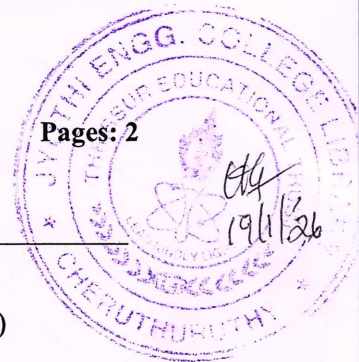


Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

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



Course Code: UCEST206

Course Name - ENGINEERING ENTREPRENEURSHIP & 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) |

Module -3

- | | | | | |
|----|----|---|------------|-----|
| 11 | a) | What is the purpose of prototype requirements analysis? | CO2
CO5 | (3) |
| | b) | How will the prototype be tested and validated? | 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
CO5 | (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
CO5 | (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
CO5 | (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) |
