

CBCS Scheme: 2017-18

MODEL QUESTION PAPER

15 BM 64

Sixth Semester B.E. Degree Examinations

Clinical Instrumentation - II

Time: 3 Hrs

Max. Marks: 80

Note: Answer FIVE FULL Questions, selecting ONE FULL Question from each Module

Question Number	Question	Marks Allotted
Module -1		
1	a) Explain the various tests to examine the functions of cranial nerves, gait and stance. b) Give the indications and technique of Lumbar Puncture. c) Write a note on MRI used to examine skull and spine.	6M 5M 5M
2	a) Describe the types of Evoked Potentials. b) Define Epilepsy. Discuss its classifications with waveforms.	8M 8M
Module -2		
3	a) What is Myasthenia Gravis? Explain the test to examine neuromuscular junction. b) Write a note on biopsies of muscle and nerve.	8M 8M
4	a) Give the principle of generation of interference currents. b) Discuss the types of electrodes used in electro-diagnostic and therapeutic applications c) Explain the pain relief through Transcutaneous Electrical Nerve Stimulator and Spinal cord Stimulator.	4M 4M 8M
Module -3		
5	a) With block diagram, explain the medical compressed air plant. b) Describe the working principle of Differential Pressure flowmeter. c) List the principles of constructing Vaporizing system.	6M 4M 6M
6	a) Explain the various factors affecting vapour concentration in Vaporiser. b) Write a note on ELSA electronically controlled anaesthetic machine.	8M 8M
Module -4		
7	a) With figures, explain Mapleson D system with spontaneous ventilation. b) Discuss the simple bottle humidifier and methods of increasing humidification with figures.	8M 8M
8	a) Give the working principles of Galvanic oxygen fuel cell and Polarographic oxygen analyzer. b) Describe the working principle of Raman anaesthetic gas	6M 6M

	monitor. c) Explain the layout of anaesthetic room.	4M
	Module -5	
9	a) Define fracture. Give the patterns of fracture. b) Explain the stages of healing of fracture with figures. c) Discuss fatigue or stress fractures.	5M 8M 3M
10	a) Explain the methods of immobilisation of fracture. b) With figures, discuss the principles of open fracture.	8M 8M