| Seat No.: | Enrolment No. |
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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII • EXAMINATION – WINTER • 2014

| Subject Name: Manufacturing Technology-II | | Code: 172003 Date: 04-12-2014 | Date: 04-12-2014 Total Marks: 70 | |
|---|------------|--|-----------------------------------|--|
| | | 0:30 am - 01:00 pm Total Marks: 70 | | |
| | | Attempt all questions. | | |
| Q.1 | (a) | Briefly mention procedural steps to find GFN by laboratory experiment. Also state its importance in moulding sand testing. | 07 | |
| | (b) | State its importance in moduling sand testing. State the steps of making a fizzy drink can from sheet metal with a neat sketch of each operation. | 07 | |
| Q.2 | (a) | State different principles of jigs and fixture design. Explain any one of them with neat sketch. | 07 | |
| | (b) | With neat sketch explain about Electric Discharge Machining(EDM) and its parameters with equipments etc. | 07 | |
| | (b) | OR With neat sketch explain Abrasive Jet Machining(AJM) and its parameters. | 07 | |
| Q.3 | (a) (b) | Write a short note on 'Die casting'. What are the steps to measure an angle with sine bar and slip gauge? Explain | 07 07 | |
| | | with neat sketch. | | |
| Q.3 | (a) (b) | Write a short note on 'Centrifugal casting'. Differentiate between line standard and end standard of measurement giving examples and neat sketch. | 07 07 | |
| Q.4 | (a) | Briefly discuss the effect of varying arc welding process variables on resultant bead parameters for SMAW and SAW using bead on plate test. | 07 | |
| | (b) | Explain principle and types of extrusion. OR | 07 | |
| Q.4 | (a) (b) | Enlist different forging operations and explain any one in detail. State various design considerations for casting for avoiding casting defects. | 07 07 | |
| Q.5 | (a) (b) | Explain work piece control with reference to jigs and fixtures. Differentiate between jigs and fixtures (with examples and diagrams) in tabular form. | 07 07 | |
| Q.5 | (a) (b) | OR Describe various resistance welding processes with sketches. How electrodes are specified? Explain in brief. | 07 07 | |
