Reg. No.					



## MANIPAL INSTITUTE OF TECHNOLOGY (A constituent unit of MAHE, Manipal 576104)

### IV SEMESTER B.Tech. (BME) DEGREE END SEM EXAMINATIONS, APR/MAY 2019.

# SUBJECT: BASIC CLINICAL SCIENCES-I (BME 2204) (REVISED CREDIT SYSTEM)

Wednesday, 24th April 2019, 2 pm to 5 pm

TIME: 3 HOURS MAX. MARKS: 50

### **Instructions to Candidates:**

- 1. Answer ALL questions of PART- A, PART-B and PART- C. Use separate answer books for PART-A, PART-B and PART-C.
- 2. Draw neat labeled diagram wherever necessary.

### PART-A: CARDIOLOGY (Max. Marks 15)

1.	Write a note on programming parameters of cardiac pacemakers.								
2.	Discuss the components of Rotablation.	5							
3.	Explain the different types of Ultrasound transducers.								
PART-B: ANAESTHESIOLOGY (Max. Marks 20)									
1.	Describe a Medical oxygen cylinder.	5							
2.	Explain with diagram the following phase variables with regards to mechanical ventilators trigger, limit and cycle.	5							
3.	List 5 safety features present in anaesthetic machines to prevent delivery of hypoxic gas mixture.	5							
4.	List four equipment's used to monitor body temperature. List different sites used to monitor core body temperature.	5							
PART-C: ENT. (Max. Marks 15)									
1.	Enumerate functions of larynx.	5							
2.	Write a note on parts of cochlear implant and its working principle and its indications.	1+2+2							
3.	What is LASER? What is the principle of LASER? Enumerate uses of LASER in ENT.	1+2+2							