SECTION-C

Note:Long answer type questions. Attempt any three questions. 3x10=30

- Q.3 Discuss in detail the type of gauges. Discuss the design and drawing of any one.
- Q.4 Discuss the various types of clamping devices and their features.
- Q.5 What is the difference between jigs and fixtures? Where these are used?
- Q.6 Discuss in detail various type of drilling and drilling tools.
- Q.7 Discuss the essential features of jig and fixture designs. Write their limitations.

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4th Sem. / T & D | CNC | CAD | CAM

Subject : Jigs fixtures & Gauzes (Design & Drawing)

Time: 3 Hrs. M.M.: 100

SECTION-A

Note: Very Short Answer type questions. Attempt any 15 Questions. (15x2=30)

- Q.1 a) Define mild steel.
 - b) Define defects with fixtures.
 - c) Functions of clamping device.
 - d) What is boring?
 - e) What is waste material?
 - f) What is thread gauge?
 - g) What are bushes?
 - h) Limitations of threading.

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- i) Use of steel.
- j) Where the pneumatic fixture used?
- k) Give names of lubricants used.
- What is pneumatics?
- m) Use of snap gauge?
- n) What is plug gauge?
- o) Define assembling.
- p) Compare alloy and metal.
- q) Use of alloys.
- r) Define counter bore.

SECTION-B

Note: Short answer type questions. Attempt any ten Questions. 10x4=40

- Q.2 i) Discuss the need of jigs and fixtures.
 - ii) Write about the characteristics of jigs material.
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- iii) Classifications of gauges.
- iv) Discuss loading and unloading arrangements.
- v) What is the difference between grinding and gauging?
- vi) Write the advantages of gauges.
- vii) Difference between gauge and jig.
- viii) Advantages of clamping devices. Give some names.
- ix) Write about the cooling agents used.
- x) Importance of cutting tools.
- xi) What are the general rules for designing?
- xii) Discuss the basic principles of location.
- xiii) Applications of box jigs.
- xiv) Discuss the types of jigs and fixtures.
- xv) Write about various clamping devices.
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