

Reg No.: \_\_\_\_\_

Name: \_\_\_\_\_

## APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

B.Tech Degree S2 (S) Examination January 2026 (2024 Scheme)



## Course Code: UCEST206

## Course Name - ENGINEERING ENTREPRENEURSHIP &amp; IPR

Max. Marks: 40

Duration: 2 hours 30 minutes

## PART A

(Answer all questions. Each question carries 2 marks)

		CO	Marks
1	What are the strategies for encouraging innovation within an organization?	CO1	(2)
2	Give different types of IPR with its purpose?	CO1	(2)
3	What is customer profiling? Give its benefits?	CO3	(2)
4	What are the contents of a business plan?	CO4	(2)
5	What are the primary goals and objectives of a prototype?	CO2	(2)
6	How will we ensure that all stakeholders feel heard and valued during prototype development?	CO5	(2)

## PART B

(Answer any one full question from each module, each question carries 7 marks)

## Module -1

7	a) Explain the meaning, characteristics and challenges of entrepreneurial mindset?	CO1	(4)
b)	How to develop entrepreneurial mindset?	CO1	(3)
8	A team of engineers is tasked with developing a self-driving car that is safe, reliable, and affordable for the consumer market.		
a)	What are some creative ideation methods that could be employed to overcome technical challenges like obstacle detection in diverse weather conditions?	CO1	(2)
b)	What industry associations or organizations could provide support and guidance to the team as they develop their self-driving car venture?	CO1	(2)
c)	What are the key statutory compliances related to developing and selling self-driving vehicles?	CO1	(3)

## Module -2

9	a) Why is understanding customer needs crucial for successful entrepreneurship?	CO3	(3)
	b) What are the key elements of effective communication for entrepreneurs?	CO3	(2)
	c) How does a value proposition help an entrepreneur?	CO3	(2)
10	Suppose you are developing a sustainable packaging solution		
	a) How do you define and select your target market segments?	CO3	(3)
	b) How do you identify and analyze your competitors?	CO3	(4)
		<b>Module -3</b>	
11	a) What is the purpose of prototype requirements analysis?	CO2	(3)
	b) How will the prototype be tested and validated?	CO5	
		CO2	
		CO5	(4)
12	Consider a case study of the development of a smart irrigation system for rice farming in Kerala.		
	a) What are the key milestones and deadlines for developing, testing, and deploying the system?	CO2	(3)
	b) How is the system's design, development process, and changes documented and version controlled?	CO2	
		CO5	(4)

**Module -4**

13	a) How can you demonstrate the value of the prototype to potential investors and secure funding for further development?	CO4	(4)
	b) How will you ensure that partners are aligned with your vision and actively involved in testing and providing feedback on the prototype?	CO4	
		CO5	(3)
14	A start up is planning to develop a prototype of Mobile App for Remote Medical Consultations		
	a) Identify the stakeholders and how can you best communicate the purpose, scope, and limitations of the prototype to each stakeholder?	CO4	(4)
	b) How can you measure the impact of stakeholder engagement on the success of the prototype and the product development process?	CO4	
		CO5	(3)

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