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Course: B.Voc Program: Production- Tool & Die Manufacturing
Subject: Basics of Jigs & Fixtures, Code: ME-602
Semester: V

Time: 03 Hours

Max Marks:70

Instructions to the Students:

1. This Question paper consists of two Sections. All sections are compulsory.
2. Section A comprises 10 questions of short answer type. All questions are compulsory. Each question carries 2 marks.
3. Section B comprises 8 long answer type questions out of which students must attempt any 5. Each question carries 10 marks.
4. Do not write anything on the question paper.

Q.No.	SECTION –A (SHORT ANSWER TYPE QUESTIONS)	Marks
1.	a) What is material of buses used in Jigs ?	(2)
	b) State the main components of drilling Jig	(2)
	c) What is the meaning of Redundant location ?	(2)
	d) What are types of buses used in Jigs ?	(2)
	e) Define Degree Of Freedom (DOF)	(2)
	f) How many DOF get locked in 3-2-1 principle of location ?	(2)
	g) State the practical application of Diamond pin locator	(2)
	h) Sate the name of locating methods	(2)
	i) What is the function of location devices ?	(2)
	j) State the name of any four clamping devices.	(2)
	SECTION –B (LONG ANSWER TYPE QUESTIONS)	
2.	Discuss the materials used in manufacturing of Jigs & Fixtures	(10)
3.	What are the differences between Jigs & Fixtures ?	(10)

4. State and explain the types of buses used in Jigs & Fixtures. (10)
5. Discuss Broaching fixture with neat sketch. (10)
6. Classify fixtures used in mass production (10)
7. State and explain the working principle of clamping devices. (10)
8. Discuss the working of Wedge clamp and Toggle clamps with neat sketch (10)
9. Explain 3-2-1 principle of location with diagram (10)

==END OF PAPER==