00362

RESEARCH DEGREE PROGRAMME IN ECONOMICS

Term-End Examination

June, 2016

RECE-010 : PUBLIC ECONOMICS

Time : 3 hours   *Maximum Marks : 100*

Note :   *Attempt all the questions as directed.*

SECTION - A

Answer **any two** questions from this section. **2x20=40**

1. Suppose a monopolist's cost function is given by $C(q) = 10 + 2q + 0.5q^2$. The demand function for the product is $P(q) = 47 - q$. The government imposes a tax of ₹ 9 per unit.
    (a) Determine the equilibrium quantity and price of the product.
    (b) Determine the amount of tax borne by the consumer and by the monopolist.

2. You are asked to estimate the following labour supply relationship :
    Labour Supply $L_j = -320 + 85 W_j + 320 G_j - 120 M_j$
    where labour supply = hours of annual work and wages are given as hourly wage.
    W_j = after-tax wage
    G_j = dummy variable (college graduate)
    M_j = dummy variable (marital status)

(a) Interpret the coefficient of after-tax wages.

(b) Discuss about income and substitution effects of wages on labour supply from the estimated equation.

(c) How might this estimated coefficient be biased ? Explain your answer.

3. What is the income tax base in India ? Discuss the impact of horizontal and vertical equity aspect of such a tax system.

4. Suppose that a corporate tax rate is 20% with the provision of investment tax credit of 10%; depreciation rate of 5%; and dividend yield of 10%.

The official depreciation schedule is such that the present discounted value of depreciation allowances is 40% of the purchase price of the machine.

(a) What is the per-period marginal cost of each rupee that a firm spends on the machine ?

(b) If the marginal benefit per-period is given as $MB = 40 - 0.6 K$, where K = rupees spent on the machine , find the optimal amount of machinery purchased.

(c) If the investment tax credit is increased to 20%, what will happen firm's decision ? Discuss your answer.

SECTION - B

Answer **any five** questions from this section.

5x12=60

5. Why do you think that vertical and horizontal equity as goals of a tax system are important ? Which of these two concepts is easier to measure in practice ? Explain.

6. Compare the equity and efficiency aspects of two consumption tax systems where one imposes uniform rates on all goods while the other provides for taxation of luxury items at a higher rate and exemption of necessaries.

7. Why does a lump-sum tax involve no excess burden ? If this wind of tax is so efficient , why governments do not use it more often ?

8. If the cost function of a monopolist is given as $C(q) = 10 + 2q + 0.5q^2$ and the demand function is $P(q) = 47 - q$ and government levies a tax of ₹ 9 per unit, what is the what the welfare loss ?

9. Discuss the positive effects of supply-side fiscal policy.

10. Discuss the meaning of built-in stabilizers. How do these help eliminate recession or inflation ?

11. Write a critical note on India's system of inter-governmental fiscal relations.

12. Write short notes on :
    (a) Fiscal responsibility by state government and 13th Finance Commission of India.
    (b) Domar's stability condition on debt.