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

IV SEMESTER B.Tech. (BME) DEGREE MAKE UP EXAMINATIONS, JUNE 2019.

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

Saturday, 8th June 2019: 2 PM to 5 PM

TIME: 3 HOURS

MAX. MARKS: 50

Instructions to Candidates:

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

PART-A: CARDIOLOGY (Max. Marks 15)

- Write the ECG criteria for Left and right ventricular hypertrophy. 5
- Explain the conduction system of the heart. 5
- Write a note on different types of cardiac pacing devices. 5

PART-B: ANAESTHESIOLOGY (Max. Marks 20)

- Describe the variable bypass mechanism used in current TEC vaporizers? What are the techniques used for temperature compensation by TEC vaporizers? 5
- What is Bernoulli's principle? What is venturi phenomenon? How do these apply to gas flow in anaesthesia? 5
- Name the various devices available for Gas Flow measurement? Elaborate on any one including advantages and disadvantages? 5
- Describe resistance and compliance with respect to ventilation? 5

PART-C: ENT. (Max. Marks 15)

- Enumerate different methods of post laryngectomy speech rehabilitation. Write a brief note on any one method of speech rehabilitation. 2.5+2.5
- Write a note on osteomeatal complex in the lateral wall of nose. 5
- Discuss the role of Endoscopy in ENT 5