MTH302 mid term paper of shared by MOST WANTED

FINALTERM EXAMINATION Spring 2010

MTH302- Business Mathematics & Statistics

SHARED BY MOST WANTED

Time: 90 min

Question No: 1 (M - 1) . (http://www.vuzs.info)

An arrangement of data by successive time periods is called a

- **► Exponential Smoothing**
- **► Time Series**
- **► Combination**
- **► Permutation**

Question No: 2 (M - 1) . (http://www.vuzs.info)

What is the probability of choosing a vowel from the alphabet?

- **► 21/26**
- **► 5/26**
- **► 1/21**
- **► 2/21**

Question No: 3 (M - 1) . (http://www.vuzs.info)

What is the probability of scoring 11 when you roll two dice?

- **► 1/18**
- **► 2/18**
- **► 1/36**
- **► 3/18**

Question No: 4 (M - 1) . (http://www.vuzs.info)

If sign of r is negative then it indicates

- **► Direct relationship between X & Y**
- **► Indirect relationship between X & Y**
- **► X & Y equal**
- **► X & Y are square**

Question No: 5 (M - 1) . (http://www.vuzs.info)

The answer of the SUMIF function in the above diagram is:

► **763**

► **663**

► **613**

► **513**

Question No: 6 (M - 1) . (http://www.vuzs.info)

Two dice are rolled and the numbers are added together. The probability of the total being 12 is 

► **True**

► **False**

Question No: 7 (M - 1) . (http://www.vuzs.info)

Twelve randomly-chosen students were asked how many times they had missed class during a certain semester, with this result: 2, 1, 5, 1, 1, 3, 4, 3, 1, 1, 5, 18. For this sample, which measure of central tendency is least representative of the "typical" student?

► **Mean**

► **Median**

► **Mode**

► **Midrange**

Question No: 8 (M - 1) . (http://www.vuzs.info)

The experimental region is the range of the previously observed values of the dependent variable.

► **False**

► **True**

Question No: 9 (M - 1) . (http://www.vuzs.info)

---------- should be of equal size.

► **Intervals**

► **table**

► frequency

► mean

Question No: 10 (M - 1) . (http://www.vuzs.info)

Let's assume that you are receiving 1000 Rs. every year, and you invested each payment at 5%. The amount you would have at the end of five years period is referred as

► Final Value

► Cumulative interest

► Accumulated value

► Principal value

Question No: 11 (M - 1) . (http://www.vuzs.info)

The point where a straight line cuts the X-axis is called

► slope

► starting point

► y-intercept

► x-intercept

Question No: 12 (M - 1) . (http://www.vuzs.info)

Which ratio is equal to 15:20?

► 21 to 28

► 5 to 10

► 18:25

► None of these

Question No: 13 (M - 1) . (http://www.vuzs.info)

Reduction from original selling Price is called ……

► Loss

► List price

► Profit

► Markdown

Question No: 14 (M - 1) . (http://www.vuzs.info)

This example returns the present value of an investment that pays Rs. 100 at the end of every year for 10 years. The money paid out will earn 5.25% annually.

► =PV (5.25%/1, 10*1, 100, 0)

► =PV (5.25%/1, 10*1, 100, 1)

► =PV (5.25%/12, 10*1, 100, 0)

► =PV (5.25%/1, 10*12, 100, 1)

Question No: 15 (M - 1) . (http://www.vuzs.info)

Which is the correct syntax for the determinant of a matrix given by the following array

► =DETERM(B4:E7)

► =MDTERM(B4:E7)

► =MDETERM(B4:E7)

► =MDETERM(B4;E7)

Question No: 16 (M - 1) . (http://www.vuzs.info)

While using Frequency function ,one always selects

► one cell more than data array.

► one cell more than bins array .

► at most 20 cells.

► random number of cells.

Question No: 17 (M - 1) . (http://www.vuzs.info)

Coefficient of variation shows dispersion of the

► standard deviation about mean.

► standard deviation about mode.

► variance about mean.

► variance about mode.

Question No: 18 (M - 1) . (http://www.vuzs.info)

The result of BINOMDIST is #NUM. Why?

- ► One parameter is missing.
- ► Fourth parameter is FALSE
- ► The number of successes should be negative.
- ► Probability of success on each trial should be less than 1.

