Code : 100105/100205

B.Tech 2nd Semester Special Exam., 2020

(New Course)

WORKSHOP MANUFACTURING PRACTICES

Time : 3 hours   Full Marks : 70

Instructions :

(i) All questions carry equal marks.

(ii) There are **NINE** questions in this paper.

(iii) Attempt **FIVE** questions in all.

(iv) Question No. 1 is compulsory.

1. Answer any *seven* questions :

   (a) Differentiate between machine tool and machining center.

   (b) Explain recrystallization temperature.

   (c) Explain various forming operations.

   (d) List the various casting defects.

   (e) Write the applications of various types of flames in gas welding.

   (f) Discuss the role of polarity in arc welding.

   (g) Discuss the types of plastics.

   ..... power tools in short.

(2)

   (i) Differentiate between 3-jaw and 4-jaw chuck on lathe machine.

   (j) Differentiate between live centre and dead centre on lathe machine.

2. What do you understand by manufacturing process? List the various manufacturing processes along with the suitable material used.

3. What do you understand by CNC machine? Explain with neat sketch the working of any CNC machine.

4. Justify why cast iron is not preferred as suitable material for fitting operations. Explain with neat sketches the various cutting and finishing tools used in fitting shop. https://www.akubihar.com

5. Explain any *two* tools used for the following operations in carpentry :

   (a) Cutting

   (b) Finishing

   (c) Striking

6. Explain in detail the technique for glass cutting.

7. Explain with neat sketch the various elements of casting. Also, explain the properties of moulding sand.

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(3)

8. Explain in detail with neat sketch the arc-welding process.

9. Explain the types of welding joints. Also, clearly differentiate between soldering and brazing along with its applications.

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