Indian Institute of Technology Kharagpur
Department of Humanities and Social Sciences

Date: ______FN/AN   Time: 2 hrs   Full Marks: 30   No of Students: 412

Autumn Mid-Sem. Exam, 2018   Subject: Economics   Subject No: HS20001

Instructions: (1) Answer one question in one place only, otherwise they will not be evaluated.
(2) All questions are compulsory.

1. (a) Discuss how the assumptions of Cardinal measures of utility vary from the assumptions of Ordinal measures of utility. What are the basic criteria of consumer's equilibrium under indifference curves analysis? **(2+2)**

(b) What are the exceptions to the law of demand? **(1.5)**

(c) Discuss the major determinants of price elasticity of demand. Hero India manufactures and sells bicycles. Management believes that price elasticity of demand is (-) 3. Currently, bicycles are priced at INR 1,200 per unit and the quantity demanded is 10,000 per annum.

i) If the price is increased to INR 1,300 per unit, how many bicycles will the company be able to sell each year?

ii) How much will total revenue change as a result of the price increase? **(2.5+1+1)**

2. (a) Present the circular flow diagram for a closed economy and discuss the interdependence among different economic agents and offer implications. **(2)**

(b) Define and distinguish between (i) capital and investment, (ii) gross investment and net investment. Find the role of MEC and rate of interest in the decisions to invest in an economy.

Patanjali is considering a new investment proposal. The conceived project has an initial (in the first year) capital requirement of INR 1200 Cr and the project will last for 4 years. The annual prospective yields for this project are given as follows.

Year	Prospective Yields (in Crore)
1	400
2	400
3	440
4	480

The market interest rate is estimated to be 10%. Following the rules of the MEC, suggest whether the project is worth-considering. **(2+2)**

(c) Define investment multiplier and discuss how the slopes and intercepts of different demand functions of a closed economy affect the value of the multiplier and income.

Suppose, an economy plans to make an initial investment of 50. It consumption function is expressed as

$C = 200 + 0.8Y$ (Y represents current income)

Derive initial equilibrium income. If an additional investment of 40 is made in the economy, what are its effects on the new equilibrium income under the condition that investment is once-over type? Make both algebraic and tabular presentations and interpret. **(2+2)**

3. (a) Discuss the underlying economic theory for construction of index number using consumer behaviour analysis. **(5)**

(b) Write short note on the following: **(2.5+2.5)**

(i) Capitalism

(ii) Value-added approach to measure GDP

END