

FINAL TERM EXAMINATION
18 July, Spring 2011
MTH001- Elementary Mathematics
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Ref No: 1735901
Time: 90 min
Marks:

Student Info	
Student ID:	
Center:	
Exam Date:	

For Teacher's Use Only									
Q No.	1	2	3	4	5	6	7	8	Total
Marks									
Q No.	9	10	11	12	13	14	15	16	
Marks									
Q No.	17	18	19	20	21	22	23	24	
Marks									
Q No.	25	26	27	28	29	30	31	32	
Marks									
Q No.	33	34	35	36	37	38	39	40	
Marks									
Q No.	41	42	43	44	45	46	47	48	
Marks									
Q No	49	50	51	52					

Question No: 1 (Marks: 1) - Please choose one

The difference between the upper and the lower class boundaries of a class are known as:

- ▶ Class Marks
- ▶ **Class Interval**
- ▶ Class frequency

Question No: 2 (Marks: 1) - Please choose one

The probability of sure event is

- ▶ 0
- ▶ **1**
- ▶ 0.5

Question No: 3 (Marks: 1) - Please choose one

What is the simple interest earned on Rs.3000 invested at 8% per annum for 6 months?

- ▶ **$3000 \times 6 \times 0.08$**
- ▶ $3000 \times 60 \times 0.08$
- ▶ $3000 \times 0.5 \times 0.08$
- ▶ $3000 \times 1.5 \times 0.08$

Question No: 4 (Marks: 1) - Please choose one

The probability of vowel letters from the word STATISTICS is

- ▶ 2/10
- ▶ **3/10**
- ▶ 0

▶ 10/10

Question No: 5 (Marks: 1) - Please choose one

Smoking habits of the residents of an area are

▶ Quantitative

▶ **Qualitative**

Question No: 6 (Marks: 1) - Please choose one

In a symmetric distribution

▶ **The mean, median, and mode are equal**

▶ The mean is the largest measure of location

▶ The median is the largest measure of location

▶ The standard deviation is the largest value

Question No: 7 (Marks: 1) - Please choose one

When two coins are tossed simultaneously, the probability of at least one head is _____.

▶ 1/4

▶ **3/4**

▶ 1/2

▶ 1

Question No: 8 (Marks: 1) - Please choose one

20 m long rope is cut to the length of 15m. what is percentage decrease?

