

## Rajiv Gandhi University of Health Sciences

Second Year M.Sc. (Perfusion Technology) Degree Examination - OCT-2019

[Time: 3 Hours] [Max. Marks: 100]

## Cardiac and Robotic Cardiac Surgery (RS-2) O.P. CODE: 9086

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary. Answer all questions

LONG ESSAY 2 X 20 = 40 Marks

- 1. Difference between three generations of Thoratec VAD devices. Use the pointers below to justify answer for each generation
  - a) Explain the types
  - b) Working principle
  - c) Complications of each
- 2. Explain the principles and application of intravascular counter pulsation technique.

SHORT ESSAY 6 X 10 = 60 Marks

- 3. Right Mini Thoracotomy for Aortic Valve Repair
  - a) Perfusion strategies
  - b) Advantages and disadvantages of the procedure
- 4. Da Vinci surgical system
- 5. Hybrid TECAB
- 6. Describe the physiology of ECMO.
- 7. Role of MCS devices in primary graft failure following heart transplant
- 8. Harlequin syndrome

\*\*\*\*\*
COM