Menoufia University
Faculty of Engineering
Shebin El-kom
Academic Year 2014-2015

Date :7/6/2015



Dept: Prod Engg. & Mech. Design

Year : Diploma program (500)

Subject/code: Jigs and fixtures/PRE510

Time Allowed :3Hours

Answer all the following questions:

Question 1:-

- -When discussing welding tools, what do the term Jig and fixture mean?
- -Write and discuss on short notes the features of Jigs and fixtures in the ECM and the EDM processes.
- -Discuss the advantages of Jigs and fixtures .

Mention the advantages and disadvantages of conical tools.

Sketch and mention the different applications of turning fixtures.

Question 2:-

- A) Design and draw a suitable Jig to make a hole (10mm) as shown in Fig.1.
- B) Design a milling fixture to make a slot of (10 x 10 mm) as shown in fig.2.
- C) Design a drill Jig to make a hole of (10mm) as shown in fig.3. and mention the part list.

N.B

- Assume any missing data suitably wherever it is necessary.
- -Assume that the required in A,B and C is the last operation to be performed.

