

a)210                  b)1050                  **c) 25200**                  d) 21400                  e)none of these

Ans: c)

a) 1440      b) 1956      c) 720      d) none of these

Ans: a)

a) 28-1      b) **'38-1'**      c) 48-1      d) none of these'

Ans: b)

a) '216'                      b) '240'                      c) '600'                      d) '3125'

Ans: a)

a)10!      **B)1010**      c)210      d)'210-1'

Ans: b)

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  
a)105 b)115 c)175 **d)185**

There are 5 letters and five addressed envelopes. the number of ways in which all the letters can be put in wrong envelopes is  
a)119 **b)44** c)59 c)40

**Q155)** 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  
a)25 b)30 c)32 **d)none of these**

a) 'np'                                      b) 'pn'  
c) '**p+1**n -1'                            d) '(n+1)p-1'

**Q157)** 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',  
a) '220'                      b) '204'                      **c) '205'**                      d) 195',

Ans: c)

**Q158)** 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',  
a)'56'                      b) 126                      **c) 91**                      d)none of these'

Ans: c)

**Q159)** 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  
a)'15'                      b) '81'                      **c) 255'**                      d)256'

Ans: c)

**Q160)** 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?

**a)'1260'**,                      b)'210'  
c)  $10C6 * 6!$  d)' $10C5 * 6!$ ,

Ans: a)

**Q161)** There are 10 yes or no questions. How many ways can these be answered?

a) 1084                      b)2048                      **c)'1024'**                      d)100'

Ans: c)

**Q162)** '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?'

a) '24'                      b)31                      **c) 32**                      d)30

Ans: c)

**Q163)** 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)'1/22'                      b)3/22                      c)2/91                      d)2/77

**Q164)**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:

a) '4/19'                      **b)'7/19'**                      c)12/19                      d)21/95'

Ans: b)

**Q165)** 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 ?

**a)'2/5'**                      b)3/4                      c)3/5                      d)3/10'

Ans: a)

**Q166)** 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'

a)'1/18'                      b) '1/3'                      **c)'1/6'**                      d) '2/3',

Ans: c)

**Q167)** If A and B are 2 independent events and  $P(A)=0.5$  and  $P(B) = 0.4$ , find  $P(A/B)$ :

**a) '0.5'**                      b) '0.4'                      c) '0.88'                      d) 'None of these'

Ans: a)

**Q168)** 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?

- a) ' $1/4$ '      **b) ' $1/5$ '**      c) ' $2/5$ '      d) ' $1/120$ '

Ans: b)

**Q169)** In a single throw of dice, what is the probability to get a number greater or equal to 4?

- a) 4      b)  $1/3$       **c)  $2/3$**       d)  $1/2$       e) 'None of these'

Ans: c)

**Q170)** 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?

- a) ' $3.5/12$ '      **b) ' $7/12$ '**      c) ' $5/12$ '      d) , 'None of these'

Ans: b)

**Q171)** 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?

- a) ' $4/7$ '      b) ' $8/49$ '      c) ' $7/8$ '      **d) ' $15/49$ '**

Ans: d)

**Q172)** 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?

- a) ' $2/3$ '      b) ' $3/7$ '      c) ' $2/21$ '      **d) 'None of these'**

Ans: d)

**Q173)** The probability of having at least one tail in 5 throws of a coin is'

- a) ' $1/32$ '      **b) ' $31/32$ '**      c) ' $1/5$ '      d) 'None of these'

Ans: b)

**Q174)** 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?

- a) ' $5/108$ '      b) ' $1/6$ '      c) ' $5/18$ '      **d) ' $4/9$ '**

Ans: d)

**Q175)** A single letter is drawn at random from the word, "ASPIRATION", the probability that it is a vowel is?

- a) ' $1/2$ '**      b) ' $1/3$ '      c) ' $3/5$ '      d) ' $2/5$ '

Ans: a)

