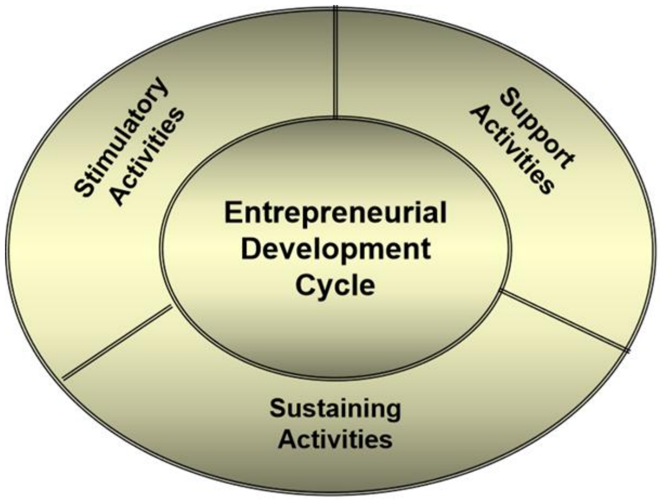
Internal Assessment Test 2 – Nov. 2025

Subject/Code: Technological Innovation & Management and Entrepreneurship/BEC501				
Date: 28/11/2025	Duration: 90 mins	Max. Marks: 50	Semester: 05	Branch: ECE

Sl.	Soultion	Marks	CO	RBT
1	What is an entrepreneurship? Discuss the contribution of Entrepreneurship development cycle.	[10]	CO3	L2
	Entrepreneurship is the process of identifying opportunities, taking calculated risks, organizing resources, and creating new ventures to deliver products or services that generate value. An entrepreneur is an innovator who introduces new ideas, improves existing systems, creates employment, and drives economic growth. Entrepreneurship involves creativity, leadership, decision-making, and persistence in overcoming challenges to convert ideas into successful business outcomes. **Entrepreneurship development cycle:**  1. Stimulatory Activities Stimulatory activities aim to create awareness, interest, and motivation among individuals to take up entrepreneurship. These activities help potential entrepreneurs recognize opportunities and gain confidence to start a business. Key stimulatory activities include: ● Entrepreneurship awareness programs (EAPs) to promote the idea of entrepreneurship ● Motivational and capacity-building training ● Opportunity identification and business idea guidance ● Entrepreneurship education in schools, colleges, and training institutions ● Business opportunity guidance camps and industrial visits ● Campaigns, workshops, seminars, and success story sharing sessions Outcome: More individuals develop entrepreneurial intentions and			

	willingness to establish their own ventures. 2. Support Activities Support activities provide the necessary assistance, resources, and infrastructure required for setting up and operating an enterprise. These activities help entrepreneurs convert ideas into viable business units. Key support activities include: ● Facilitation of financial assistance (bank loans, venture capital, subsidies) ● Technical and managerial training ● Business plan preparation support ● Availability of land, sheds, and machinery ● Guidance on legal formalities, licensing, and regulatory approvals ● Mentoring and consultancy services ● Market linkage support and export assistance Outcome: Entrepreneurs are able to establish and operationalize enterprises smoothly 3. Sustaining Activities Sustaining activities help existing entrepreneurs grow, improve efficiency, and overcome challenges. They ensure long-term survival and expansion of enterprises. Key sustaining activities include: ● Incubation and acceleration programs ● Upgradation of technology and skills ● Marketing support and quality improvement ● Cluster development and networking ● Diversification and scaling support ● Troubleshooting and rehabilitation assistance for sick units ● Information on new government policies, schemes, and incentives Outcome: Enterprises become stable, competitive, and capable of long-term sustainability.			
2	Discuss the Government initiatives and policies towards MSMEs.	[10]	CO4	L2
	Government of India periodically revises policies and programs to encourage, support and promote MSMEs. Following are the Government policy initiatives for promoting MSMEs in India. 1. MSME development act, 2006 2. Ease of registration process 3. RBI guidelines 4. Public procurement policy 5. Make-in-India policy **MSME development act, 2006** This Act came into effect from 2 October 2006 with the core purpose of strengthening the Indian MSME and making them globally competitive. The salient features of the Act are the following: ● The act provides separate definitions for micro, small and medium enterprises, based on their annual revenue. ● The Act is responsible for the establishment of a National Board for MSME			

