

R16

Code No: 136FB

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year II Semester Examinations, November/December - 2020

FABRICATION PROCESSES

(Common to CE, EEE, AE)

Time: 2 hours

Max. Marks: 75

Answer any five questions
All questions carry equal marks

- 1.a) Describe the difference between a runner and a gate. [5+10]
- b) With suitable sketches explain centrifugal casting. [5+10]
- 2.a) Why is it important to provide a means of venting gases from the mold cavity?
- b) Explain casting defects. [5+10]
- 3.a) What is the purpose of flux? Why is it not needed in gas tungsten-arc welding?
- b) Explain the basic principles of arc-welding processes. [5+10]
4. What is the principle of gas welding? Also, explain about various types of flames in gas welding. [15]
5. With suitable sketches explain the difference between hot working and cold working process. Also mention the advantages and disadvantages of each process. [15]
6. An annealed copper strip, 228 mm wide and 25 mm thick is rolled to a thickness of 20 mm in one pass. The roll radius is 300 mm, and the rolls rotate at 100 rpm. Calculate the roll force and the power required in this operation. [15]
7. Explain the following with neat sketches:
 - a) Forward extrusion
 - b) Backward extrusion. [7+8]
8. With suitable sketches explain various forging operations. [15]

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