

Scheme of Course Work

Course Title	Management of Technology
Course Code	15HM1106
Program	B.Tech
Prerequisites	Management of Technology

Course Outcomes

1	Understand the basic concepts of technology and its requirement to industry.
2	Analyze different dynamics and approaches of technology and how technology cycle works
3	Determine the role of strategic planning in technology planning and its evaluation methods.
4	Classify different facets of technology partnership with intermediaries and licensing
5	Acknowledge various technology outsourcing and technology upgradation modes.

correlation Course Outcome versus Program Outcomes

COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12		
CO-1						3			2		3			
CO-2						3			2		3			
CO-3						2			3		3			
CO-4						3			3		3			
CO-5						3			3		3			

Week	Topics/Contents	CO	Sample Questions	Teaching learning strategy	Assessment Method & Schedule
1	Introduction Technology origin and evolution - Technology as an asset- Competitive technology strategic options- Types of commercialization - Commercialization process -Technology opportunities- Technology scale up-	1	1. Discuss the origin and evolution of technology	<ul style="list-style-type: none"> Lecture Discussion 	Assignment-I/Quiz-I/Mid-I
2	Transfer decision making- Choice of technology- Tailoring technology to meet specific industry requirements Technology Cycle Technology cycle and understanding technology change	1 & 2	1. How can an industrialist make a choice of a product and related technology for starting a plant	<ul style="list-style-type: none"> Lecture Discussion Problem solving 	Assignment-I/Quiz-I/Mid-I

3	Responding to technology dynamics- Adoption of technology- Overcoming resistance- Different dynamics and	2	1. Discuss the precaution to be taken by the top management during recession period	<ul style="list-style-type: none"> • Lecture • Discussion • Problem solving 	Assignment-I/Quiz-I/Mid-I
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4	Technology Assessment Dissemination of technology information and strategic planning	3	1. How dissemination of technology information and strategic planning helps in assessment.	<ul style="list-style-type: none"> • Lecture • Discussion • Problem solving 	Assignment-I/Quiz-I/Mid-I
5	MID EXAM I				
6	Technology choice and evaluation methods- Analysis of alternative technologies- Implementation of technology programmes.	3	1. How can an industrialist analyze alternative technologies?	<ul style="list-style-type: none"> • Lecture • Discussion 	Assignment-II/Quiz-II/Mid-II
7	Technology Licensing and Partnering In-house development- Partnerships with Intermediaries- Sponsored Development- Joint Development- Collaborative development - Technology licensing- Rights of license holders- Financial terms- Documentation	4	1. What is the advantage of in-house development of technology as an asset to the organization.	<ul style="list-style-type: none"> • Lecture • Discussion 	Assignment-II/Quiz-II/Mid-II
8	Technology Negotiation and Diffusion Technology negotiation- Preparation and conduct of negotiation - Technology outsourcing- Socio, economic, political, legal and cultural considerations- Technology diffusion- Technology transfer modes	4	1. 'Technology negotiation is an important aspect in manufacturing sector' Substantiate the above statement	<ul style="list-style-type: none"> • Lecture • Discussion 	Assignment-II/Quiz-II/Mid-II
9	Technology up-gradation- Technology modernization - Adoption of new technologies- Absorption of new technologies- Absorption process	5	1. Technology upgradation is mandatory otherwise the manufacturer will have to shutdown the business-Discuss	<ul style="list-style-type: none"> • Lecture • Discussion 	Assignment-II/Quiz-II/Mid-II
10	MID EXAM II				