**Q176)** 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:

- a)  $291/364$ '      b) ' $371/464$ '      c) ' $471/502$ '      **d) ' $459/512$**

Ans: d)

**Q177)** 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:

- a) '**8/27**'                      b) ' $1/27$ '                      c) ' $26/27$ '                      d) ' $2/3$ '

Ans: a)

**Q178)** 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?

- a) ' $0.3$ '                      b) '**0.4**'                      c) ' $0.7$ '                      d) 'None of these'

Ans: b)

**Q179)** An unbiased coin is tossed 5 times. If tail appears on first four tosses, then probability of tail appearing on the fifth toss is:

- a) ' **$1/2$** '                      b) ' $1$ '                      c) ' $0$ '                      d) ' $4/5$ '

Ans: a)

**Q180)** 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:

- a) ' **$1/3$** '                      b) ' $1/5$ '                      c) ' $1/2$ '                      d) ' $1/10$ '

Ans: a)

**Q181)** 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:

- a) '**55/2048**'                      b) ' $3/4096$ '                      c) ' $1/1024$ '                      d) 'None of these'

Ans: a)

**Q182)** 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?

- a) ' $9/11$ '                      b) ' **$2/11$** '                      c) ' $1/11$ '                      d) 'None of these'

Ans: b)

**Q183)** Three numbers are chosen from 1 to 30 randomly. The probability that they are not consecutive is:

- a) ' $1/145$ '                      b) '**144/145**'                      c) ' $139/140$ '                      d) ' $1/140$ '

Ans: b)

**Q184)** 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?

- a) '**1**'                      b) ' $0$ '                      c) ' $1/2$ '                      d) 'None of these'

Ans: a)

**Q185)** 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?

- a) ' $1$ '                      b) ' $5/6$ '                      c) ' **$1/6$** '                      d) 'None of these'

Ans: c)

**Choose the correct answer:**

**Q186)** The probability of drawing an apple from a bag of fruits is  $\frac{6}{25}$ . How many apples should Ravi draw, so that there is a chance he will draw 12 apples on average?

- a) '25'      b) '**50**'      c) '12'      d) 'None of these'

Ans: b)

**Q187)** What is the probability for a day to be Sunday?'

- a) ' **$\frac{1}{7}$** '      b) ' $\frac{1}{5}$ '      c) ' $\frac{52}{365}$ '      d) 'None of these'

Ans: a)

**Q188)** 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.

- a) ' **$\frac{1}{8}$** '      b) ' $\frac{1}{2}$ '      c) ' $\frac{1}{3}$ '      d) 'None of these'

Ans: a)

**Q189)** 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?

- a) ' **$\frac{1}{2}$** '      b) ' $\frac{1}{4}$ '      c) '1'      d) 'None of these'

Ans: a)

**Q190)** 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?

- a) ' $\frac{1}{16}$ '      b) ' $\frac{3}{8}$ '      c) ' **$\frac{1}{8}$** '      d) 'None of these'

Ans: c)

**Q191)** 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?

- a) '0.7'      b) '0.1'      c) '**0.12**'      d) 'Cannot be determined'

Ans: c)

**Q192)** 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?

- a) '0.1'      b) '**0**'      c) '1'      d) 'Cannot be determined'

Ans: b)

**Q193)** 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?

- a) '**0.85**'      b) '0.75'      c) '0'      d) 'Cannot be determined'

Ans: a)

**Q194)** 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 vo

- a) '**25000**'      b) '33000'      c) '35000'      d) '40000'

Ans: a)

**Q195)** 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:

- a) '4:3:5'      b) '**5:6:10**'      c) '6:5:10'      d) '10:5:6'

Ans: b)

**Q196)** 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:

- a) Rs. 169.50'      b) Rs. 170'      c) **'Rs. 175.50'**      d) 'Rs. 180'

Ans: c)

**Q197)** 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 ?

- a) '10'      b) '20'      c) **'21'**      d) '25'