	• The Act has simplified the process of registration as well as the closure of business. • Introduction to public procurement policy by giving preference in government procurements to products and services of MSMEs. **Ease of registration process** • To enable speed and ease of registration of MSMEs, a simple one page registration form for online filing of "Udyog Aadhaar Memorandum" (UAM) is introduced. • UAM is a one-page registration form which constitutes a self-declaration format under which the MSME will self-certify its existence, bank account details, promoter/owner's Aadhaar details and other minimum information required. • There shall be no fee for filling the Udyog Aadhaar Memorandum. **RBI guidelines** The RBI has given MSMEs an extension of up to 180 days to clear their loans to banks. **Public procurement policy** The objective of Policy is promotion and development of Micro and Small Enterprises by supporting them in marketing of products produced and services rendered by them. **Make-in-India policy** • Make-in-India initiative was launched by Prime Minister, Narendra Modi on 25th September 2014. • The policy aimed at making India a global manufacturing hub and creating millions of jobs in the country. • Make-in India is intended to make India a manufacturing hub of the world (at least Asia for that matter). • The idea was to increase the contribution of the manufacturing sector to India's GDP. • To accommodate the 300 million people who will join India's workforce between 2010 and 2040, each year 10 million jobs are needed.			
3	Discuss the techniques to generate business ideas.	[10]	CO4	L3
	Generating business ideas is a crucial step in entrepreneurship, as successful ventures emerge from innovative and feasible concepts. Several systematic techniques can help individuals identify, refine, and develop promising business ideas. The major techniques are as follows: **1. Problem Identification and Gap Analysis** One of the most effective methods is to observe day-to-day problems faced by individuals, businesses, or society. By identifying unmet needs or inefficiencies, entrepreneurs can generate ideas that offer practical solutions. Gap analysis includes comparing existing products or services with customer expectations to spot opportunities for improvement.			

2. Brainstorming

Brainstorming is a group creativity technique where participants freely suggest ideas without criticism. It helps in producing a large number of ideas in a short time. Later, ideas are evaluated and filtered based on feasibility, innovation, and market demand.

3. Market Research and Trend Analysis

Studying market trends, consumer behavior, technological advancements, and industry reports helps entrepreneurs identify emerging opportunities. Tools like PESTEL analysis and SWOT analysis enable systematic scanning of the environment to generate need-based and future-oriented ideas.

4. SCAMPER Technique

SCAMPER stands for **Substitute, Combine, Adapt, Modify, Put to another use, Eliminate, and Reverse**. It encourages entrepreneurs to think creatively by altering existing products or processes. This method often leads to innovative improvements or new business models.

5. Creative Thinking Techniques

Methods such as **lateral thinking, mind mapping, and design thinking** help individuals explore unconventional solutions. These techniques encourage breaking traditional thought patterns and viewing problems from different perspectives.

6. Customer Feedback and Observation

Direct interaction with customers through surveys, interviews, or observation provides insights into their pain points and preferences. Many successful business ideas emerge from understanding what customers "really want" but are not currently getting.

7. Imitation and Improvement

Entrepreneurs can study successful businesses in other markets or regions and adapt the idea locally. Imitation does not mean copying; rather, it involves modifying or improving an existing concept based on local needs, cost structure, or technology.

8. Networking and Collaboration

Engaging with professionals, industry experts, mentors, and peers often leads to new insights and opportunities. Networking platforms, conferences, startup meetups, and academic environments provide exposure to real-world problems and collaborative ideas.

9. Technology and R&D Driven Innovation

Many business ideas originate from technological advancements or research findings. Entrepreneurs associated with R&D institutions or engineering backgrounds can convert innovations into commercially

	viable products. **10. Incubators, Competitions, and Ideation Workshops** Startup incubators, hackathons, business plan competitions, and innovation workshops provide structured environments for idea generation. These platforms offer mentorship, tools, and techniques to refine raw ideas into potential ventures.			
4	Explain the project feasibilities in detail.	[10]	CO4	L2
	Before starting any entrepreneurial venture, it is essential to evaluate whether the proposed project is practical, viable, and sustainable. This process is known as feasibility analysis. It helps in identifying strengths, weaknesses, risks, and potential success of the project. The major types of project feasibilities are explained below: 1. Technical Feasibility Technical feasibility examines whether the project has the required technology, equipment, skills, and technical resources to produce the product or deliver the service. Key aspects include: • Availability of raw materials, machinery, and tools • Required technical know-how and skilled manpower • Manufacturing process or service delivery process • Capacity planning and production technology • Location and infrastructure requirements • It determines whether the project is technically possible and what should be the most suitable technological approach. 2. Economic / Financial Feasibility This feasibility evaluates the financial viability of the project. It identifies whether the project will be profitable and economically sustainable in the long run. It involves: • Estimation of capital investment • Operating costs • Revenue projections • Cost–benefit analysis • Break-even analysis • Return on Investment (ROI) • Payback period • A project is financially feasible if expected returns outweigh the costs and provide reasonable profit margins. 3. Market Feasibility Market feasibility analyses the size and characteristics of the target market, customer preferences, and competitive environment. It helps understand whether the product or service has sufficient demand. Components include: • Market size and potential • Customer needs, buying behavior, and segments			

- Competitor analysis
- Pricing strategies
- Distribution channels
- Sales forecasting
- It answers the key question: Is there a market for the product, and can the business survive competition?

