

MICROECONOMICS: THEORY & APPLICATIONS

PROF. DEEP MUKERJEE TYPE OF COURSE: Rerun | Core | PG

Department of Economic Sciences COURSE DURATION: 12 weeks (24 Jan' 22 - 15 Apr' 22)

IIT Kanpur EXAM DATE : 23 Apr 2022

PRE-REQUISITES: Knowledge of Calculus (High school level) and Microsoft Excel.

INTENDED AUDIENCE: Students of Economics, Commerce, or Management degree programs.

INDUSTRIES APPLICABLE TO: Any industry that would like to educate their staff on basics of

Economics.

COURSE OUTLINE:

Microeconomics: Theory & Applications is designed as a postgraduate course that teaches economic theory involving entities such as consumers and firms and how these economic agents interact within the social institution called market. This is one of the courses that students take in their 1st semester coursework in M.S./M.A. economics program. For students registered in M.Com./M.B.A. program, Microeconomics may be the only course they take in economics, and it provides a solid foundation for economic thinking that can be useful throughout their professional careers. This particular course is designed in such a way that it will provide a foundation for applied studies in economics, business, or public policy. That's why this course has devoted some lectures on quantitative techniques which are useful in applied work. On the successful completion of this course, you will be able to use basic microeconomic theory and quantitative techniques to provide solution to a number of real-life business and policy questions.

ABOUT INSTRUCTOR:

Prof. Deep Mukherjee is currently an associate professor at the Department of Economic Sciences, IIT Kanpur. He obtained his Ph.D. from the University of Connecticut and M.S. from Indian Statistical Institute. His research interests are in the fields of agricultural economics and public policy. He has taught undergraduate level microeconomics, econometrics, and environmental economics courses.

COURSE PLAN:

- Week 1 Introduction to economic analysis, Market mechanism, Basic differential calculus
- Week 2 Utility, Marshallian theory of consumer behaviour, Basic mathematical optimization
- Week 3 Modern theory of consumer behaviour (Part I)
- Week 4 Modern theory of consumer behaviour (Part II)
- Week 5 Modern theory of consumer behaviour (Part III)
- Week 6 Theory of production
- Week 7 Theory of cost
- Week 8 Perfect competition, equilibrium of a competitive firm and a competitive industry
- Week 9 Welfare analysis of market, Governmental intervention in market, Monopoly
- Week 10 Imperfect competition: Monopoly, Duopoly
- Week 11 Externality problem, Linear programming as a tool for resource allocation problem
- Week 12 Linear programming, Regression analysis as a tool for applied economists