

COURSE CODE - 6050503

M.PHIL DEGREE EXAMINATION - JAN 2009

M.PHIL (PHY)

ELECTRONICS AND INSTRUMENTATION

(For Candidate admitted from calendar 2007 onwards)

Time: 3 Hours

Max. Marks: 100

Section - A

Answer ALL the Questions:

10 X 3 = 30

1. What is mean by thermocouple?
2. What is mean by Transducers?
3. Write about data acquisition system?
4. What is mean by modems?
5. Write ECG recorder principle?
6. Write about ECG amplifiers?
7. Write the advantage of electronic control of devices?
8. What is mean by three phase?
9. What is power transistor?
10. What is mean by vector circuit?

Section – B

Answer any FIVE questions:

5 X 6 = 30

11. Explain about solar batteries?
12. Write about pyrometers?
13. Write about single channel data acquisition system?
14. Write a note on sensor based computer data system?
15. Explain digital frequency meter?
16. Explain Electrocardiography?
17. Write about pc motor speed control?
18. Write a note on illumination control?

Section - C

Answer any TWO questions:

2 X 20 = 40

19. Write about
 - a. Servomotors
 - b. eddy current clutches and
 - c. Modulators.
20. Write a note on
 - a. Single channel data acquisition system
 - b. Multi channel DAS
21. Explain over voltage and overload protection of DC motors?