

End Semester Examinations - 2015-16 Even Semester - May 2016

15EI2007 Medical Diagnostic Equipment

Set B

Time : 3 hrs
Total Marks: 100

1. Explain the working of heart rate measurement system and respiration measurement. [10+10]

OR

2. Explain the types of photo plethysmogram. Discuss the principle of sphygmo manometer.

[10+10]

3. Discuss the detailed function of 12 lead electro cardiogram. Explain the artefacts in ECG measurements.

[15+5]

OR

4. With a block diagram explain the principle and applications: spirometer,
electro myogram.

[10+10]

5. Explain the detailed architecture of Spectro photometer.

List the merits of optical detector.

[15+5]

OR

6. Illustrate the following with a neat sketch:

a) Electrophoresis, b) Paper chromatography

[15+5]

7. Write elaborate notes on : a) Blood cell counter. B) blood gas analyser [10+10]

OR

8. Describe the functions of computer in a chromatographs. Mention the applications
of MEMS technology in medical diagnosis system with a suitable illustration. [10+10]

9. List various types of endoscopic techniques. Discuss the construction and working
of capsule endoscope. Mention the merits of endoscopes. [5+10+5]

Wishing you All the Best
