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Question Paper Code: 58765

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 2019

One credit Course

Mechanical Engineering

15UME865- JIGS & FIXTURES

(Regulation 2015)

Duration: One hour

Maximum: 30 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

- The following is(are) the function(s) of a
 - Holding
 - Locating
 - Guiding
 - All of the above
- The following holds the work piece securely in a jig or fixture against the cutting forces
 - Loading device
 - Clamping device
 - Guiding device
 - Indexing device
- With the use of Jigs and fixture total cost of production
 - Increases
 - Decreases
 - Remains same
 - Jigs are not used in any production
- The following type of jig is used to drill a series of equidistant hole along a circle
 - Index jig
 - Plate type jig
 - Open type jig
 - Pot type jig
- A fixture does not
 - Holds the workpiece
 - Locate the workpiece
 - Guide the tool
 - All of the above
- Which of the following is not correct about fixture?
 - It is used to hold the work
 - It is used to position the work the work
 - It assures high accuracy of parts
 - It is used to guide the cutting tool

7. The following jig can be used for several different work pieces and operations
- (a) Template jig (b) Multi-station jig (c) Index jig (d) Universal jig
8. Jigs and Fixtures are used for
- (a) Mass production (b) Identical parts production
(c) Both 'A' and 'B' (d) None of the above
9. The jigs and fixtures can be constructed through
- (a) Casting (b) Fabrication (c) Welding (d) All of the above
10. A fixture does not
- (a) Holds the workpiece (b) Locate the workpiece
(c) Guide the tool (d) All of the above

PART – B (1x 20= 20 Marks)

11. (a) Explain the advantages obtained from the uses of pneumatic and hydraulic clamping devices. (20)
- Or
- (b) Explain briefly about Quick change fixture. (20)