2212E023

Roll No. | | | | | | | | | | | | |

Course: B.Voc. Program: Production Tool and Die Manufacturing
Subject: Basics of Press Tools, Dies & Moulds, Code: ME-604
Semester: III

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) Define Jigs.	(2)
	b) State any two locating devices.	(2)
	c) Why drill bushings are used?	(2)
	d) Why gauge tolerances are being provided?	(2)
	e) Write down the names of two milling fixtures.	(2)
	f) What is a fixture?	(2)
	g) State names of any two grinding mixtures?	(2)
	h) Which materials are being used for jigs design?	(2)
	i) State use of taper gauge.	(2)
	j) State use of go and no go gauges.	(2)

SECTION –B (LONG ANSWER TYPE QUESTIONS)

2.	What are the general considerations for designing drill jigs?	(10)
3.	Discuss in detail the design considerations of locators and clamps for fixtures.	(10)

4. Discuss Taylor's principle of maximum and minimum material condition. (10)

5. (a) What is the material selection criterion for gauge design? (5)
   (b) What are the design considerations for turning fixtures? (5)

6. What are the different types of lathe fixtures? Discuss their applications. (10)

7. Discuss the "3-2-1" principle of location with a neat and clean diagram. (10)

8. What are the different types of gauges? Discuss in detail design considerations for gauges. (10)

9. What is the difference between jigs and fixtures? What are their applications? (10)

===END OF PAPER===