UNIT – III: Theory of Production:

Production function, Marginal rate of technical substitution, Iso-quants and Iso-costs, production function with one/two variable factors,Law of Variable Proportions, and Returns to Scale, internal and external economies.

UNIT – IV: Cost Analysis:

Cost concepts, cost determinants, cost output relationship in the short and long run, Break-Even analysis.

UNIT-V: Markets and price determination:

Features and types of different competitive situations – Perfect competition, Monopoly, Monopolistic competition and Oligopoly, pricing methods in practice.

TEXT BOOKS:

- 1. Gupta: Managerial Economics, 1/e TMH, 2005
- A.R.Arya Sri, Managerial Economics and Financial Analysis, TMH, 2/e, 2010

REFERENCES:

- 1. Dominic Salvatore, Managerial Economics, Thomson, 2/e, 2006
- 2. Mote Paull, Managerial Economics, 1/e, TMH, 2004

IV Year I - Semester

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AG421 Soil and Water Conservation and Structures Lab

Course Description & Objectives:

To study the various conservation structures to be employed in adverse conditions for management of soil and water.

Course Outcomes:

Students will have practical knowledge of soil and water conservation structures with their design considerations.

List of Experiments:

- 1. Study of soil loss measurement techniques
- 2. Study of details of Coshocton wheel
- 3. Study of details of multi slot runoff samplers
- 4. Study of rainfall simulators and runoff plots
- 5. Determination of sediment concentration by oven drying method
- 6. Preparation of contour map of an area and its analysis
- 7. Design of vegetated waterways and contour bunding system
- 8. Design of graded bunding system
- 9. Design of various types of bench terracing systems
- 10. Determination of rate of sedimentation and storage loss in reservoir
- 11. Design of Shelter belts and wind breaks.
- 12. Construction of specific energy and specific force diagram
- 13. Design of H flume and Parshall flume
- 14. Measurement of hydraulic jump parameters and amount of energy dissipation
- 15. Hydraulic design of a straight drop spillway
- 16. Determination of uplift force and construction of uplift pressure diagram
- 17. Determination of loads on headwall and construction of triangular load diagram
- 18. Hydraulic design of a chute spillway
- 19. Design of a SAF energy dissipater
- 20. Design of small earth embankments
- 21. Design of water harvesting structures
- 22. EIA analysis and cost estimation of structures.