

PG Odd Semester (CBCS) Exam., December—2016

ECONOMICS

(3rd Semester)

Course No. : EC-305 (C)

(Computer Applications in Economics)

(Practical)

Full Marks : 45

Pass Marks : 18

Time : 1 hours 45 minutes

The figures in the margin indicate full marks for the questions

Answer **all** questions

1. (a) In a certain survey, it has been found that around 150 students have access to Internet facility. Out of these, 80% reside in an urban location, and only 30% of the total students is female. Draw a suitable table in MS-Word to present these data.
- (b) Prepare a blank document in MS-Word with 'Department of Economics' as header and 'Assam University Silchar' as footer.

- (c) Type the following expressions in MS-Word :

$$(i) \quad \begin{matrix} x & 31y & 3z & 60 \\ 34x & 23y & 19z & 5 \\ & 3y & 9z & 23 \end{matrix}$$

$$(ii) \quad {}_1^7(4x \ e^{2x} \ 7) \qquad 5+5+5=15$$

2. Using 'SPSS.sav' data file (provided in the desktop), solve the following problems :

$$7+3+5=15$$

- (a) Compute the N, minimum, maximum and mean for all the variables (save the output file as 'descriptive' in your desktop). How many students have complete data? Identify any statistics on the output that are not meaningful. Explain.
- (b) What is the mean height of the students? What percentage of students are males?
- (c) Draw a cross tab to estimate the percentage of male students who are married. How many of the married female students have children?

(3)

3. Using 'regression.gdt' data file (provided in the desktop), solve the following problems :

$$5+3+4+3=15$$

- (a) Draw a scatter plot considering CM as the dependent variable and FLT as the independent variable and save the plot in MS-Word with 'scatter' as the file name.
- (b) Estimate the parameters of the following model and save the output in MS-Word with 'regression' as the file name :

$$CM_i = \beta_0 + \beta_1 FLT_i + \beta_2 PGNP_i + \beta_3 TFR_i + U_i$$

where, CM=child mortality, FLT=female literacy rate, PGNP=per capita GNP and TFR=total fertility rate.

- (c) Interpret the estimated parameters of the model in plain paper.
- (d) Does the estimated model suffer from heteroscedasticity? Conduct appropriate test and justify your answer in plain paper.

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