

RAMAKRISHNA MISSION VIDYAMANDIRA

(Residential Autonomous College affiliated to University of Calcutta)

FIRST YEAR [2015-18]

B.A./B.Sc. FIRST SEMESTER (July – December) 2015

Mid-Semester Examination, September 2015

Date : 14/09/2015

ECONOMICS (Honours)

Time : 11 am – 1 pm

Paper : I

Full Marks : 50

[Use a separate Answer Book for each group]

Group – A

1. Answer **any three** : [3×5]
 - a) The aphorism is “Talk is cheap until you hire a lawyer.” Another way we can restate it as — “Talk is cheap because supply exceeds demand.” At what price is this comparison being made? [5]
 - b) Suppose that Shyam has what is known as a Cobb-Dauglas utility function : $U = q_1^a q_2^{1-a}$ where ‘a’ is a positive constant, q_1 is the number of chocolates he buys a year, and q_2 is the number of cakes he buys in a year. What is his marginal rate of substitution? [5]
 - c) Explain with the help of graph :
 - i) Indifference map for Ben when the two commodities at his disposal are Coke and Pepsi and Ben views Code and Pepsi as perfect substitutes. [2·5]
 - ii) Indifference map for Craig, when he views (within a two commodity framework) ice cream and pie as perfect complements. [2·5]
 - d) Define ‘giffen good’. Graphically explain the shape of ‘Price Consumption Curve’ for a giffen good. [5]
2. Answer **any one** : [1×2]
 - a) Let R be a preference relation (a binary relation R over the set X, which is complete and transitive). Define two new binary relations P and I as follows:
$$x I y \Leftrightarrow x R y \text{ and } y R x$$
$$x P y \Leftrightarrow x R y \text{ and } \text{not } y R x$$
Show that $x P y \text{ and } y R z \Rightarrow x P z$.
 - b) Check whether the following indifference curve is convex, $u(x, y) = x^{1/2} + y^{1/2}$
3. For each example below, show representative indifference curves, draw an arrow that shows the direction in which the consumer becomes better-off, and determine whether the consumer’s preferences satisfy monotonicity and convexity.
 - a) 1 litre bottles and 2 litre bottles of Coke for a person who is just interested in the total quantity of Coke he consumes.
 - b) Water and wine for a person who is not allowed to consume alcohol. Make sure you label the graphs clearly. [4]
4. Consider, $u(x, y) = \min(x + 2y, 2x + y)$. You should draw the indifference curve, when $u(x, y) = 100$. [4]

Group – B

- Answer **any one** : [1×5]
5. In an economy GDP = ₹ 6000, Personal disporable income = ₹ 5100, Government Budget Deficit = ₹ 200, consumption = ₹ 3800 and Trade deficit = ₹ 100.
 - a) How large is the savings
 - b) How large is the size of I
 - c) How large is G [2+2+1]
 6. Show how one can determine the Natural Rate of Unemployment of an economy. [5]

7. Describe the properties of the Keynesian consumption function. [5]

Answer **any two** : [2×10]

8. Explain, with the help of a circular Flow of Income diagram, why the value of production, value of Income generated and value of expenditure of an economy are always equal. [10]

9. In a simple Keynesian Cross type of model show that the value of the autonomous expenditure multiplier is greater than one. What happens if in addition to consumption investment also depends on the level of income? Explain. [5+5]

10. “The Effectiveness of Fiscal Policy depends on the slope of the LM curve” —Justify the statement. [10]

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