

B.Tech 2nd Semester Exam., 2021

(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 wood and timber.
- (b) Differentiate between hot working and cold working.
- (c) Explain the types of flames in gas welding.
- (d) Explain forming process.
- (e) Differentiate between machining center and machine tool.
- (f) Explain the role of polarity in electric arc welding.

(g) List the properties of materials.

(h) Explain alloys.

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

(j) Write on the classification of steel.

- 2. Classify various manufacturing processes along with the suitable materials that can be used in each process. <https://www.akubihar.com>
- 3. List the various additive manufacturing processes and explain 3D printing in detail.
- 4. Explain the various operations that can be performed in fitting shop.
- 5. Explain the different types of saw used in carpentry shop along with neat sketches.
- 6. Explain the various techniques used for glass moulding.
- 7. Classify and explain the various casting defects along with neat sketches.

(3)

- 8/ Explain the types of welding joints. Also differentiate clearly between soldering and brazing along with its applications.
- 9/ With the help of a neat sketch, explain the gas welding process.