Ans: c)

**Q198)** 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% ?

- a) Rs 4'      b) 'Rs 5'      c) **'Rs 6'**      d) 'Rs 7

Ans: c)

**Q199)** 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

- a) Rs.12.50      b) **'Rs. 13.50'**      c) Rs. 14.50'      d) 'Rs. 15.50'      e) 'None of these'

Ans: b)

**Q200)** 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.

- a) **'200'**      b) '250'      c) '300'      d) '400',

Ans: a)

**Q201)** A sells a bicycle to B at a profit of 20%. B sells it to C at a profit of 25%. If C pays Rs. 225 for it, the cost price of the bicycle for A is:

- a) Rs. 110'      b) 'Rs.120'      c) 'Rs. 125'      d) **'Rs. 150'**

Ans: d)

**Q202)** Choose the correct answer.', 'If 5% more is gained by selling an article for Rs. 350 than by selling it for Rs. 340, the cost of the article is:

- a) Rs. 50'      b) 'Rs. 160'      c) **'Rs. 200'**      d) 'Rs. 225'

Ans: c)

**Q203)** Consider the following statements : If a sum of money is lent at simple interest, then the  
<br/>1. Money gets doubled in 5 years if the rate of interest is 50/3 %.<br/>2. Money gets doubled in 5 years if the rate of interest is 20%.<br/>3. Money becomes',

- a) '1 and 3 are correct'      b) **'2 alone is correct'**  
c) '3 alone is correct'      d) '2 and 3 are correct'

Ans. b)

**Q204)** The difference between simple interest and compound interest on Rs.1200 for one year at 10% per annum reckoned half-yearly is:

- a) Rs. 2.50'      b) **'Rs. 3'**      c), 'Rs. 3.75'      d) 'Rs. 4'      e) 'None of these

Ans: b)

**Q205)** A sum of money lent at compound interest for 2 years at 20% per annum would fetch Rs. 482 more, if the interest was payable half-yearly than if it was payable annually. The sum is:

- a) Rs. 10,000      **b) 'Rs. 20,000'**      c) 'Rs. 40,000'      d) 'Rs. 50,000'

Ans: b)

**Q206)** The simple interest on Rs. 10 for 4 months at the rate of 3 paise per rupee per month is:',

- a) Rs. 1.20'**      b) 'Rs. 1.60'      c) 'Rs. 2.40'      d) Rs. 3.60'

Ans: a)

**Q207)** Choose the correct answer.', 'If the compound interest on a sum for 2 years at  $25\frac{1}{2}$  % per annum is Rs. 510, the simple interest on the same sum at the same rate for the same period of time is:

- a)Rs. 400'      b) 'Rs. 450'      c) 'Rs. 460'      **d) 'Rs. 480'**

Ans: d)

**Q208)** 'I started on my bicycle at 7 a.m. to reach a certain place. After going a certain distance, my bicycle went out of order. Consequently, I rested for 35 minutes and came back to my house walking all the way. I reached my house at 1 p.m. If my cycling s', 0, ", 4, '4.92 km', '13.44 km', '14.375 km', '15.476 km', ", 1, "

**Q209)** A bag contains 10-paisa, 20-paisa and 25-paisa coins in the ratio 7:4:3. If the total value is Rs. 90, the number of 25-paisa coins in the bag is:

- a)'120'**      b)'160'      c) '280'      d) '300'

Ans: a)

**Q210)** Find a whole number such that when one of its digit is erased, the resulting number is equal to one-ninth of the original number. The resulting number is also a multiple of 9.

- a) '90'      b)'83438'      **c) '25'**      d) '70847'

Ans: c)

**Q211)** A ship is moving at a speed of 30 kmph. To know the depth of the ocean beneath it, it sends a radiowave which travels at a speed 200 m/s. The ship receives back the signal after it has moved 500 m. What is the depth of the ocean?

