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

ECONOMICS

(3rd Semester)

Course No. : ECOCC–303 (C)

(Group—C)

(Computer Applications in Economics)

(Practical)

Full Marks : 25
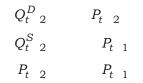*Pass Marks* : 10

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 Karimganj districts were found to be 19·28% and 20·90% respectively. On the other hand, the decadal growth

rates of females in these two districts during the same period were 21·15% and 22·95% respectively. Using MS-Word, present the above information with the help of a table. Save your answer as 1*a* on the desktop. 4

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

$$Q_t^D{}_2 \qquad P_{t\ 2}$$
$$Q_t^S{}_2 \qquad P_{t\ 1}$$
$$P_{t\ 2} \qquad P_{t\ 1}$$

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 Pakistan only using filtering. Save it as 2*a* on the desktop. 3

(b) Calculate the total volume of trade and trade balance of Pakistan for different years. Show, with the help of an appropriate figure, how trade balances in Pakistan have changed during the given period. Save your answer as 2*b* on 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 households 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 income of the households? What percentage of households belongs to rural areas? 3

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

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

$$\text{CM}_i = \beta_0 + \beta_1 \text{FLR}_i + \beta_2 \text{PGNP}_i + \beta_3 \text{TFR}_i + \mu_i$$

where

    CM = Child mortality

    FLR = 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 each State. Show the annual growth rates of Meghalaya, thus obtained, with the help of bar diagram. Save your answer as '5' on the desktop. 2+3=5

6. Consider the supply function :

$$q^s(p^s) = 40 + 6p^s$$

and the demand function

$$q^d(p^d) = 130 - 4p^d$$

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

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

$$p^s = 14$$

Calculate producer, 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 your answer as *6b* on the desktop.   3

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