

# Question Paper

Exam Date & Time: 19-Apr-2022 (10:00 AM - 12:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

THIRD SEMESTER B.Sc. PERFUSION TECHNOLOGY DEGREE EXAMINATION - APRIL 2022  
SUBJECT: PFT2101 - INTRODUCTION TO PERFUSION TECHNOLOGY  
(2020 SCHEME)

Answer ALL questions.

Draw neat diagram wherever required.

Marks: 50

Duration: 120 mins.

### Essay:

- 1) Describe various types of blood pumps, ideal characteristics of blood pumps. Describe the difference between pulsatile versus non-pulsatile blood pumps (10)
- 2) What is CPB? Write the basic principles of CPB. Draw a diagram of Extracorporeal Circuit (10)

### 3. Write short notes:

- 3A) Hemostatic monitoring during CPB (5)
- 3B) What are the preoperative investigations done in a patient before cardiac surgery, and explain its clinical importance with their normal values. (5)
- 3C) Blood transfusion and its complications. (5)
- 3D) Explain principles of venous drainage and types of assisted venous drainage. Enlist the reasons for poor venous drainage (5)

### 4. Short Answers:

- 4A) Different types of Filters (2)
- 4B) Draw a normal ECG wave form and label the different waves (2)
- 4C) Tubing's and connectors (2)
- 4D) Sites of Arterial cannulation (2)
- 4E) Gross Well Technique (2)

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