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

ECONOMICS

(3rd Semester)

Course No. : ECOCC–303 (D)

(Group—D)

(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)* The decadal growth rates of male population during 2001–11 in Cachar and Hailakandi districts were 19·28% and 20·45% respectively. On the other hand, the decadal growth rates of

females in these two districts during the same period were 21·15% and 22·51% respectively. Using MS-Word prepare a table to show the above information. Save your answer as 1*a* on the desktop. 4

(b) Type the following equations :

$$Q_{t\ 2}^{D} \qquad P_{t\ 2}$$

$$Q_{t\ 2}^{S} \qquad P_{t\ 1}$$

$$P_{t\ 2} \qquad P_{t\ 1}$$

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

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

(a) Prepare a dataset containing export and import data of Sri Lanka only using filtering. Save it as 2*a* on the desktop. 3

(b) Calculate the total volume of trade and trade balance of Sri Lanka for different years. Show, with the help of an appropriate figure, how trade balances in Sri Lanka have changed during the given period. Save your answer as 2*b* 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. How many households have complete data? Identify any statistics on the output that are not meaningful. Give reasons why, in your opinion, they are not meaningful. 7

(b) What is the mean size of the households? What percentage of the households belong to urban 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 :

$$IM_i \quad _0 \quad _1FLR_i \quad _2PGNP_i \quad _3TFR_i \quad _i$$

where,

IM = Infant mortality

FLR = Female literacy rate

PGNP = Per capita GNP

TFR = Total fertility rate. 3

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

(c) Do the estimated coefficients 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 product of each State. Show the annual growth rates of Mizoram, thus obtained, with the help of bar diagram. Save the answer as '5' 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 the 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 6*b* on the desktop. 3

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