

D 6973

(Pages : 4)

Name.....

Reg. No.....

THIRD SEMESTER M.A. DEGREE EXAMINATION, DECEMBER 2016

(CUCSS)

Applied Economics

Optional IV—COMPUTER APPLICATION IN ECONOMIC ANALYSIS

(2012 Admissions)

Time : Three Hours

Maximum : 36 Weightage

Part A

*Answer **all** questions.*

*Each bunch of **four** questions carries a weightage of 1.*

(A) Multiple Choice :

1 What was the CPU component of the first generation computers ?

- | | |
|-------------------|-------------------------|
| (a) Transistors. | (b) Integrated circuit. |
| (c) Vacuum tubes. | (d) ALU. |

2 What is the purpose of a compiler ?

- (a) To convert high level language to machine code.
- (b) To convert high level language to assembly language.
- (c) To convert assembly language to high level language.
- (d) To convert machine language to assembly language.

3 Which of the following is word processing software ?

- | | |
|-----------------|---------------|
| (a) Ms Word. | (b) Ms Excel. |
| (c) PowerPoint. | (d) C++. |

4 Which of the following is software used to analyze, share and manage the data ?

- | | |
|---------------------|---------------|
| (a) MS Word. | (b) MS Excel. |
| (c) MS Power point. | (d) MS Docs. |

(B) Multiple choice :

5 A numerical value used as a summary measure for a sample, such as sample mean, is known as :

- | | |
|---------------------------|-----------------------|
| (a) Population parameter. | (b) Sample parameter. |
| (c) Sample statistic. | (d) Population mean. |

Turn over

6 Based on a sample of 100 observations, the correlation coefficient between x and y is found to be nearly zero. Then :

- (a) x and y are definitely unrelated.
- (b) x and y are linearly related to each other.
- (c) x and y may be non-linearly related to each other.
- (d) there is spurious correlation between x and y .

7 The value that has half of the observations above it and half the observations below it is called the :

- (a) Range. (b) Median.
- (c) Mean. (d) Mode.

8 Arithmetic mean is 12 and number of observation are 20 then sum of all value is :

- (a) 8. (b) 20.
- (c) 12. (d) 240.

(C) Fill in the blanks :

- 9 _____ is a facility to send a document to different recipient.
- 10 _____ cells involves creating a single cell by combining two or more selected cells.
- 11 _____ contains various symbols for doing different activities such as bold, italic, underline etc.,
- 12 Data originally collected for any investigation is called _____

(D) State True or False :

- 13 BIOS program is stored on the RAM.
- 14 Word bit is the short form of binary digit.
- 15 GUI stands for Graphical User Interconnection.
- 16 A group of 8 bit is called a Nibble.

(16 x $\frac{1}{4}$ = 4 weightage)

Part B (Short Answer Questions)

*Answer any ten of the following.
Each question carries a weightage of 2.*

17 What are the major classifications of computers ? Explain.

18 The following data represent height of 16 adults in centimeters :

162, 168, 177, 147, 189, 171, 173, 168, 178, 184, 165, 173, 179, 166, 168, 165

Divide the data into 5 equal length interval between 140 cm and 190 cm and draw a histogram.

- 19 Briefly explain the meaning, merits and limitations of median.
- 20 The population of a country has increased from 84 million in 1998 to 108 million in 2008.
Find the annual rate of growth of population.
- 21 Calculate the standard deviation from the following series :
- | | | | | | | |
|---|---|----|----|----|----|----|
| X | : | 10 | 11 | 12 | 13 | 14 |
| F | : | 3 | 12 | 18 | 12 | 3 |
- 22 Briefly explain Lorenz curve and its uses.
- 23 Distinguish correlation and regression.
- 24 Point out the methods of studying correlation.
- 25 Define regression and explain its application.
- 26 From the following data construct an index numbers by applying Laspeyres method :

Commodity	2006		2007	
	Price	Quantity	Price	Quantity
A	2	7	3	6
B	5	12	7	9
C	8	18	5	13
D	9	23	3	16

- 27 Explain, what is a computer and its uses ?
- 28 Explain with example what application software is.

(10 x 2 = 20 weightage)

Part C (Essay Questions)

Answer any **three** questions.
Each question carries a *weightage* of 4.

- 29 Below are given the figures of production (million tons) of a sugar factory :
- | | | | | | | | | |
|------------|---|------|------|------|------|------|------|------|
| Year | : | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| Production | : | 80 | 90 | 92 | 83 | 94 | 99 | 92 |
- (i) Fit a straight line trend to these figures.
- (ii) Plot these figures on a graph and show the trend line.
- 30 The regression equation involving variables are $Y = 5.6 + 1.2x$ and $X = 12.5 + 0.6Y$.
Find the Arithmetic mean of X and Y and the correlation coefficient between them ?

Turn over

- 31 Calculate the mean, standard deviation and coefficient of standard deviation from the following data:

Age (in years)	10	20	30	40	50	60	70	80
No. of Persons dying :	15	30	53	75	100	110	115	125

- 32 In a music contest two judges ranked eight candidates in order of their performance as follows :

Individuals	A	B	C	D	E	F	G	H
First Judge	5	2	8	1	4	6	3	7
Second judge	4	5	7	3	2	8	1	6

Find the rank correlation coefficient.

- 33 Explain computer generation and different application of information technology.

(3 x 4 = 12 weightage)