▶ **(5/20 ×100)%**

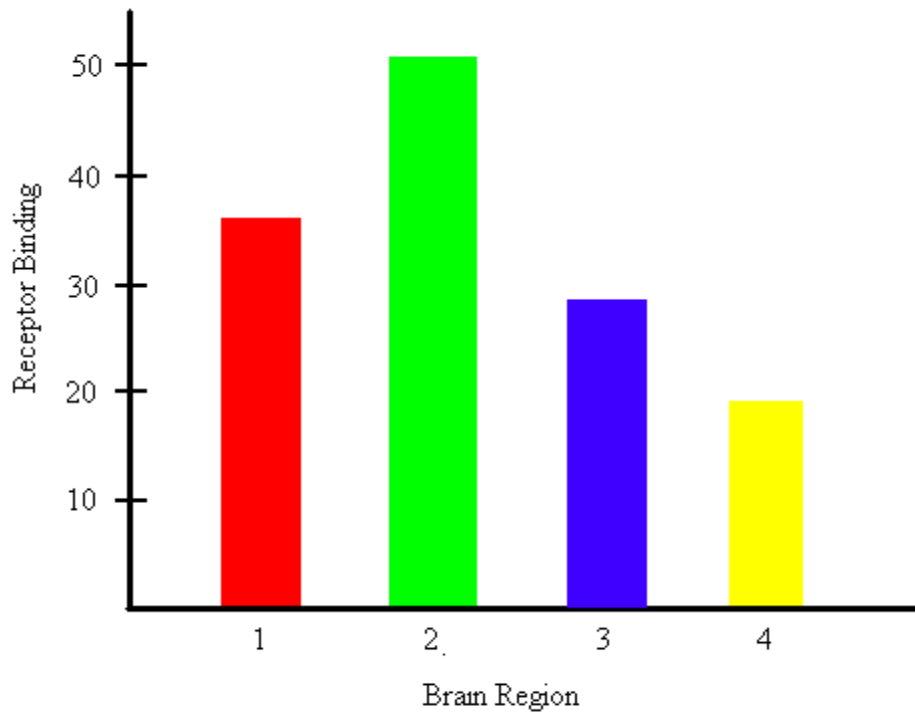
▶ $(15/20 \times 100)\%$

▶ $(5/20)\%$

▶ $(2/2000)\%$

Question No: 9 (Marks: 1) - Please choose one

The chart below is agraph.



▶ Pie

▶ **Bar**

▶ Line

▶ Quadratic

Question No: 10 (Marks:)

List price of a shirt is Rs 450. If the discount rate is 20%, calculate the discount

amount of the shirt.

Question No: 11 (Marks: 1) - Please choose one

Third Quartile = Q3 =

- ▶ P3
- ▶ Median
- ▶ **None of the above**
- ▶ Mode

Question No:12 (Marks: 1) - Please choose one

Standard deviation is always measure from

- ▶ **Mean**
- ▶ Median
- ▶ Mode

Question No: 13 (Marks: 1) - Please choose one

The probability of sure event is

- ▶ 0
- ▶ **1**
- ▶ 0.5

Question No: 14 (Marks: 1) - Please choose one

The probability of tail when a coin is tossed is

- ▶ 0

▶ 1

▶ 1/2

Question No: 15 (Marks: 1) - Please choose one

A major disadvantage of mean is that it is affected by..

▶ Extremely large values

▶ Extremely small values

▶ Middle values

Question No: 16 (Marks: 1) - Please choose one

Mode is the measure which always exists in any numerical data

▶ True

▶ False

Question No: 17 (Marks: 1) - Please choose one

When 3 coins are tossed simultaneously (3 heads) will be.

▶ 3/8

▶ 1/8

▶ 1/4

▶ 1

Question No: 18 (Marks: 1) - Please choose one

If A is the sure event, then $P(A)=$

1

1/2

1/4

3/4

Question No: 19 (Marks: 1) - Please choose one

Probability of a sure event is

1/2

0

1

1/4

Question No: 20 (Marks: 1) - Please choose one

If E and F are mutually exclusive events such that $P(E) = 0.4$ and $P(F) = 0.5$ then.

0.2

0.9

0.1

0.5

Question No: 21 (Marks: 1) - Please choose one

Which of them is a proposition?

x is greater than 2

▶ **3+7 =10**

▶ close the door

▶ what time is it?

Question No:22 (Marks: 1) - Please choose one

Conjunction of two statements p and q is denoted by

▶ **$p \wedge q$**

▶ $p \vee q$

▶ $p \leftrightarrow q$

▶ $p \rightarrow q$

Question No: 23 (Marks: 1) - Please choose one

The component bar chart should be used when we have available to use in formation regarding totals and their components.

▶ **True**

▶ False

Question No: 24 (Marks: 1) - Please choose one

A conditional statement is logically equivalent.

▶ contra positive

▶ Inverse

▶ converse to its

Question No: 25 (Marks: 1) - Please choose one

Which one of the following is the negation of the statement

▶ If Tanveer live in Lahore then he does not live in Pakistan

▶ Tanveer does not live in Lahore and he lives in Pakistan

▶ If Tanveer does not live in Lahore then he does not live in Pakistan

▶ Tanveer does not live in Lahore then he lives in Pakistan

Question No: 26 (Marks: 1) - Please choose one

According to Demorgan's Law $\sim (p \wedge q) =$

▶ $\sim p \wedge q$

▶ $\sim p \wedge \sim q$

▶ $\sim p \vee \sim q$

▶ $p \wedge \sim q$

Question No: 27 (Marks: 1) - Please choose one

Order of elements in a set does not matter

▶ True

▶ False

Question No: 28 (Marks: 1) - Please choose one

If $A = \{1, 2, 3, 4\}$ and $B = \{5, 6, 7\}$, then $A \cap B$.