- a) '4 km'      b) '8 km'      **c) '6 km'**      d) '12 km

Ans: c)

**Q212)** In a town the population grows at a simple rate of 10% in a decade and compounds from decade to decade. Find the population at the beginning of the 1970s if the population at the beginning of the 1990s is 3,63,000 people.

- a) 30,000'      **b) '3,00,000'**      c) '30,00,000'      d) '3,15,000'

Ans: b)

**Q213)** In approximately how many years will a certain sum of money triple itself at 22% simple interest?

- a)'10 years'      b) '11 years'      **c) '9 years'**      d) '12 years'

Ans: c)

**Q214)** A man rows a boat at a speed of 5 km/hr in still water. Find the speed of a river if it takes him 1 hr to row a boat to a place 2.4 km away and return back.

- a)1 km/hr**      b)6 km/hr      c) '3 km/hr'      d) '4 km/hr'

a)

**Q215)** A boat covers 40 km upstream and 90 km downstream in 5 hr. It can also cover 60 km upstream and 60 km downstream in 5 hr. The speed of the water current is',

- a) '4 km/hr'                      **b) '5 km/hr'**                      c) '20 km/hr'                      d) '25 km/hr'

Ans: b)

**Q216)** Two champion swimmers start a two-length swimming race at the same time, but from opposite ends of the pool. They swim at constant but different speeds. They first pass at a point 18.5 m from the deep end. Having completed one length, each swimmer take',

- a) 90 m                      **b) '45 m'**                      c) '26.5m'                      d) Data insufficient

Ans: b)

**Q217)** A and B start together from the same point on a circular track and walk in the same direction till they both again arrive together at the starting point. A completes one circle in 224 s and B in 364 s. How many times will A have passed B?

- a) '4'                      **b) '5'**                      c) '6'                      d) '7'

Ans: b)

**Q218)** 36 men can complete a piece of work in 18 days. In how many days will 27 men complete the same work ?

- a)'12'                      b) '18'                      c)22'                      **d) '24'**                      e) 'None of these

Ans: d)

**Q219)** 39 persons can repair a road in 12 days, working 5 hours a day. In how many days will 30 persons, working 6 hours a day, complete the work ?

- a)'10'                      **b) 13'**                      c)14'                      d)15'

Ans: b)

**Q220)** If 7 spiders make 7 webs in 7 days, then 1 spider will make 1 web in how many days ?

- a) '1'                      b)'7/2'                      **c)'7'**                      d)'49'

Ans: c)

**Q221)** Some persons can do a piece of work in 12 days. Two times the number of such persons will do half of that work in:

- a)'6 days'                      b)'4 days'                      **c) '3 days'**                      d) '12 days'

Ans: c)

**Q222)** Ronald and Elan are working on an assignment. Ronald takes 6 hours to type 32 pages on a computer, while Elan takes 5 hours to type 40 pages. How much time will they take, working together on two different computers to type an assignment of 110 pages ?

- a)'7 hours 30 minutes'                      b)'8 hours',                      **c) '8 hours 15 minutes',**                      d)'8 hours 25 minutes',

Ans: c)

**Q223)** A and B can do a work in 12 days, B and C in 15 days, C and A in 20 days. If A, B and C work together, they will complete the work in:

- a) '5 days'                      b)'47/6 days'                      **c) '10 days'**                      d) '47/3 days'

Ans: c)

**Q224)** A and B can do a job together in 7 days. A is  $\frac{7}{4}$  times as efficient as B. The same job can be done by A alone in:

- a)'28/3 days'                      **b) '11 days'**                      c) '49/4 days'                      d) '49/3 days'

Ans: b)



**Q225)** A and B can complete a work in 15 days and 10 days respectively. They started doing the work together but after 2 days B had to leave and A alone completed the remaining work. The whole work was completed in:

- a) '8 days'      b) '10 days'      **c) '12 days'**      d) '15 days'

Ans: c)

