

Code: R7411003

R07

B.Tech IV Year I Semester (R07) Supplementary Examinations, May 2013

ANALYTICAL INSTRUMENTATION

(Electronics and Instrumentation Engineering)

Time: 3 hours

Max. Marks: 80

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Explain the working of a silica analyzer.
(b) Discuss briefly the features of hydrogen analyzer.
- 2 (a) Explain the analysis of CO monitor.
(b) Write short notes on H₂S sampling.
- 3 (a) With neat figure, explain the function of a liquid chromatography.
(b) List the uses of gas chromatography.
- 4 (a) Describe chromatographic technique of separation.
(b) Write short notes on grating monochromators.
- 5 (a) Explain with a neat figure VIS spectrophotometer.
(b) Bring out the differences between single beam and double beam instruments.
- 6 (a) Explain the function of an atomic emission spectrophotometer.
(b) What is meant by online calorific value? Discuss.
- 7 (a) Write briefly the function of ESR.
(b) Give the principle of NMR and list its applications.
- 8 (a) Explain the function of solid state detector.
(b) Discuss the applications of proportional counters.
