

Code No: R22034

R10**SET - 1****II B. Tech II Semester Supplementary Examinations, November-2017****PRODUCTION TECHNOLOGY**

(Mechanical Engineering)

Time: 3 hours

Max. Marks: 75

Answer any **FIVE** Questions
All Questions carry **Equal** Marks

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1. a) Define casting. What four basic steps are generally involved in making a casting? (5M)  
b) What is a pattern? Discuss briefly the various functions of a pattern (5M)  
c) Explain the terms shrinkage allowance and machining allowance. (5M)
2. Explain the construction and working principle of Cupola furnace with a neat sketch. (15M)
3. a) Explain the principle of arc-welding. (8M)  
b) What do you understand by the term polarity? Explain. (7M)
4. a) Explain about MIG welding process with a neat diagram. (8M)  
b) Write a short note on (i) Brazing (ii) Soldering process. (7M)
5. a) Describe briefly the meaning of draught and elongation as related to hot rolling? (8M)  
b) Explain the functioning of two-high rolling mill and multi-pass-rolling mill? (7M)
6. a) Write a short note on (i) Wire drawing and (ii) Tube drawing. (8M)  
b) What are different types of press tools used? Explain? (7M)
7. a) Write the expression for determining the force required to produce an extrusion and discuss the effect of various parameters on the extruding force? (8M)  
b) Explain about smith forging process. (7M)
8. a) Enumerate the various methods used for processing of plastics and mention their merits and demerits compared to others. (8M)  
b) With help of neat sketches describe the Blow moulding process. (7M)