**Q226)** A, B and C together can complete a piece of work in 10 days. All the three started working at it together and after 4 days A left. Then B and C together completed the work in 10 more days. A alone could complete the work in

- a)'15 days'      b)'16 days'      **c) '25 days'**      d)'50 days'

Ans: c)

**Q227)** One pipe can fill a tank three times as fast as another pipe. If together the two pipes can fill the tank in 36 minutes, then the slower pipe alone will be able to fill the tank in:

- a)'81 min',      b)'108 min'      **c) '144 min'**      d) '192 min',

Ans: c)

**Q228)** A large tanker can be filled by two pipes A and B in 60 minutes and 40 minutes respectively. How many minutes will it take to fill the tanker from empty state if B is used for half the time and A and B fill it together for the other half ?

- a) 15 min'      b) '20 min'      c) '27.5 min'      **d) '30 min'**

Ans: d)

**Q229)** Three taps A, B and C can fill a tank in 12, 15 and 20 hours respectively. If A is open all the time and B and C are open for one hour each alternately, the tank will be full in

- a)'6 hrs.'      b) '20/3 hrs'      **c) '7 hrs'**      d) '15/2 hrs'

Ans: c)

**Q230)** Two pipes can fill a tank in 20 and 24 minutes respectively and a waste pipe can empty 3 gallons per minute. All the three pipes working together can fill the tank in 15 minutes. The capacity of the tank is:

- a) '60 gallons'      b)'100 gallons'      **c) '120 gallons'**      d) '180 gallons'

Ans: c)

**Q231)** Ram and Shyam together do a work in 8 days. Both of them began to work. After 3 days Ram fell ill. Shyam completed the remaining work in 15 days. In how many days can Ram complete the whole work?"

- a) '12'**      b) '17'      c)'16'      d) '15'

Ans: a)

**Q232)** Two workers A and B were employed for a work. A takes 8 hour more than the time taken by A and B together. If B takes 4.5 hours more than the time taken by A and B together, how long would A and B take together to complete the work?

- a)'7 hours'      **b) '6 hours'**      c) '5 hours'      d) '4 hours'

Ans: b)

**Q233)** If 5 persons can do 5 times of a work in 5 days, then 10 persons can do 10 times of that work in:

- a)'10 days'      b)'8 days'      **c) '5 days'**      d) '2 days'

Ans: c)

**Q234)** Two taps can fill a cistern in 6 min. and 7 min. respectively. If these taps are opened alternatively for a minute, in what time will the cistern be filled?

- a) '5.67 min'      b) '6.25 min'      c) '5 min',      **d) '45/7 min'**

Ans: d)

**Q235)** Two taps A and B can fill a cistern in 28 min. and 42 min. respectively. Third tap C can empty it in 42 min. If all the three taps are opened, the time taken to fill the cistern is:

- a) '30 min'      b) '35 min'      **c) '28 min'**      d) '42 min'

Ans: c)

**Q236)** 49 pumps can empty a reservoir in  $6\frac{1}{2}$  days, working 8 hours a day. If 196 pumps are used for 5 hours a day, then the same work will be completed in:

- a) '2.6 days'**      b) '3 days'      c) '2.5 days'      d) '2 days'

Ans: a)

**Q237)** 16 men complete one-fourth of a piece of work in 12 days. What is the additional number of men required to complete the work in 12 more days ?

- a) '48'      b) '36'      c) '30'      **d) '16'**

Ans: d)

**Q238)** A takes thrice as long to do a piece of work, as B takes. A and B together can do a piece of work in 7.5 days. A alone can do in:

- a) 30 days**      b) '40 days'      c) '50 days'      d) '60 days'      e) 'None of these'

Ans: a)

**Q239)** A cistern can be filled by two pipes A and B in 10 and 15 hours respectively and is then emptied by a tap in 8 hours. If all the taps are opened, the cistern will be fill in:

- a) '21 hours'      b) '22 hours'      c) 23 hours      **d) '24 hours'**      e) None of these'

Ans: d)

**Q240)** A locomotive engine, without any wagons attached to it, can go at a speed of 40 km/hr. Its speed is diminished by a quantity that varies proportionally as the square root of the number of wagons attached. With 16 wagons, its speed is 28 km/hr.

