Reg. No. :

Question Paper Code: 58765

B.E. / B.Tech. DEGREE EXAMINATION, DEC 2021

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)

1.   The following is(are) the function(s) of a

 (a) Holding   (b) Locating   (c) Guiding   (d) All of the above

2.   The following holds the work piece securely in a jig or fixture against the cutting forces

 (a) Loading device   (b) Clamping device

 (c) Guiding device   (d) Indexing device

3.   With the use of Jigs and fixture total cost of production

 (a) Increases   (b) Decreases

 (c) Remains same   (d) Jigs are not used in any production

4.   The following type of jig is used to drill a series of equidistant hole along a circle

 (a) Index jig   (b) Plate type jig   (c) Open type jig   (d) Pot type jig

5.   A fixture does not

 (a) Holds the workpiece   (b) Locate the work piece

 (c) Guide the tool   (d) All of the above

6.   Which of the following is not correct about fixture?

 (a) It is used to hold the work   (b) It is used to position the work the work

 (c) It assures high accuracy of parts   (d) 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. With the use of Jigs and fixture quality control expenses will

   (a) Reduce

   (b) Increases

   (c) Jigs and fixture are not used in any production process uide the tool

   (d) None of the mentioned

<center>PART – B (1x 20= 20 Marks)</center>

11. (a) Explain the advantages obtained from the uses of pneumatic and hydraulic   (20)
        clamping devices.

<center>Or</center>

   (b) Explain briefly about Quick change fixture.   (20)