

(Affiliated to the Tamil Nadu Dr M.G.R Medical University, Chennai)

B. Sc. CARDIOPULMONARY PERFUSION CARE TECHNOLOGY

**1412 –PRINCIPLES OF PERFUSION
II YEAR**

UNIT IV- HEART DISEASES, CANNULATION , IABP

I.ELABORATE ON

10 MARKS

REFERENCE – THE TAMILNADU DR.M.G.R MEDICAL UNIVERSITY QUESTION PAPER

S.no	Questions	Reference	Bloom's Taxonomy
1	Explain the Principles, Indications, Insertion, and Complications of Intra-Aortic Balloon Pump (IABP) .	APRIL 2024	Analyze
2	Classify Congenital Heart Diseases . Discuss in detail about Tetralogy of Fallot (TOF) , including its four main defects.	APRIL 2024	Analyze
3	Describe the various methods and sites of Arterial Cannulation for Cardiopulmonary Bypass (CPB). Detail the procedure and precautions for femoral cannulation.	MARCH 2021	Analyze
4	Discuss the principles and components of Cardioplegia Cannulation . Elaborate on the differences between Antegrade and Retrograde cardioplegia delivery.	AUGUST 2017	Analyze
5	Discuss the physiological basis of IABP triggering . Describe the various trigger modes and explain the process of weaning a patient off IABP support.	AUGUST 2018	Apply
6	Describe in detail the various methods and sites of Venous Cannulation for CPB. Discuss the advantages and disadvantages of Single Venous versus Bicaval Venous cannulation.	AUGUST 2015	Evaluate

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S.no	Questions	Reference	Bloom's Taxonomy
7	Discuss the clinical presentation, diagnosis, and CPB management considerations for a patient with Transposition of the Great Arteries (TGA) .	FEBRUARY 2017	Apply
8	Elaborate on the preparation of the IABP machine and the sterile tray. Detail the steps involved in percutaneous insertion of the IABP catheter.	AUGUST 2019	Apply
9	Describe the detailed mechanism of action of Del Nido Cardioplegia solution. Discuss its clinical indications and contraindications.	SEPTEMBER 2022	Analyze
10	What is Heart Block ? Discuss the different types and their management strategies, focusing on the role of temporary and permanent pacemakers .	AUGUST 2014	Understand

II.WRITE NOTES ON**5 MARKS****REFERENCE – THE TAMILNADU DR.M.G.R MEDICAL UNIVERSITY QUESTION PAPER**

S.no	Questions	Reference	Bloom's Taxonomy
1	Del Nido Cardioplegia solution.	APRIL 2024	Remember
2	Various types of Arterial cannulas used for CPB.	APRIL 2024	Remember
3	Indications and Contraindications of IABP .	AUGUST 2012	Remember
4	Write a note on Patent Ductus Arteriosus (PDA) .	AUGUST 2012	Understand
5	Venous Cannulation sites.	FEBRUARY	Remember

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S.no	Questions	Reference	Bloom's Taxonomy
		2019	
6	Describe the IABP timing errors and their consequences.	MARCH 2021	Analyze
7	Write a note on Coronary Sinus Cannulation (Retrograde Cardioplegia).	FEBRUARY 2016	Understand
8	Discuss the ECG features of different degrees of Heart Block.	AUGUST 2019	Analyze
9	Ventricular Septal Defect (VSD).	FEBRUARY 2022	Understand
10	IABP Complications.	AUGUST 2017	Remember

III.WRITE SHORT NOTES ON**3 MARKS****REFERENCE – THE TAMILNADU DR.M.G.R MEDICAL UNIVERSITY QUESTION PAPER**

S.no	Questions	Reference	Bloom's Taxonomy
1	What is IABP?	AUGUST 2012	Remember
2	What is the Primary principle of IABP?	APRIL 2024	Understand
3	Name the two main effects of IABP on cardiac function.	AUGUST 2015	Remember
4	Name two sites of Venous Cannulation.	FEBRUARY 2019	Remember
5	Define Cardioplegia.	MARCH 2021	Remember

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S.no	Questions	Reference	Bloom's Taxonomy
6	What is Heart Block?	AUGUST 2014	Remember
7	Name two Acynotic Congenital Heart Diseases .	FEBRUARY 2016	Remember
8	What is the common cannula size for adult arterial cannulation?	AUGUST 2018	Remember
9	IABP Trigger Sources .	FEBRUARY 2020	Remember
10	Name the four defects of Tetralogy of Fallot .	AUGUST 2017	Remember
11	Define Arterial Cannulation .	APRIL 2023	Remember
12	Name two Contraindications of IABP .	SEPTEMBER 2022	Remember
13	What is the role of Potassium in Cardioplegia solution?	AUGUST 2019	Understand
14	What is Asystole ?	AUGUST 2014	Remember
15	What is Counterpulsation ?	FEBRUARY 2022	Understand