▶ $\{1, 2, 3\}$

▶ $\{5, 6, 7\}$

▶ $\{1, 2, 3, 4, 5, 6, 7\}$

▶ 0

Question No: 29 (Marks: 1) - Please choose one

Which one of the following sets is finite?

▶ set of real numbers

▶ set of even numbers

▶ $\{x \mid x \in \mathbb{Z} \wedge 0 \leq x \leq 12\}$

▶ $\{x \mid x \in \mathbb{R} \wedge x \geq 12\}$

Question No: 30 (Marks: 1) - Please choose one

If $R = \{(a,a), (b,b), (c,c)\}$ is a relation on the set $A = \{a, b, c\}$

▶ symmetric only

▶ **symmetric and Reflexive**

▶ Equivalence relation

▶ Reflexive only

Question No: 31 (Marks: 1) - Please choose one

$2x + 6y$ is a

▶ Monomial

▶ Binomial

▶ Trinomial

▶ none of these

Question No: 32 (Marks: 1) - Please choose one

Order of matrix $A = \begin{bmatrix} 2 \\ 4 \end{bmatrix}$ is

▶ **1 x 1**

▶ 2 x 2

▶ 2 x 1

▶ 1 x 2

Question No: 33 (Marks: 1) - Please choose one

If matrix A is of order 2 x 3 and B is of order 3 x 4, then order of matrix AB will be

▶ **2 x 4**

▶ 2 x 3

▶ 2 x 2

▶ 3×2

Question No: 34 (Marks: 1) - Please choose one

Data which is not arranged in ascending or descending order is called

▶ grouped data

▶ raw data

▶ qualitative data

Question No: 35 (Marks: 1) - Please choose one

If $x : y = y : 1$ then $x =$

▶ y^2

▶ y

▶ $\frac{y}{x}$

▶ $x^2 y$

Question No: 36 (Marks: 1) - Please choose one

If set A has m elements and set B has n elements then the total numbers of relation from A to B are

▶ $m \times n$

▶ m

▶ $2 \times n$

▶ $m + n$

▶ mn

Question No: 37 (Marks: 1) - Please choose one

Determine the range of the function g from $X = \{2,4,5\}$ to $Y = \{1,2,4,6\}$ defined as $g = \{(2,6),(4,2),(5,1)\}$

▶ Range of $g = \{1,2,6\}$

▶ Range of $g = \{2,6\}$

▶ Range of $g = \{2,4,5\}$

Question No: 38 (Marks: 1) - Please choose one

Suppose A is a set with m elements and B is a set with n elements. How many functions are there from A to B ?

▶ $m \cdot n$

▶ m
▶ n

▶ $m \cdot m$
▶ $n \cdot n$

Question No: 39 (Marks: 1) - Please choose one

If the price of shoes increase from Rs.600 to 900, what is the percentage increase?

▶ $(600/3)\%$

▶ $(900/6)\%$

▶ $(600/9)\%$

▶ $(300/6)\%$

Question No: 40 (Marks: 1) - Please choose one

The value of all assets that are reasonably expected to be converted into cash within one

year in the normal course of business are called

▶ **Liabilities**

▶ Current assets

▶ Face value

Question No: 41 (Marks:) - Please choose one

Define Observations.

Question No: 42 (Marks:) - Please choose one

A pair of fair dice is rolled once .Find the probability that the sum of the face is 9.

Question No: 43 (Marks:) - Please choose one

let $f : \mathbb{R} \rightarrow \mathbb{R}$ be defined by $f(x) = \frac{x+1}{x+2}$

$x+2$

show that f is one - to -one and onto

Question No: 44 (Marks:) - Please choose one

Finde the value of x in the proportion (5x+ 1):3 =(2x +2): 7(6 x) = (4x) :7

Question No: 45 (Marks:1) - Please choose one

The chart below is a graph

▶ Bar

▶ Pie

▶ Line

▶ Simple bar

Question No: 45 (Marks:) - Please choose on

Consider the following diagrams