| Seat No.: | Enrolment No. |
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| GUJARAT TECHNOLOGICAL UNIVERSITY BE - SEMESTER-IV (OLD) - EXAMINATION – SUMMER 2017 | | | | |
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| Su | ıbject | Code: 141901 Date: 06/06/20 | 017 | |
| Su Ti | ibject me: 1 struction 1. 2. | Name: Mechanical Measurement & Metrology 10:30 AM to 01:00 PM Total Marks: Ons: Attempt all questions. | : 70 | |
| Q.1 | (a) (b) | Comparison between line standard and end standard. Differentiate between systematic error and random error. | 07 07 | |
| Q.2 | (a) (b) | Explain least count of micrometer screw and types of error. Describe the construction and working of micrometer screw with neat sketch. OR | 07 07 | |
| | (b) | Describe the vernier height gauge with neat sketch. | 07 | |
| Q.3 | (a) (b) | Describe with neat sketch the following equipments, (i) Slip gauges (ii) sine bar (iii) Dial indicator. Describe the working of sigma comparator and magnification with neat sketch. OR | 07 07 | |
| Q.3 | (a) (b) | Explain the measurement of effective diameter by two wire method. Explain how to measure internal diameter of threaded part using slip gauges. | 07 07 | |
| Q.4 | (a) (b) | Explain Parkinson's gear tester with neat sketch. Sketch and describe a Gear tooth vernier caliper. OR | 07 07 | |
| Q.4 | (a) (b) | Write short note of 'Auto collimator'. Describe the working of N.P.L. gauge interferometer with sketch. | 07 07 | |
| Q.5 | (a) (b) | Explain optical pyrometer for measurement of temperature. Describe the working and construction of LVDT with neat sketch. OR | 07 07 | |
| Q.5 | (a) (b) | Describe the construction and working of Dead weight pressure gauge. Write short note on Proving ring type load cell. | 07 07 | |
