

Syllabus for the Post of Dark Room Attendant
(Preliminary MCQs based Written Examination)

Examination Scheme

Test Component	Number of Questions	Maximum Marks
Basic Medical Sciences and Hospital Procedures	40	40
Dark Room Techniques, Radiographic Procedures and Radiation Protection	50	50
General Awareness, Ethics and Computer Knowledge	10	10
Total	100	100

Nature of Examination

- Objective Type Multiple Choice Questions (MCQs)

Standard of Examination

- Graduation in radiology level.

Medium of Examination

- English and Hindi wherever applicable

Detailed Syllabus

Section I: Basic Medical Sciences and Hospital Procedures: 40 Marks

Topic	Subtopics
Human Anatomy and Physiology	Cell, tissues, skeletal system, respiratory system, cardiovascular system, nervous system, endocrine system and vital signs
Basic Pathology and Microbiology	Inflammation, infection, sterilization, disinfection, biomedical waste management and infection control
Hospital Procedures and Patient Care	Hospital organization, patient handling, patient preparation, communication skills and hospital terminology
Basic Nursing and First Aid	First aid principles, CPR basics, emergency care and patient safety measures
Medical Ethics and Professional Conduct	Professional ethics, discipline, patient confidentiality and medico-legal awareness
Computer Fundamentals	MS Word, Excel, internet usage, digital documentation and data handling

Section II: Dark Room Techniques, Radiographic Procedures and Radiation Protection: 50 Marks

Topic	Subtopics
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Dark Room Procedures	Dark room construction, safe light, pass box, handling and processing of X-ray films and film storage
Radiographic Photography	Film density, contrast, intensifying screens, cassettes, image quality and radiographic artifacts
Digital Radiography	Computed radiography, digital radiography, photo printing and digital image editing
Radiological Physics	Electricity and magnetism, X-ray generation, properties of radiation, radiation units and measurements
Radiation Protection	Radiation hazards, biological effects, radiation safety, ICRP guidelines and AERB regulations
X-Ray Equipment and Imaging Systems	X-ray tubes, generators, exposure switches, fluoroscopy, image intensifiers and dental radiography units
Radiographic Techniques and Positioning	Chest, skull, abdomen and limb radiography, contrast studies, bedside radiography and patient immobilization
CT, MRI and Ultrasound Basics	Basic principles of CT, MRI safety, ultrasound and Doppler imaging basics
Equipment Maintenance and Troubleshooting	Routine maintenance, troubleshooting procedures and quality assurance measures

Section III: General Awareness, Ethics and Computer Knowledge: 10 Marks

Topic	Subtopics
General Awareness	Current affairs, general science, healthcare awareness and government health schemes
Reasoning and Aptitude	Basic mathematics, logical reasoning and analytical ability
Professional Ethics	Discipline, team work, communication skills and patient confidentiality
Computer Knowledge	MS Office, internet and email usage, digital records and online reporting