4. Organizational / Operational Feasibility

This feasibility checks whether the organization has the internal capability to implement and run the project effectively. It involves examining:

- Management expertise and leadership
- Organizational structure
- Workforce availability and required skills
- Operational processes and workflow design
- Legal and regulatory compliance
- Logistics and supply chain capabilities
- A project is operationally feasible if the business can manage daily operations smoothly and deliver consistent output.

5. Legal Feasibility

Legal feasibility analyzes whether the proposed project complies with government rules, laws, and regulations.
It includes:

- Business registration and licensing requirements
- Environmental regulations
- Labor laws
- Industry-specific compliance (e.g., pollution, health & safety)
- Intellectual property rights
- Tax obligations
- A legally feasible project avoids penalties, disputes, and interruptions due to non-compliance.

6. Social / Environmental Feasibility

This examines how the project impacts the society, environment, and local community.
It assesses:

- Employment generation potential
- Impact on local culture and society
- Environmental pollution, waste management, and sustainability
- Corporate social responsibility (CSR)
- Public acceptance of the project
- A socially feasible project contributes positively to society and follows sustainable environmental practices.

7. Schedule / Time Feasibility

Time feasibility checks whether the project can be completed within the planned timeline.
It includes:

- Project scheduling

	• Availability of resources at the right time • Identification of critical activities (PERT/CPM) • Seasonal and market timing constraints • A project that cannot be completed on time may face cost overruns or miss market opportunities.			
5	What is angel investing and venture capitalists?	[10]	CO5	L2
	Financing is one of the most critical requirements for startups and new ventures. Among the different sources of entrepreneurial finance, Angel Investors and Venture Capitalists (VCs) play an important role in supporting innovation, high-growth startups, and new business models. Though both provide capital in exchange for equity, they differ significantly in terms of the stage of investment, risk appetite, amount invested, and the nature of support provided. **Angel Investing** Angel investing refers to financial support provided by high-net-worth individuals (HNIs), known as angel investors, who invest their personal funds in early-stage startups. These investors typically back ideas that are innovative but risky and may not get funding from banks or financial institutions. **Characteristics of Angel Investors** Personal Funds: Angels use their own money; hence decisions are more flexible and faster. Early-Stage Funding: They usually invest in the seed stage, when the startup only has a concept or prototype. Moderate Investment Amounts: Investment ranges from a few lakhs to a few crores. High Risk–High Reward: They take high risks for high potential returns. Mentorship Support: Angels often provide mentoring, guidance, networking, and business strategy support. Equity Ownership: Funding is provided in exchange for equity or convertible debt. **Role of Angel Investors** ● Encourage innovation by supporting ideas that lack collateral. ● Help entrepreneurs validate prototypes, build teams, and enter the market. ● Reduce early-stage financial pressure on startups. **Venture Capitalists (VCs)** Venture Capitalists are professional investment firms or funds that invest in startups with a proven business model and high growth potential. They manage pooled funds collected from institutions such as banks, pension funds, corporations, and wealthy individuals. **Characteristics of Venture Capitalists** Institutional Funding: They invest funds raised from multiple investors, not personal money.			

