Option 1 : Rs 4

Option 2 : Rs 5

Option 3 : Rs 6

Option 4 : Rs 7

Answer :- C

Question 49 :- Choose the correct answer.

Padam purchased 30 kg of rice at the rate of 17.50 per kg and another 30 kg rice at a certain rate. He mixed the two and sold the entire quantity at the rate of Rs. 18.60 per kg and made 20% overall profit. At what price per kg did he purchase the lot

Option 1 : Rs.12.50

Option 2 : Rs. 13.50

Option 3 : Rs. 14.50

Option 4 : Rs. 15.50

Option 5 : None of these

Answer :- B

Question 50 :- Choose the correct answer.

The manufacturer of a certain item can sell all he can produce at the selling price of Rs. 60 each. It costs him Rs. 40 in materials and labour to produce each item and he has overhead expenses of Rs. 3000 per week in order to operate the plant. The numb

Option 1 : 200

Option 2 : 250

Option 3 : 300

Option 4 : 400

Answer :- A