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

ECONOMICS

(3rd Semester)

Course No. : ECOCC–303 (E)

(Group—E)

(Computer Application 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)* The decadal growth rates of male population during 2001–11 in Hailakandi and Karimganj districts were 20·45% and 20·90% respectively. On the other hand, the decadal growth rates of females in these two districts during the

same period were 22·51% and 22·95% respectively. Using MS-Word, prepare a table to show the above information. Save it as '1a' on the desktop. 4

(b) Type the following equations :

$$Q_{t\ 1}^{S} \qquad P_t$$

$$Q_{t\ 1}^{D} \qquad P_{t\ 1}$$

$$P_t \qquad P_{t\ 1}$$

Show the equilibrium condition of the market as represented above by drawing a diagram in MS-Word. Save the answer file as '1b' on the desktop. 3+3=6

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

(a) Prepare a data set containing export and import data of Bangladesh only using filtering. Save it as '2a' on the desktop. 3

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

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 households have completed data? Identify any statistics on the output that are not meaningful. Write the reasons why they are not meaningful. 7

(b) What is the mean size of households? What percentage of households live in rural areas? 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 : 3

$$CM_j \quad _0 \quad _1FLR_j \quad _2PGNP_j \quad _3TFR_j \quad U_j$$

where,

CM = Child mortality

FLR = Female literacy rate

PGNP = Per capita GNP

TFR = Total fertility rate

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

(c) Does the estimated model suffer from heteroscedasticity? 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 product of each State. Show the annual growth rates of Manipur, thus obtained, with the help of a bar diagram. Save your answer as '5a' on the desktop.

2+3=5

6. Consider the supply function

$$q^s(p^s) \quad 25 \quad 6p^s$$

and the demand function

$$q^d(p^d) \quad 115 \quad 4p^d$$

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

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

$$p^s \quad 8$$

Calculate producer revenue, consumer expenditure and foreign exchange. 2

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

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