

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FOURTH/FIFTH SEMESTER B.TECH DEGREE EXAMINATION, DECEMBER 2018

Course Code: ME220

Course Name: MANUFACTURING TECHNOLOGY

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any three full questions, each carries 10 marks.

		Marks
1	a) What is Casting? Give a brief idea about Investment casting.	5
	b) Elucidate about different types of casting defects.	5
2	a) What is rolling? Showcase its advantages over casting.	5
	b) Write a brief note about different types of rolling defects with neat sketch.	5
3	a) Interpret forging. What are the advantages of forging?	5
	b) With neat sketch explain about die design features.	5
4	a) Define clamping. Explain principle of clamping.	5
	b) Explicate Hinge clamping with neat diagrams.	5

PART B

Answer any three full questions, each carries 10 marks.

5	a) With neat sketch demonstrate Coining process.	5
	b) Why connecting rod of a diesel engine is manufactured with forging techniques?	5
6	a) Differentiate between cold and hot extrusion process.	6
	b) Illustrate about wire drawing process with neat sketch.	4
7	a) Interpret 3-2-1 principle with neat sketch.	5
	b) Explain Swing clamping procedure with neat sketch.	5
8	a) Highlight why clamping is so important and showcase. What are the advantages of clamping?	6
	b) With neat sketch demonstrate locating from circular surfaces?	4

PART C

Answer any four full questions, each carries 10 marks.

9	a) Determine bending terminology with neat sketch?	5
	b) Justify the phenomenon spring back? And how we can overcome springback?	5
10	a) With neat sketch clarify Rubber forming process with neat sketch?	4

- b) Elucidate about tube spinning procedure? 6
- 11 a) Define welding? Demonstrate weldability. 3
- b) With neat sketch justify any one type of fusion welding? 7
- 12 a) Elucidate about deep drawing process? 4
- b) With neat sketch explain Flame characteristics of a gas welding process? 6
- 13 a) Why welding is important than other joining process? 4
- b) Write short note on Resistance welding? Clarify why is it so important? 6
- 14 a) With neat sketch explicate Ultrasonic welding? 5
- b) Write short note about Plasma arc welding? 5

PART B