Question No: 19 (M - 1) . (http://www.vuzs.info)

For two tail test, when  **the value of Z is**

- ► 1.96
- ► 1.645
- ► 2.326
- ► 2.575

Question No: 20 (M - 1) . (http://www.vuzs.info)

For the set of data 2, 1, 3, 1, 4, 5, 2, 6, 8 the median is given by

- ► 4
- ► 1
- ► 2
- ► 3

Question No: 21 (M - 1) . (http://www.vuzs.info)

The variable plotted on the horizontal or X-axis in a scatter diagram is called the

- ► Independent variable
- ► Dependent variable
- ► Correlation variable
- ► scatter variable

Question No: 22 (M - 1) . (http://www.vuzs.info)

For two tail test, when  **the value of Z is**

- ► 1.96
- ► 1.645

► 2.326

► None of these

Question No: 23 (M - 1) . (http://www.vuzs.info)

No Linear Programming problem with an unbounded feasible region has a solution.

► true

► false

► may or may not

► none of these

Question No: 24 (M - 1) . (http://www.vuzs.info)

The Linear Programming Model maximize or minimize the

► line

► both linear and quadratic functions

► None of these

► quadratic function

Question No: 25 (M - 1) . (http://www.vuzs.info)

From the given scenario, Output of SUMIF(A3:A12,"Away" A3:A12) function will be

► 10

► 14

► 0

► #NAME?

Question No: 26 (M - 1) . (http://www.vuzs.info)

which of the given function returns the normal distribution for the specified mean and standard deviation.

► NORMSDIST

► NORMDIST

► NORMSINV

► NORMINV

Question No: 27 (M - 1) . (http://www.vuzs.info)

There are 12 "Yes or No" questions. How many ways can these be answered?

► 1024

► 2048

► 4096

► 144

Question No: 28 (M - 1) . (http://www.vuzs.info)

There may be more than one optimal solution of linear programming problem, however the condition is that

► the objective function must be parallel to all the constraints

► the objective function must be paralle to one of the constraints.

► the objective function must not be paralle to any of the constraints.

► None of these

Question No: 29 (M - 1) . (http://www.vuzs.info)

For CUMULATIVE Binomial distribution, which of the following formulae is correct?

► =BINOMDIST(4, 7, 0.5, FALSE)

► =BINOMDIST(4, 7, 0.5, TRUE)

► =BINOMDIST(4, 7, 2.5, FALSE)

► =BINOMDIST(4, 7, 2.5, TRUE)

Question No: 30 (M - 1) . (http://www.vuzs.info)

A bar graph uses ……to show data.

► Points

► Lines

► Circle

► Bars

Question No: 31 (M - 2)

How many different 5-letter arrangements are there of the letters in the word DIGIT ?

ANS:

D=1

I=2

G=1

Formula= 5*4*3*2*1 /1*2*1*1

120/2= 60

Question No: 32 (M - 2)

Explain what is meant by confidence interval?

Question No: 33 (M - 2)

Average sale and standard deviation for a store are 17 and 5.5 respectively .Find coefficient of variation .

ANS:

cv = s.d/average *100

cv=5.5/17*100

cv=32.35%

Question No: 34 (M - 3)

Suppose a coin is flipped 3 times. What is the probability of getting two tails and one head?

ANS:

HT total probability is 50 50

now probability of getting 2 tails id 2/3

and probability of getting one head is 1/3

now total probability of getting 2 tails and 1 head is 3/6 = 1/2

Question No: 35 (M - 3)

From the data below:

Week no.	Actual sales	Forecast
2	4000	4500

Given that α = 0.4, find the forecast for the 3rd week.

Question No: 36 (M - 3)

A random sample of size 36 is taken from a normal population with a known variance  **If the mean of the sample is 42.6. Find the left confidence limit for the population mean.**

Question No: 37 (M - 5)

Two students were informed that they received standard scores of 0.8 and -0.4 respectively on a multiple choice examination in English. If their marks were 88 and 64 respectively. Find the mean and standard deviation of the examination marks.

Question No: 38 (M - 5)

Find the centered average in the data below:

Quarter	Actual	Moving Average	Centered Average
1	142		
2	54		
3	162	141	
4	206	138	139.5
1	130	137	137.5
2	50	140	138.5
3	174	138	139
4	198	137	137.5
1	126	135	136
2	42	132	133.5
3	162	129	130.5
4	186		

Question No: 39 (M - 5)

Find the probability that in a family of 4 children there will be at least 1 boy.

ANS:

(probability of at least boy) +(probability of girls) =1

p(boy) = 1- p(girls)

p(boy) = 1 - ¾

p(boy) = ¼