FAKIR CHAND COLLEGE

INTERNAL ASSESSMENT 2021

DEPARTMENT OF ECONOMICS

SEMESTER II

ECONOMICS HONOURS

Paper – CC3

INTRODUCTORY MACROECONOMICS

Full Marks – 10 Time – 30 Minutes

Group – A

Choose the correct answer for **any four** of the following questions: (1X4=4)

1 . If actual sales are less than expected then the producers will

a) Add more inventory to their stocks than desired

b) Cut their inventory stocks

c) Will be in equilibrium

d) None of a, b, c

2. Full employment equilibrium is always attained

a) In the classical system

b) In the Keynesian system

c) Both in the classical and Keynesian system

d) None of a, b, c

3. Money plays neutral role

   a) Both in the classical and Keynesian system

   b) In the Keynesian system

   c) In the classical system.

   d) None of the above

4. When the economy is under liquidity trap, as money supply increases

   a) Interest rate increases.

   b) Interest rate decreases

   c) Remain constant.

   d) May increase or decrease

5. Net National product - ……..? = National Income

   a) Depreciation,

   b) Personal taxes,

   c) Indirect business taxes and other

   d) Government transfer payments

GROUP—B

ANSWER ANY TWO QUESTIONS (3×2)

1 . What is called Keynesian cross? Illustrate with diagram.

2 . Given the following data

NDP at market price……. 17,000 (in crores)

Net factor income from abroad…… -500 (in crores)

Depreciation…….. 1200 (in crores)

Subsidies……....400 (in crores)

Indirect taxes……..……..2200 (in crores)

Determine: a) NDP at factor cost, b) NI, c) GNP at factor cost.

3. What do you mean by Speculative demand for money?

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SEMESTER 2

ECONOMICS HONOURS

Paper – CC4

MATHEMATICAL METHODS IN ECONOMICS - II

Full Marks – 10 Time – 30 Minutes

Group – A

Choose the correct answer for any four of the following questions: (1X4=4)

1. The degree of homogeneity of the function $f(x,y,w) = x/y + 2w/3x$ is
   a) 0
   b) 1
   c) 2
   d) It is a non-homogeneous function.

2. Sufficient condition for establishing a relative maximum in case of constrained optimization of a function is :
   a) A positive Hessian determinant
   b) A negative Hessian determinant
   c) A positive bordered Hessian determinant
   d) A negative bordered Hessian determinant.

3. Non-negative variables which are added in the LHS of the constraint to convert the '<' inequality into an equation in solving LPP are called:
   a) Slack variables
   b) Surplus Variables
   c) Artificial Variables
   d) Key elements

4. If dy/dt + 5y = 0, then intertemporal value of the variable y is :
   (a) 1
   (b) 2
   (c) 3
   (d) 4

5. As $t \to \infty$ if $(-a)^t \to 0$ and $0 < a < 1$, then time path is
   a) Stable and fluctuating
   b) Stable and not fluctuating
   c) Unstable and fluctuating
   d) Unstable and not fluctuating

Group – B

Answer any two of the following questions: (3X2=6)

6. Suppose there are two individuals L and M. The level curve of L is given by $U_L = (x+a)^{\alpha} (y+b)^{\beta}$, while that of M is given by $U_M = [(x+a)^{\alpha} (y+b)^{\beta}]^2$, where a, b, α and β are all positive. Find the slopes of these two level curves and comment on the relation between them. 3

7. Find the extremum of the function z = xy, subject to the constraint x+2y = 2. 3

8. Suppose $D = -5 + 2\frac{dp}{dt} + 3\frac{d^2p}{dt^2}$ and $S = 10 - 4\frac{dp}{dt} + 6p$ and D = S.
   Find General Solution to the above differential equation. 3