

THIRD SEMESTER M.A. DEGREE EXAMINATION, DECEMBER 2015

(CUCSS)

Applied Economics

Optional IV—COMPUTER APPLICATION IN ECONOMIC ANALYSIS

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 Rajesh Mehta wants to store data of his monthly expenditure over the last financial year. Which of the following applications is most suitable for this purpose ?
 - (a) Microsoft Word.
 - (b) Microsoft PowerPoint.
 - (c) Microsoft Outlook.
 - (d) Microsoft Excel.
- 2 What kind of computer memory is non-volatile ?
 - (a) RAM.
 - (b) ROM.
 - (c) LOTUS.
 - (d) UNIX.
- 3 What's a quick way to extend numbers in an Excel worksheet to a longer sequence, for instance 1 through 20 ?
 - (a) Select both cells, and then drag the fill handle over the range you want, for instance 18 more rows.
 - (b) Select the range you want, include both cells, point to fill on the edit menu, and then click down.
 - (c) Copy the second cell, click in the cell below it, on the standard toolbar click the down arrow on the Paste button, and then click Paste Special.
 - (d) All of above.
- 4 Formulas in Excel start with :
 - (a) %.
 - (b) .
 - (c) +.
 - (d) @.

B. Multiple choice :

- 5 The mean value of a frequency distribution is 30 and the median value is 27. The mode value of this frequency distribution will be :
 - (a) 28.5.
 - (b) 25.
 - (c) 21.
 - (d) 31.5.
- 6 A simple line graph of a frequency, relative frequency or percentage distribution is called :
 - (a) Polygon.
 - (b) Histogram.
 - (c) Bar chart.
 - (d) Ogive.

Turn over

7 Which of the following is responsible for co-ordinating statistical activities in India, which includes preparation of national accounts, processing and publishing industrial statistics, etc.

- (a) National Sample Survey Organization. (b) Central Statistical Organization.
(c) National Industrial Organization. (d) None of these.

8 A relative frequency distribution presents frequencies in terms of .

- (a) Fractions. (b) Whole numbers.
(c) Percentages. (d) Both (a) and (c).

C. Fill in the blanks :

9 _____ is the name of the tool used for finding synonyms and antonyms in MS Word.

10 The procedure of combining two or more overlapping series of index numbers into one continuous series is known as _____

11 The food production in India during 2010-11 and 2011-12 were 255 million tons and 260 million tons, respectively. The sample percentage annual growth rate of food production in India during the above mentioned period is _____

12 HTTP stands for _____

D. State True or False :

13 The value most often repeated in a data set is called the arithmetic mean.

14 In MS Excel, the shortcut key combinations used for navigating to the end of a column are CTRL + down arrow key (4) or END + down arrow key (J.).

15 Page breaks can be inserted using view menu.

16 The value most often repeated in a data set is called the arithmetic mean.

(16 x ¼ = 4 weightage)

Part B (Short Answer Questions)

Answer any **ten** questions.

Each question carries a weight of 2.

17 Write formula, for the operations given in (a) to (b) based on the spreadsheet given below along with the relevant cell address :

	A	B	C	D	E	F	G
1	SNO	Name	Science	Maths	Computers	Total	Average
2	1	Swati	70	80	87	—	—
3	2	Shruti	90	98	89	—	—
4	3	Neelu	90	90	98	—	—
5	4	Rosy	60	76	79	—	—
6	5	Shreya	50	45	67	—	—
7	Max				—		
8	Total		—				

- (a) To calculate the Total Marks as sum of Science, Maths and Computers for each student and display them in column F.
- (b) To calculate the average marks for each student and display them in column G.
- (c) To calculate the highest marks in Computers and display it in cell E7.
- (d) To calculate the total number of students appearing for the Science test and display it in cell C8.

18 What is Pie diagram ? Explain its uses.

19 What is histogram ? Draw histogram for the following data :—

Range of marks	10-15	15-20	20-25	25-30	30-35
Number of students	10	25	50	40	15

- 20 What are the major classification of computers ? Explain.
- 21 The mean annual salary paid to all employees in a company is Rs. 5,000. The mean annual salary for all male employees is Rs. 5,200 and for all female employees is Rs. 4,200. Find out the percentage of males and females employed by the company.
- 22 What is coefficient of variation ? How is it calculated ? For what purpose it is used ?
- 23 What does Lorenz Curve indicate ? State at least two practical applications of Lorenz Curve in Economics.
- 24 Calculate the present value of Rs. 6,000 that is expected to be received in three years' time with simple interest of 7.5 % per annum.
- 25 What is purpose of Networking ? Explain different methods of networking.
- 26 Differentiate between Laspeyer's formula and Paasche's formula for the construction of Index numbers. Which is more appropriate for measuring National Income of a country ? Why ?
- 27 An opinion survey among 120 households regarding the construction of a new airport provides 58 Yes, 42 No, and 20 no-option answers. Construct (i) a Pie chart ; and (ii) a bar graph using the information.
- 28 Rs. 5,000 is invested at 8 % compounded interest per annum for three years :
- (a) Calculate the value of the investment at the end of three years.
 - (b) Compute the present value of receiving Rs. 15,000 in three years' time when the discount rate is 8 %.

(10 x 2 = 20 weightage)

Part C (Essay Questions)

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

- 29 What are the different measures of average ? Compare them their relative merits and demerits.

Turn over

- 30 The marks obtained by two students in 10 tests of 100 marks each are given below. Find out the mean, standard deviation, and coefficient of variation of marks obtained by each student. Who is more intelligent and who is more consistent ?

Marks of Student X	25	50	45	30	70	42	36	48	34	60
Marks of Student Y	10	70	50	20	95	55	42	60	48	80

- 31 The prices and quantities of fruits consumed by a family for two different months are given below :

Fruit	Price per unit		Quantity in numbers	
	January, 2014	October, 2014	January, 2014	October, 2014
<u>Pear</u>	4	7	100	80
<u>Orange</u>	5	9	80	60
<u>Apple</u>	6	8	150	120
<u>Lime</u>	2	2	50	60

Taking January, 2014 as the base period, calculate weighted index number by (i) Laspeyzer's method ; and (ii) Paasche' method.

- 32 The Wholesale Price Index (WPI) was constructed with 1995-96 as base year and continued upto 1999-00. From 1999-00 WPI was computed with 1999-00 as base year. The corresponding WPI values are given below. Prepare spliced series of WPI with base 1999-00.

Year	WPI with base 1995-96	WPI with Base 1999-00
1995-96	100	
1996-97	114	
1997-98	128	
1998-99	140	
1999-00	150	100
2000-01		104
2001-02		111

- 33 Give a note on MS Access. How it is used in Database Management ?

(3 x 4 = 12 weightage)