- a) 99'      **b) , '100'**      c) 120',

Ans: b)

1) If 33 untrained labourers can do a work in 15 days of 12 hr. each, how many trained labourers can do 50% more work in 11 days of 9 hr each ? It may be assumed that it takes 2 trained labourers to do the work of 5 untrained labourers)

'42', '36', '90', '100',

2) Which of the following fractions is less than  $\frac{7}{8}$  and greater than  $\frac{1}{3}$  ?

' $\frac{1}{4}$ ', ' $\frac{23}{24}$ ', ' $\frac{11}{12}$ ', ' **$\frac{11}{24}$** ',

3)  $892.7 - 573.07 - 95.007 = ?$

'**224.623**', '224.777', '233.523', '414.637',

4) Which is the closest approximation to the product  $0.3333 \times 0.25 \times 0.499 \times 0.125 \times 24$  ?

' **$\frac{1}{8}$** ', ' $\frac{3}{4}$ ', ' $\frac{3}{8}$ ', ' $\frac{2}{5}$ ', "

5) Find the value of X

$$0.009/X = 0.01$$

a)0.0009 b)0.09 c)**0.9** d)9

6)The least among the following is:

a)0.2 b) $\frac{1}{0.2}$  c)0.22222222 d)**0.2**

7)In the following expression, there are two missing digits: \* and #. Find the value of \*

a)4 b)6 c)8 d)**None of these**

8)What is the value of  $(-5)4)2)-\frac{1}{2})\frac{3}{4})$  ?', 0, ", 4, '-30', '-15', '15', '30', ", 3, ", 4, 0, ", '0000-00-00 00:00:00', '0000-00-00 00:00:00', ", 'Numbers', 'Quantitative',

If  $x * y = x^2 + y^2 - xy$ , then the value of  $9 * 11$  is:

', 0, ", 4, '93', '103', '113', '121', ", 2, ", 4, 0, ",

10)If  $a = 0.1039$ , then the value of  $(4a^2 - 4a + 1)^{\frac{1}{2} + 3a}$  is:

a)0.1039 b)0.2078 c)**1.1039** d)2.1039

11)If a, b, c, d, e are five consecutive odd numbers, their average is:

a) $5a + 4$  b) $\frac{abcde}{5}$  c) $5(a + b + c + d + e)$  d)**None of these**

12) $(x \% \text{ of } 932) + 30 = 309.6$ . Find x.

a)25 b)**30** c)35 d)40

13)Which of the following multipliers will cause a number to be increased by 29.7% ?

a)**1.297** b)12.97 c)129.7 d)1297

14)If  $2A = 3B$  and  $4B = 5C$ , then A: C is:

a)4 : 3 b)8 : 15 c)**15 : 8** d)3 : 4

15)0.4777 . . . is the recurring decimal for the fraction:

a) $\frac{4777}{100000}$  b) $\frac{477}{100}$  c) $\frac{437}{1000}$  d) **$\frac{43}{90}$**

16) $0.8888 \div 0.011$  is equal to:

a)8.08 b)**80.8** c)0.808 d)None of these

17)The ascending order of rational numbers  $-7/10$ ,  $5/-8$ ,  $2/-3$  is:  
a)-**7/10**, **2/-3**, **5/-8** b)- $7/10$ ,  $5/-8$ ,  $2/-3$  c) $5/-8$ ,  $-7/10$ ,  $2/-3$  d) $2/-3$ ,  $5/-8$ ,  $-7/10$

18)If A is real and  $1 + A + A^2 + A^3 = 40$ , then A is equal to:  
a)-3 b)-1 c)1 d)**34**