	Growth-Stage Investing: Prefer startups in expansion or scaling stages, with market traction. Large Investment Amounts: Investments typically run into several crores. Detailed Due Diligence: Decisions are formal, structured, and require financial, technical, and market evaluation. Active Participation: VCs often join the Board of Directors and influence company decisions. Equity Stake: Funding is provided in exchange for significant ownership and control. **Role of Venture Capitalists** ● Provide large-scale funding required for marketing, technology enhancement, and global expansion. ● Help startups achieve rapid growth and professional management. ● Bring industry networks, partnerships, and strategic support.			
6	Discuss the essential qualities of a business idea to become a business opportunity.	[10]	CO5	L2
	A business idea becomes a true business opportunity only when it has the potential to create value, attract customers, and generate sustainable profits. Not every idea qualifies as an opportunity; only ideas that meet certain essential characteristics can be successfully converted into commercially viable ventures. The key qualities are as follows: **1. Customer Need or Problem-Solving Ability** A promising business opportunity must address a real and significant customer need, pain point, or problem. ● The idea should offer value to customers. ● It must provide a better, cheaper, or faster solution than existing alternatives. Example: Online food delivery apps solved convenience and time-related problems. **2. Market Demand and Size** The opportunity must have a sufficient and growing market. ● A large or expanding customer base increases the success potential. ● Market research should confirm that customers are willing to pay. Without market demand, even the best idea cannot succeed. **3. Feasibility and Practical Implementation** The idea must be technically, financially, and operationally feasible. ● Availability of technology ● Required resources and skills ● Legal and environmental feasibility If an idea cannot be implemented effectively, it remains only an idea, not an opportunity. **4. Competitive Advantage**			

A valid business opportunity must have some unique edge such as:

- Innovation
- Better quality or pricing
- Faster delivery
- Patents/technology
- Superior customer experience

Differentiation helps the business compete and survive in the market.

5. Profitability and Revenue Potential

A business opportunity must generate reasonable profit after covering costs.

- Opportunity for recurring revenue
- High margins or scalable operations
- Potential for long-term financial sustainability

Without profit potential, an idea is not commercially viable.

6. Scalability and Growth Potential

The idea should allow for expansion—geographically or through increased production.

- Scalable business models attract investors and support entrepreneurship.
- Should have scope for adding new features, markets, or customer segments.

7. Affordability and Resource Availability

Resources required such as capital, human resources, raw materials, and technology should be accessible and affordable to the entrepreneur.

If resources are too expensive or scarce, the idea fails to become an opportunity.

8. Legal and Social Acceptability

The business idea must comply with:

- Government regulations
- Ethical standards
- Environmental norms
- Social norms

A legally and socially accepted idea faces fewer barriers and risks.

9. Low to Manageable Level of Risk

All businesses have risk, but a good opportunity has manageable and predictable risks.

- Market risks
- Operational risks
- Financial risks

Entrepreneurs should be able to handle these through planning and management.

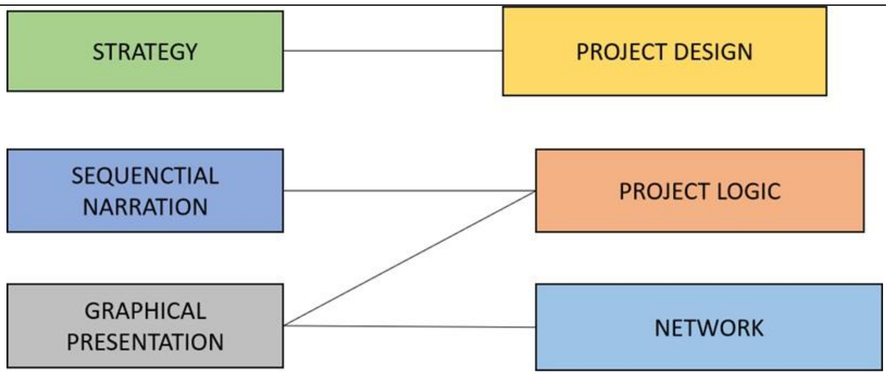
10. Alignment with Entrepreneur's Skills and Interests

A business idea becomes a real opportunity when it fits the entrepreneur's:

- Knowledge
- Experience
- Passion
- Leadership capabilities

This increases commitment and chances of success.

7	Explain the importance of Network Analysis in Project Design and Execution.	[10]	CO5	L2



- The execution of a project follows a definite path of planning, scheduling and controlling.
- Project design is one of the key aspects of project.
- It defines the individual activities which go into the corpus of the project and their interrelationship with each other.
- Project design helps to identify the flow of events which must take place for the successful implementation of the project.
- Network techniques help the management of an organisation in performing these functions efficiently and effectively.
- Strategy forms the initiation of the project design development.
- The sequential narration of the compilation of the strategy is known as Project Logic.
- Project logic represented in the form of graphical pattern is called a network.

Network Analysis:

- The network analysis has the potential of unfolding unknown snags involved in project estimates.
- Entire project has to be considered with reference to sequence of activities and events.
- Events to be thought of in different streams of operations and their relationships understood clearly.
- The whole project may be put on one network.
- Time estimates may be made taking into account two discrete aspects: one based on probability and other based on deterministic approach.
- Cost estimates would depend on the project time estimates and the changes in the prices of the different factors of production.
- The physical progress of the projects, individuality and simultaneity of events.