

B.Tech. 4th Semester (AUE) F-Scheme Examination,
May-2018

MEASUREMENT AND INSTRUMENTATION

Paper-AUE-212-F

Time allowed : 3 hours] [Maximum marks : 100

Note : Attempt five questions out of nine questions. Q. No. 1 is compulsory. Students have to attempt one question from each of four sections.

1. (a) Why are sin bars not used for large angle measurement?
- (b) Explain thermocouples.
- (c) What is CMMS ?
- (d) Explain optical measuring instruments.
- (e) Define error in instruments. 5×4=20

Section-A

2. Explain in detail static and dynamic performance characteristic of measurement system. 20
3. Explain with neat and clean diagram linear and angular displacement measurement. 20

Section-B

4. What is transducer ? Explain types of transducers. 20

5. Explain in detail any digital measurement instrument. 20

Section-C

6. Explain with diagram construction and working of gear tooth vernier. 20
7. Explain with diagram measurement of angles and tapers. 20

Section-D

8. Explain with diagram construction and working of optical pyrometer. 20
9. Explain with diagram construction and working hydraulic dynamometer. 20