

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

**UNIT III- PRE-OPERATIVE SURGICAL INVESTIGATIONS, MAINTENANCE AND
TROUBLE SHOOTING- 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	Checklist before going on cardiopulmonary bypass	Aug 2013, Aug 2015, Feb 2016, Feb 2019, Dec 2020, Sep 2022, Jan 2025	Understand/Apply
2	Pre-bypass check list	Feb 2014, Feb 2016, Sep 2022, Jan 2025	Understand/Apply
3	Explain briefly on the following special investigations: a) Echocardiography b) Angiography c) Liver function test d) Renal function test	Aug 2017, Aug 2019, Aug 2018	Understand/Analyze
4	Explain in detail about the routine investigation done for cardiac surgery and their importance to the perfusionist	Feb 2018	Understand/Analyze
5	Surgical asepsis	Aug 2015, Feb 2018	Understand/Apply
6	Elaborate on preparation and assembling of circuits on Heart Lung Machine and filters under surgical asepsis	Apr 2023	Apply/Analyze
7	Periodic maintenance of heart lung machine	Feb 2015, Aug 2013, Aug 2015, Feb 2018	Apply/Analyze
8	Safety methods and management of accidents during Cardiopulmonary Bypass	Apr 2024	Analyze/Evaluate
9	Preoperative investigations for CPB	Feb 2018, Feb 2019, Dec 2020, Apr 2024	Understand/Apply

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S.No	Question	Reference (Month/Year)	Bloom's Taxonomy
10	Describe in detail about pre-bypass checklist. Add a note on troubleshooting during cardiopulmonary bypass	Sep 2022	Analyze/Apply

II. WRITE NOTES ON

5 MARKS

S.No	Question	Reference (Month/Year)	Bloom's Taxonomy
1	Pre-bypass checklist	Feb 2021, Sep 2022, Apr 2023	Understand/Apply
2	Cleaning and maintenance of Heart Lung Machine	Feb 2018, Sep 2022	Apply/Analyze
3	Skin preparation for surgical procedure/invasive procedures	Feb 2016, Aug 2017, Apr 2023	Apply/Understand
4	Periodic maintenance of heart lung machine	Feb 2015, Aug 2013, Aug 2015, Feb 2018, Apr 2023	Apply/Analyze
5	Explain how to maintain surgical asepsis in HLM	Sep 2022	Apply/Understand
6	Management of power failure during Cardio Pulmonary Bypass	Sep 2022	Apply/Analyze
7	Parameters to be monitored on Cardiopulmonary Bypass	Apr 2024	Understand/Apply
8	Precautions to be taken during rewarming	Sep 2022, Apr 2023	Understand/Apply
9	Troubleshooting and management of complications while initiating CPB	Jan 2025	Analyze/Apply

III. WRITE SHORT NOTES ON

3 MARKS

S.No	Question	Reference (Month/Year)	Bloom's Taxonomy
1	Preoperative investigations for CPB	Aug 2013, Feb 2015, Feb 2019, Dec 2020	Remember/Understand

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S.No	Question	Reference (Month/Year)	Bloom's Taxonomy
2	Angiography	Feb 2015, Feb 2019, Dec 2020, Aug 2017, Aug 2019, Aug 2018	Remember/Understand
3	Echocardiograph	Feb 2014, Aug 2017, Aug 2019, Aug 2018	Remember/Understand
4	Renal function tests	Feb 2015, Feb 2016, Aug 2017, Aug 2019, Aug 2018, Dec 2020, Apr 2023	Remember/Understand
5	Liver function tests	Feb 2014, Aug 2014, Aug 2015, Feb 2016, Aug 2017, Aug 2019, Aug 2018, Dec 2020, Apr 2023	Remember/Understand
6	ECG and its significance to perfusionist	Aug 2015, Aug 2017, Aug 2019, Aug 2018, Dec 2020	Remember/Understand
7	Steps for asepsis during assembling circuit	Aug 2013, Feb 2019, Dec 2020	Apply/Understand
8	Surgical asepsis for invasive procedure	Nov 2023	Apply/Understand
9	Mention any three methods in maintenance of asepsis during Cardiopulmonary bypass	Apr 2024	Remember/Apply
10	Periodic maintenance of heart lung machine	Aug 2013, Feb 2015, Aug 2015, Feb 2018, Apr 2023	Apply/Analyze
11	Troubleshooting and management of complications (e.g., loss of electrical power, air entry into venous line)	Feb 2014, Aug 2014, Aug 2015, Feb 2016, Aug 2017, Feb 2018, Feb 2019, Aug 2019, Aug 2018, Aug 2022, Apr 2023, Jan 2025	Apply/Analyze