

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

ECONOMICS

(3rd Semester)

Course No. : ECOCC-303 (A)

(Group—A)

(Computer Applications in Economics)

(Practical)

Full Marks : 25

Pass Marks : 10

Time : 2 hours

The figures in the margin indicate full marks for the questions

Answer **three** questions, taking **one** from each Part

PART—I

1. (a) In Assam 43.3% of the rural households and 64.1% of the urban households had safe drinking water in 1991. The same rose to 56.8% and 70.4% respectively in the year 2001. Using MS-Word, prepare a table to show the above information. Save your answer as 1a in the desktop. 4

- (b) Type the following equations in MS-Word :

$$Q_t^D \quad P_{t-1}$$

$$Q_t^S \quad P_t$$

$$P_{t-1} \quad P_t$$

Draw a suitable diagram in MS-Word to show equilibrium condition of the market as represented above. Save your answer as 1b in the desktop. 3+3=6

2. Using 'Trade.xlsx' data file (provided in your desktop), do the following :

- (a) Prepare a data set containing export and import data of India only using filtering. Save it as 2a in desktop. 3

- (b) Calculate the total volume of trade and trade balance of India for different years. Show, with the help of a suitable figure, how trade balances in India have changed during the given period. Save your answer as 2b in the desktop. (2+2)+3=7

(3)

PART—II

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

(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. Write reasons why they are not meaningful. 7

(b) What is the mean height for the students? What percentage of students are male? 3

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

(a) Estimate the parameters of the following model and save the output in MS-Word with 'regression' as the file name :

$$CM_i = \alpha_0 + \alpha_1 FLT_i + \alpha_2 PGNP_i + \alpha_3 TFR_i + U_i$$

where

CM = Child mortality

FLT = Female literacy rate

PGNP = Per capita GNP

TFR = Total fertility rate. 3

(4)

(b) Interpret the estimated parameters of the model in plain paper. 4

(c) Does the estimated model suffer from heteroskedasticity? Conduct appropriate test and justify your answer in plain paper. 3

PART—III

5. Using 'SDP.xlsx' data file (provided in the desktop), calculate annual growth rates of per capita net State Domestic Products of the North-Eastern States. Show the annual growth rates of Assam, thus obtained, with the help of bar diagram. Save the answer as '5' in desktop. 2+3=5

6. Consider the supply function

$$q^s(p^s) = 30 + 6p^s$$

and the demand function

$$q^d(p^d) = 120 - 4p^d$$

Set up a linear market model in Excel and solve the following problems :

(a) Consider a free trade situation with a world market price

$$p^s = 10$$

Calculate producer revenue, consumer expenditure and foreign exchange. 2

(5)

(b) How do foreign exchange and government budget develop in a domestic price range $10 < p < 20$? Show the graph of the functions. Save it as 6b in the desktop. 3
