

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B.Sc. Perfusion Technology Examination - OCT-2019

Time: Three Hours Max. Marks: 100 Marks

PERFUSION TECHNOLOGY ADVANCED, PAPER – III (RS) Q.P. CODE: 2925

Your answers should be specific to the questions asked. Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

- Write an essay on different types of ventricular septal defects, clinical diagnosis and its management.
- Write an essay on surgical plans for minimally invasive cardiac surgery.
- An oxygenator manufacturing company wants you to design an oxygenator. As a perfusionist what are the design characteristics you will incorporate in the oxygenator.

SHORT ESSAYS (Answer any Ten)

10 x 5 = 50 Marks

- 4. Prebypass ultrafiltration
- Advantages and disadvantages of pulsatile perfusion
- Retrograde cardioplegia delivery
- Neurological monitoring during CPB
- 8. Compare and contrast roller pump with centrifugal pump.
- Gas exchange principles in oxygenators
- 10. Write any three shunts in pediatric heart surgery in detail.
- 11. Blood vs crystalloid cardioplegia
- 12. Write any three anaesthetic drugs used during CPB.
- 13. Volatile inhalational agents used in CPB
- 14. Cardioplegia administration routes, methods and pressure of delivery.
- Blood conservation measures in prediatric CPB

SHORT ANSWERS (Answer any Ten)

10 x 3 = 30 Marks

- Antiarrthymic drugs while coming of CPB
- 17. KAVD
- Pharmacological IABP
- 19. Air oxygen mixer
- MIDCAB
- 21. North south syndrome in ECMO
- 22. Recirculation in ECMO
- 23. Conventional ultrafiltration
- 24. Protamine reaction
- 25. Perfusionist role in transplant
- 26. Perfadex
- Plasmalyte

