# THIRD SEMESTER M.A. DEGREE EXAMINATION, DECEMBER 2014 

 (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 weightage 1.
A. Multiple Choice :

1 Headers and footers are exhibited :
(a) In print layout.
(b) In normal view.
(c) In web layout.
(d) All the above.

2 To save a file which of the following function key is used :
(a) F2.
(b) F9.
(c) F10.
(d) F5.

3 What do we call a computer program that organizes data in rows and columns of cells ? You might use this type of program to keep a record of the money you earned moving lawns over the summer :
(a) Spreadsheet program.
(b) Database program.
(c) Word processor program.
(d) Desktop publisher program.

4 When a row of data is to be converted into columns :
(a) Copy the cells in row, select the same number of cells in row and paste.
(b) Copy the cells in column then choose Edit $\gg$ Paste Special, then click Transpose and OK.
(c) Copy the cells then go to Format >> Cells then on Alignment tab click Transpose check box and click OK.
(d) Select the cells then place the cell pointer on new cell and choose Edit >> Paste Special, mark Transpose check box and click OK.
B. Multiple Choice :

5 Smoothed frequency curves drawn for two cumulative series are called:
(a) Ogives.
(b) Histograms.
(c) Polygons.
(d) Normal curves.

6 Mean and median calculated for a statistical data are 14.92 and 15.83. The mode value for the data is :
(a) 17.65 .
(b) 18.38 .
(c) 15.25 .
(d) 13.8 .

7 The National Sample Survey Organization (NSSO) in India conducts surveys on :
(a) Household income and consumer expenditure.
(b) Retail prices of selected commodities.
(c) Particulars relating to the employment and unemployment.
(d) All of the above.

8 Which of the following measure of average is based on all the observations in the data ?
(a) Median.
(b) Mean.
(c) Mode.
(d) All of the above.
C. Fill in the blanks :

9 The hardware part USB stands for $\qquad$
10 $\qquad$ is the name of the protocol associated with sending E-mail.

11 The weighted index method in which quantities consumed during the base period are used as weights is the $\qquad$ method.
12 $\qquad$ is defined as the square root of the mean of squares of deviation of all values of a series from its mean.
D. State True or False :

13 Thesaurus provides a list of possible meanings and synonyms.
14 The variance, like the standard deviation, takes into account every observation in the data set.

15 A population is a collection of all the elements we are studying.
16 An index number is always found by taking the ratio of a current value to a base value and multiplying by 100.

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\text { ( } 4 \times 1=4 \text { weightage) }
$$

Part B (Short Answer Questions)
Answer any ten questions.
Each question carries a weightage of 2 .
17 What do you mean by data type ? Explain the types of data.
18 What is Laspeyres' Price Index ? How is it different from Paasche's Price Index ?

19 Write the Excel formula to solve the following :-
(a) $35 \mathrm{M}-5+5 \varkappa^{-8.2}$
(b) in (8.3) +5 in (15) (ln means natural logarithm).
(c) $\frac{s}{\left(1 \_3 n^{5}\right)}$
(d) $250 \mathrm{e}^{8}$, (e represents exponential).

20 What are the major applications of computers in economic analyses ?
21 Can polygons be constructed for distributions of nominal, ordinal or discrete ratio data ? Explain.

22 The following frequency table presents the income in hundred earned by 257 families in a town :-

| Income class | $:$ | $\mathrm{O}-10$ | $10-50$ | $50-200$ | $200-500$ | $500-1000$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of families : | 22 | 78 | 124 | 24 | 9 |  |

Draw a bar chart for the above data keeping income-class in the x-axis. Explain the chart.
23 Distinguish between discrete and continuous measurement variables with examples.
24 Differentiate between programming languages and DBMS using examples.
25 The average wage of 100 labourers working in a construction site in two shifts is Rs. 38. 60 labourers are working in the morning shift and their average wage is Rs. 40 . Find the mean wage of the remaining labor working in the afternoon shift.

26 Distinguish between variance and standard deviation. Which measure is more appropriate in measuring dispersion? Why?
27 Calculate the present value of Rs. 10,000 due in five years if interest is compounded annually at $4.5 \%$.

28 What are properties of a good database management system?
(10 $\times 2=20$ weightage)

## Part C (Essay Questions) <br> Answer any three questions. <br> Each question carries a weightage of 4 .

29 What are the essential properties of a good measure of average?
30 The following frequency table presents the income in hundred earned by 257 families in a town :-

| Income class | $:$ | $\mathrm{O}-10$ | $10-50$ | $50-200$ | $200-500$ | $500-1000$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of families : | 22 | 78 | 124 | 24 | 9 |  |

Draw the Lorenz Curve and explain the curve.

Turn over

31 Suppose Rs.5,000 is invested for five years. Calculate the amount accumulated at the end five years if interest is compounded annually at a nominal rate of (a) $5 \%$, (b) $7 \%$, and (c) $\mathbf{1 0}^{\mathbf{r}}$
32 The Wholesale Price Index (WPI) from the year 2002-03 to 2007-08, with 1993-94 as the year, is given below. Recalculate the WPI by shifting the base year from 1993-94 to 2004

| Year |  | WPI |
| :---: | :---: | :---: |
| $2002-03$ |  | 166 |
| $2003-04$ |  | 175 |
| $2004-05$ |  | 187 |
| $2005-06$ |  | 195 |
| $2006-07$ |  | 206 |
| $2007-08$ | $\ldots$ | 215 |

33 What is an operating system? What are the major functions of an operating system ? Comment on various types of operating systems.

