

SANJAY GANDHI POSTGRADUATE INSTITUTE OF MEDICAL SCIENCES

Raebareli Road, Lucknow-226014 (U.P.)

Syllabus for the Post of Perfusionist (Core Subject) Advt No. I/10/3/Rectt/2026-27

(Syllabus is only Indicative. The questions can assess any aspect of knowledge, aptitude, attitude and practical skills, which is expected from a trained person to work efficiently at the advertised post)

1. General concepts of patient care
2. Basics of human anatomy / physiology / pathology / microbiology / Biochemistry
3. Basics of Central Sterilization Services
4. Basics of Cardiopulmonary bypass, priming solutions, transducers, cannulation techniques, mechanics of pumps and oxygenators
5. Effects on various organs during CPB and introduction to IABP (Intra-aortic balloon pump) and ECMO (Extra corporeal membrane oxygenation devices)
6. Clinical Monitoring, problem detection and problem-solving during bypass and understanding of complications.
7. Basics of cardiac physiology, respiratory physiology in normal and diseased states, basics of ECG, fundamentals of Echocardiography, and Pulmonary function testing
8. Knowledge about transfusion of blood and blood products and maintaining and monitoring anticoagulation during bypass.
9. Applied Perfusion Technology, Introduction to Perfusion Technology, Perfusion Equipments, Biomedical Electronics
10. Pharmacology and Pathology related to Cardiopulmonary Bypass.
11. Organ support system in relation to Cardiopulmonary Bypass (CPB)