

FACULTY OF ENGINEERING**B.E. 3/4 (AE) I – Semester (Supplementary) Examination, July 2014****Subject : Production Technology****Time : 3 hours****Max. Marks : 75****Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.****PART – A (25 Marks)**

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| 1 | What are the general advantages, disadvantages and applications of die casting? | 3 |
| 2 | What is continuous casting? Name the various processes of continuous casting you know. | 2 |
| 3 | Classify various types of metal joining process n welding process. | 2 |
| 4 | Compare spot welding with seam welding. | 3 |
| 5 | Briefly discuss the relative merits and demerits of different kind of extrusion. | 3 |
| 6 | Describe briefly with neat sketch to explain the principle of forging. | 2 |
| 7 | Explain various types of chips with neat sketches. | 2 |
| 8 | Explain with the help of neat sketches orthogonal cutting and oblique cutting. | 3 |
| 9 | Define lapping, honing and super finishing operations. | 3 |
| 10 | What are different work holding and tool holding devices in turning operation? | 2 |

PART – B (50 Marks)

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| 11 | With the help of neat sketch describe the complete step by step procedure of investment casting. What are the main advantages and disadvantages of investment casting? | 10 |
| 12 | What are the electrodes used in arc welding made of? What is electrode coating and why are they provided? How is an electrode specified? What factors govern the selection of an electrode? | 10 |
| 13 | Write short notes on :
a) Rolling b) Hot extrusion c) Hot forging d) Hot drawing e) deep drawing | 10 |
| 14 | Explain merchant's analysis of cutting forces. Also draw the merchant's circle drawing and show various forces in it. | 10 |
| 15 | a) With the help of a neat sketch explain the column and knee type milling machine and name its main parts. Explain any two operations with neat sketch. | 10 |
| 16 | Explain the causes and remedies of the following casting defects.
i) Swells ii) Shot metal iii) Shifts iv) Hard spots
v) Rattails or buckles | 10 |
| 17 | Write short notes on various matching operation :
i) Shaping ii) Slotting iii) Planning iv) drilling v) boring | 10 |
