



Date: 26-04-2025

Dept. No.

Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

SECTION A – K1 (CO1)

Answer ALL the questions

(5 x 1 = 5)

1 Choose the best answer.

- a) In the Ramsey-Cass-Koopmans model, what does the "golden rule" level of capital represent?
 - (A) The level of capital that maximizes consumption per worker in the steady state
 - (B) The level of capital that maximizes investment per worker in the steady state
 - (C) The level of capital that maximizes economic growth in the steady state
 - (D) The level of capital that maximizes social welfare
- b) Which among the following is the primary driver of long-run economic growth in the Romer model?
 - (A) Accumulation of physical capital
 - (B) Technological progress
 - (C) Population growth
 - (D) Natural resource abundance
- c) Real Business Cycle models often use which mathematical technique?
 - (A) Game theory
 - (B) Dynamic stochastic general equilibrium (DSGE) modeling
 - (C) Input-output analysis
 - (D) Regression analysis
- d) According to the Lucas model, short-run fluctuations in real output are primarily caused by:
 - (A) Changes in government spending
 - (B) Changes in technology
 - (C) Unanticipated changes in the money supply
 - (D) Changes in consumer confidence
- e) The Calvo Model is primarily concerned with:
 - (A) Perfectly flexible prices.
 - (B) Staggered price adjustments.
 - (C) Perfect information.
 - (D) Real business cycles.

SECTION A – K2 (CO1)

Answer ALL the questions

(5 x 1 = 5)

2 State TRUE or FALSE.

- a) The Diamond model is a static model that does not consider the evolution of the economy over time.
- b) A key feature of Romer's model is the presence of increasing returns to scale, particularly in the production of ideas.
- c) RBC theory emphasizes the role of sticky prices and wages in explaining economic downturns.
- d) In Lucas's model, unanticipated changes in the money supply can lead to short-run fluctuations in real output.
- e) In Fischer's model, monetary policy can have real effects on output in the short run.

SECTION B – K3 (CO2)**Answer any THREE of the following in 100 words each.****(3 x 10 = 30)**

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|---|---|
| 3 | Experiment the effect of increase in saving rate and population growth rate in Solow model. |
| 4 | Construct the research sector of the Romer's Economy. |
| 5 | Organize the general facts about economic fluctuations. |
| 6 | Identify the real rigidity with an example. |
| 7 | Solve the household's utility function of the Dynamic New Keynesian model. |

SECTION C – K4 (CO3)**Answer any TWO of the following in 200 words each.****(2 x 12.5 = 25)**

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|----|---|
| 8 | Analyze the demographic structure and household utility function of Porter's Diamond Model. |
| 9 | Examine the relationship between technical progress and human capital formation. |
| 10 | Discover the cyclical behaviour of real wage with an illustration. |
| 11 | Inspect the implications of Fischer's staggered price adjustment model of fluctuations. |

SECTION D – K5 (CO4)**Answer any ONE of the following in 500 words****(1 x 15 = 15)**

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| 12 | Evaluate the Canonical New Keynesian model. |
| 13 | Explain the Romer model of endogenous growth. |

SECTION E – K6 (CO5)**Answer any ONE of the following in 1000 words****(1 x 20 = 20)**

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|----|---|
| 14 | Discuss in detail the Solow's model with technological progress. |
| 15 | Elaborate the optimal saving rate and labour supply decisions using baseline model of Real Business Cycle theory. |