19) $1 + 3 + 5 + \dots + 3983 / 1992 = ?$   
a)1988 b)**1992** c)1990 d)None of these

20)Which one of the following should be added to  $25p^2 + 16q^2$ , so that the resulting sum becomes a perfect square?  
a)20pq b)30pq c)**40pq** d) $50p^2q^2$

21)Choose the correct answer  $1.0816^{1/2} = ?$   
a)'0.14' b)'1.4' c)'1.004' d)'**1.04**',  
Ans: d)

22)If the digit in the units place of a square natural number is 6, then the digit in the tens place will be:  
'1', '3', 'Even', '**Odd**',

23)The square no. which contains 6 at units place maybe 16 or 36 in which at tens place the digit is odd.'

24)If  $9x^2 + 3px + 6q$  when divide by  $3x + 1$  leaves a remainder  $-3/4$  and  $qx^2 + 4px + 7$  is exactly divisible by  $x + 1$ , then the values of p and q respectively will be:  
'0,  $7/4$ ' ' $-7/4$ , 0' 'Same' ' **$7/4$ , 0**'

25)The equations  $2x + 3y - 7 = 0$  and  $10x + 15y - 35 = 0$  are:',  
a) Consistent and have unique solution' b) '**Consistent and have infinitely many solutions** c) 'inconsistent' d) 'none of these',

26)If  $a + b = 6$ ,  $ab = 5$ , the value of  $a - b$  is:',  
a) '**4**' b) '5' c) '6' d) '7' e) '9'  
Ans: a)

27)Choose the correct answer.',  $|X - 5| + 4 > 0$  and  $|X^2| < 4$ . Then x can be:',  
a)'4' b) '2' c) '**0.5**' d) 'All of these',  
Ans: c)

28)If  $f(x) = \text{sum of all the digits of } x$ , where x is a natural number, then what is the value of  $f(1) + f(102) + f(103) + \dots + f(200)$ ?  
a) '1000' b) '784' c) '999' d) '**1001**',  
Ans; d)

29)Pawan is a very confused person. Once he wrote  $1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10 = 100$ . In how many places you need to change "+" with "\*" to make the equality hold good?',  
a)'2' b) '4' c) '**3**' d) 'None of these',  
Ans: c)

30)What is the highest power of 82 contained in  $83! - 82!$  ?'

a) '3'                      b) '2'                      c) '164'                      d) 'None of these',

Ans: a)

31) If  $x = 0.75$ , then what is the value of the expression  $1+x+x^2 + x^3/1-x$  ?

a) '0.25'                      b) '4'                      c) '1.75'                      d) '1'

Ans: b)

32) If  $a$  lies between 2 and 3, both included, and  $b$  lies between 4 and 6, both included, then what is the ratio of minimum and maximum limits of  $a^2-b^2$ ?

a) '-4'                      b) '4'                      c) '**32/7**'                      d) '- 28/6',

Ans: c)

33) If  $a, b, c$  are roots of the equation  $1x^3-4x^2+6.5x + 3.5 = 0$ , then what is the value of  $a^2 + b^2 + c^2$ ?

a) '1'                      b) '64'                      c) '169'                      d) '**3**'

Ans: d)

34) If  $|x| + |y| = 7$ , then what is the sum of minimum and maximum values of  $x + y$ ?

a) '3/2'                      b) '-7'                      c) '7'                      d) '**0**'

Ans: d)

35)  $832.58 - 242.31 = 779.84 - ?$

a) '179.57'                      b) '199.57'                      c) '295.05'                      d) '**None of these**',

Ans: d)

36) Which is the closest approximation to the product  $0.3333 * 0.25 * 0.499 * 0.125 * 24$  ?

a) '**1/8**'                      b) '3/4'                      c) '3/8'                      d) '2/5'

Ans: a)

37) The simplification of  $0.2 * 0.2 + 0.02 * 0.02 - 0.4 * 0.02$  /  $0.36$ ,

a) '0.009'                      b) '**0.09**'                      c) '0.9'                      d) '9'

