

**2022**

**M.A. / M.Sc.**

**2nd Semester Examination 2022**

**ECONOMICS**

**PAPER—ECO-202**

**THEORIES OF ECONOMIC GROWTH**

*Full Marks : 50*

*Time : 2 Hours*

*The figures in the right-hand margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

**Group - A**

1. Answer any two questions.

2×2

- (a) Distinguish between Harrod-neutral and Hicks-neutral technological progress.

*(Turn Over)*

- (b) What are the determinants of growth in Robinson's model?
- (c) Interpret the equilibrium condition in Robinson's model.
- (d) What are the necessary conditions for conditional convergence?

2. Answer any *two* questions. 2×4

- (a) Briefly discuss the concept of absolute convergence.
- (b) State and illustrate capital augmenting technical progress.
- (c) What is golden age equilibrium? Examine whether this equilibrium is stable.
- (d) Explain how the share of profit and wage are determined after the correction made by Pasinetti.

3. Answer any *one* question. 1×8

- (a) (i) Derive and interpret the fundamental equation of the growth model of Solow.
- (ii) Briefly explain the transitional dynamics and steady state situation in Solow's growth model.

4+4

- (b) (i) What are important features of limping golden age? What is leaden age?
- (ii) Distinguish between restrained golden age and bastard golden age. 4+4

### Group - B

4. Answer any *two* questions. 2×2
- (a) What are the different assumptions of the AK model of endogenous growth theory?
- (b) What are the factors on which the long-run growth rate of output per worker in Romer's model depends?
- (c) Distinguish between 'exogenous technological progress' and 'endogenous technological progress'.
- (d) Calculate the growth rate of real per capita income for the year 2022 if the nominal income for 2021 and 2022 are Rs. 100,000 and Rs. 110,000 respectively, rate of increase in general price level is 3% per annum, and population growth rate is 1.8% per annum.
5. Answer any *two* questions. 2×4
- (a) Discuss briefly the criticisms of the Endogenous Growth Theory.

- (b) Define conservation capital? Discuss its excludable and non-excludable benefits. 1+3
- (c) Explain the Growth Accounting System of Solow using a general production function incorporating two inputs, labour and capital, and an exogenous technological progress term with 75:25 shares of labour payment and capital payment.
- (d) Explain how do the households decide optimum consumption, savings and capital formation in the overlapping generations model.

6. Answer any *one* question. 1×8

- (a) Derive the optimal level of research and development in Romer's model.
- (b) Using an intertemporal utility function derive the expression for rate of growth of per capita consumption expenditure under Ramsey model under a centralised social planning system. Discuss how the incorporation of good public system helps in generating positive growth of per capita consumption in the long run. 4+4

[Internal assessment - 10]

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