

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

ECONOMICS

(3rd Semester)

Course No. : ECOCC-303 (B)

(Group—B)

(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) In Assam 74.29% of the urban households and 16.54% of the rural households had access to electricity in the year 2001. The corresponding figures for India in the same year was 87.88% and 43.53% respectively. Using MS-Word, prepare a table to show the above information. Save your answer as 1a on the desktop. 4

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

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

$$Q_t^S \quad P_t$$

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

Show the equilibrium condition of the market as represented above by drawing a diagram in MS-Word. Save your answer as 1b on 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 Singapore only using filtering. Save it as 2a on the desktop. 3
- (b) Calculate the total volume of trade and trade balance of Singapore for different years. Show, with the help of an appropriate figure, how trade balances in Singapore have changed during the given period. Save it as 2b on the desktop. (2+2)+3=7

(3)

PART—II

3. Using 'SPSS.sav' data file (provided in your 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. Give reasons why they are not meaningful? 7
- (b) What is the average height of the students? What percentage of students are females? 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 :

$$IM_f = 0 + 1FLT_j + 2PGNP_j + 3TFR_j + U_j$$

where,

IM = Infant 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 tests 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 States. Show the annual growth rates of Tripura, thus obtained, with the help of a bar diagram. Save the answer as '5' on desktop.

2+3=5

6. Consider the supply function

$$q^s(p^s) = 35 + 6p^s$$

and the demand function

$$q^d(p^d) = 125 - 4p^d$$

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

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

$$p^s = 12$$

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 on the desktop. 3

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