Ans: b)

38) If  $13 + 23 + 33 + \dots + 93 = 2025$ , then the value of  $0.11)^3 + 0.22)^3 + \dots + 0.99)^3$  is close to:',

a) '0.2695'                      b) '0.3695'                      c) '**2.695**'                      d) '3.695',

Ans: c)

39) In a purse there are 30 coins, twenty one-rupee and remaining 50-paise coins. Eleven coins are picked simultaneously at random and are placed in a box. If a coin is now picked from the box, find the probability of it being a rupee coin?

a) '4/7'                      b) '1/2'                      c) '**2/3**'                      d) '5/6'

Ans: c)

40) A, B and C are three students who attend the same tutorial classes. If the probability that on a particular day exactly one out of A and B attends the class is  $7/10$ ; exactly one out of B and C attends is  $4/10$ ; exactly one out of C and A attends is  $7/10$ .

a) '46/100'                      b) '63/100'                      c) '74/100'                      d) '**99/100**',

Ans: d)

41) A box contains 10 balls numbered 1 through 10. Anuj, Anisha and Amit pick a ball each, one after the other, each time replacing the ball. What is the probability that Anuj picks a ball numbered less than that picked by Anisha, who in turn picks a lesser  $n$ ,

a) ' $\frac{3}{25}$ '                      b) ' $\frac{1}{6}$ '                      c) ' $\frac{4}{25}$ '                      d) ' $\frac{81}{400}$ ',

Ans: a)

42) A biased die has a probability of  $\frac{1}{4}$  of showing a 5, while the probability of any of 1, 2, 3, 4, or 6 turning up is the same. If three such dice are rolled, what is the probability of getting a sum of at least 14 without getting a 6 on any die?

a) ' $\frac{5}{24}$ '                      b) ' $\frac{9}{160}$ '                      c) ' $\frac{1}{30}$ '                      d) ' $\frac{7}{160}$ ',

Ans: d)

43) A, B, C, D and E play the following game. Each person picks one card from cards numbered 1 through 10. The person who picks the greatest numbered card loses and is out of the game. Now the remaining four return their cards to the pack and draw again, and,

a) ' $\frac{3}{14}$ '                      b) ' $\frac{4}{17}$ '                      c) ' $\frac{1}{5}$ '                      d) ' $\frac{5}{24}$ '

Ans: c)

44) Which among the following is greatest:  $\frac{51}{2}$ ,  $\frac{111}{3}$ ,  $\frac{1231}{6}$ ?,

a) ' $\frac{51}{2}$ '                      b) ' $\frac{111}{3}$ '  
c) ' $\frac{1231}{6}$ '                      d) 'All are equal',

Ans: a)

45) What are the unit's digits of 369, 6864, 4725 respectively?,

a) 9, 6 and 6'                      b) '6, 6 and 6'                      c) '**3, 6 and 4**'                      d) 'None of these',

Ans: c)

46)  $A = 11 * 22 * 33 * 44 * 55 * \dots \dots 1010$ . How many zeroes will be there at the end of A?

a) '6'                      b) '**15**'                      c) '10'                      d) 'None of these'

Ans: b)

47) If  $x = 3 + \frac{31}{2}$ , then what is the value of  $x^2 + \frac{9}{x^2}$ ?,

' $15 + 3 * \frac{31}{2}$ ', ' $18 + 3 * \frac{31}{2}$ ', ' $27 + 3 * \frac{31}{2}$ ', 'None of these', ", 4, "

48) If  $x^4 + \frac{1}{x^4} = 47$ , then find the value of  $x^3 + \frac{1}{x^3}$ , 0, ",

49) The product of two numbers is 2028 and their H.C.F. is 13. The number of such pairs is:',

a) '1'                      b) '**2**'                      c) '3'                      d) '4'

Ans: b)