

Code : 100105/100205

(2)

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.*

Draw power tools in short.

- (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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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.
