

UNIT - I

2. Write in detail about design of guide pins & dowel pins. 20
3. Discuss about :
- (a) Location methods 10
 - (b) Degree of freedom 10

UNIT - II

4. Write about :
- (a) Functions of Jigs 10
 - (b) Material used in fixture 10
5. Discuss about :
- (a) Mechanical actuation fixtures 10
 - (b) Analysis of clamping force 10

UNIT - III

6. Write about :
- (a) Angle plate jigs 10
 - (b) Automatic drill jig 10
7. Write about :
- (a) Plate latch jig 10
 - (b) Design & development of jigs 10

22611- (P-3)(Q-9)(23) (2)

UNIT - IV

8. Discuss in detail about design and development of fixtures for given component. 20
9. Write in detail about inspection and welding fixtures. 20

22611- (P-3)(Q-9)(23) (3)

Roll No.

22611

**M. Tech. 2nd Semester (ME)
CBCS Scheme (Elective - II)
Examination – June, 2023**

JIGS & FIXTURE

Paper : MTME22D2

Time : Three Hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt *five* questions in all, selecting *one* question from each Unit. Question No. 1 is *compulsory*. All questions carry equal marks.

1. Write short notes on the following : $5 \times 4 = 20$
- (a) Torque exerted by machining methods
 - (b) Purpose of fixture
 - (c) Jigs
 - (d) General principles of boring