

**SUBJECT: 1423 CARDIO PULMONARY BYPASS AND COMPLICATIONS, STERILE
TECHNIQUES AND SURGICAL ASEPSIS MAINTENANCE**

UNIT IV- ECC CIRCUIT, SUPPORTING DEVICES & DRUGS- QUESTION BANK

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

I. ELABORATE ON

10 MARKS

S.No	Question	Reference (Month/Year)	Bloom's Taxonomy
1	Components of Cardiopulmonary bypass circuit	Aug 2013, Aug 2014, Feb 2018, Aug 2018, Feb 2019, Dec 2020	Understand/Apply/Analyze
2	Draw a neat labelled diagram of cardiopulmonary bypass circuit and describe in detail about the conduct of cardiopulmonary bypass	Feb 2021	Understand/Analyze
3	Assembling and preparing circuits for heart lung machine	Feb 2015, Aug 2019	Apply/Understand
4	Write the components of Cardiopulmonary bypass circuit, support your answer with the basic bypass circuit diagram by labelling	Apr 2023	Understand/Apply
5	Extra Corporeal Membrane Oxygenator – Uses and Complications	Apr 2024	Understand/Analyze
6	Describe in detail about Ventricular assist device	Apr 2025	Analyze/Evaluate
7	Discuss in detail about various pumps used in Cardiopulmonary bypass	Feb 2021	Analyze

SNS COLLEGE OF ALLIED HEALTH SCIENCE, COIMBATORE -35
(Affiliated to the Tamil Nadu Dr M.G.R Medical University, Chennai)
B.Sc. CARDIOPULMONARY PERFUSION CARE TECHNOLOGY



II. WRITE NOTES ON

5 MARKS

S.No	Question	Reference (Month/Year)	Bloom's Taxonomy
1	Draw Rough Diagram of an extracorporeal circuit	Feb 2014, Aug 2019	Apply/Create
2	Periodic maintenance of Heart Lung Machine	Feb 2015, Aug 2013, Aug 2015, Feb 2018, Apr 2023	Apply/Analyze
3	Hemotherm	Feb 2014, Feb 2015, Aug 2014, Aug 2019	Understand/Apply
4	Brief about the periodic maintenance of the Hemotherm	Aug 2017	Understand/Apply
5	Ventricular Assisting Devices	Apr 2024	Understand/Apply
6	Complications of IABP and draw a picture of positioning of IABP	Aug 2016, Feb 2017, Apr 2024	Apply/Create
7	Indications, contraindications and complications of IABP	Feb 2017	Understand/Apply
8	Write briefly about Intra-aortic balloon pump (IABP)	Sep 2022	Understand/Apply
9	Timing errors of Intra-Aortic Balloon Pump (IABP)	Apr 2025	Apply/Analyze
10	Cell saver and its uses	Apr 2025	Remember/Understand
11	Drugs used to increase systemic vascular resistance	Nov 2023	Remember/Apply
12	Explain the role of Gas filter in a bypass circuit	Feb 2018	Understand/Apply
13	Left Ventricular assists devices	Apr 2024	Understand/Analyze

III. WRITE SHORT NOTES ON

3 MARKS

S.No	Question	Reference (Month/Year)	Bloom's Taxonomy
1	Centrifugal pumps	Aug 2013, Feb 2014, Aug 2019	Remember/Understand

SNS COLLEGE OF ALLIED HEALTH SCIENCE, COIMBATORE -35
(Affiliated to the Tamil Nadu Dr M.G.R Medical University, Chennai)
B.Sc. CARDIOPULMONARY PERFUSION CARE TECHNOLOGY



S.No	Question	Reference (Month/Year)	Bloom's Taxonomy
2	Membrane Oxygenator	Aug 2013, Aug 2014, Feb 2019	Remember/Understand
3	Arterial line filter	Aug 2013, Nov 2023, Apr 2023	Remember/Understand
4	Hemotherm	Aug 2013, Feb 2014, Feb 2015, Aug 2014	Remember/Understand
5	ECMO – define, state benefits and discuss complications	Aug 2016, Feb 2017, Feb 2019, Dec 2020, Apr 2023	Remember/Apply/Analyze
6	RVAD	Jan 2025	Remember/Understand
7	Adult and Pediatric Cannulas	Jan 2025	Remember/Understand
8	Draw a diagram of Membrane oxygenator	Apr 2025	Apply/Create
9	Ventricular assist device	Nov 2023, Apr 2024	Remember/Understand
10	Short note on Ventricular Assisting Devices	Sep 2022	Understand
11	Intra-aortic balloon counter pulsation (indications, uses, or complications)	Aug 2019	Understand/Apply
12	Drugs used to increase systemic vascular resistance	Nov 2023	Remember/Apply
13	Dobutamine	Jan 2025	Remember/Understand