

All India Institute of Medical Sciences, Jodhpur

Indicative Syllabus for the Examination for the Post of PACS Administrator

(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. The number and sequence of questions examining any particular topic / subject may be variable.)

SECTION - 1 (Subject Knowledge)

PACS Administrator (Technical Officer Photography)

- Department Organization: Digital Imaging and PACS.
- The components of a PACS system.
- Compare data & workflows in an analog and digital environment.
- Summarize how studies are archived, queried and retrieved Identify system software components.
- The concept of streaming and compression of images.
- · Identify and construct system users, groups, profiles.
- Features and functions of the Work Flow Manager Administration tool Perform updates and reconciliation of studies in the PACS database.
- The flow of images to be stored on the PACS system.
- The DICOM parsing function to map DICOM fields to other DJCOM fields.
- The function of the Info Router software, construct rules and perform monitoring of jobs.
- The IS Link software and its relationship with Radiology Orders and Reports.
- CD Direct key features and functions.
- The email key features and functions.
- The Data Import key features and functions.
- The Non-DICOM Import key features and functions.
- Key functions of the PACS System Administrator.
- Pre-implementation strategy for the PACS, project management during installation and implementation of the PACS, and take total ownership of the PACS system at the completion of the implementation.
- Tasks and necessary knowledge to properly manage the PACS system.
- Navigate Archive Explorer.
- Select and use various tools in the display area.
- Differentiate between viewbox layout and group layout, as well as navigate through stacked viewers.
- Utilize the PowerViewer toolsets.
- Adjust parameters of MPR, and utilize its functions.
- Utilize the 3D toolsets.
- Define, edit, create, quantify and annotate vessel analysis.
- Utilized the system's mammography tool set.
- Basic functions of OthoView, Cardiac Analysis, Cardiac PACS, PET-CT/MRI Fusion, and Volume Matching.
- Interpret and utilize DICOM Header information.

PACS (SYSTEM ADMINISTRATION)

- Configure and utilize Display Protocols.
- List and perform how to start and stop system processes.
- · Perform system check.
- · Monitor license status.
- Daily, weekly and situational preventative maintenance procedures.
- · Working knowledge of Digital Dashboard.
- Monitor log files.

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- Monitor Audit Trail events.
- Configuration of the PACS WFM server.
- Life Cycle configuration and Autodelete priorities.
- The RMS software agents perform.
- Proficiency in troubleshooting variouss common issues.
- How to contact Carestream Support Center, and the information to be provided for the Issue.
- System Administrator Responsibilities.
- Overview of Workflow- Analog v/s Digital.
- Virtual Tour of Hospital.
- Overview of Image Workflow.
- · Overview of Storage Workflow.
- Carestream PACS v11.xx Overview.
- User Administration.
- Database Administration.
- InfoRouter.
- ISLink.
- · CD Direct.
- · Email.
- Data Importing.
- DICOM DICOM tags
- Documents.
- System Configuration.
- · Troubleshooting.
- PACS Admin Role.
- Carestream Client.
- Archive Explorer.
- · Display Area.
- Viewbox Layout.
- MPR & 3D.
- · Vessel Analysis.
- Mammography.
- Display Protocols.
- System Monitoring- Dashboard, Logs, Audit Trail.
- Digital Imaging and PACS: Picture Archiving and Communication System.
- Digital Imaging and PACS: what should a radiologist expect from PACS.
- Digital Imaging and PACS: Image processing in Computed Radiography.
- Intravascular Contrast Media.
- Whole body Computed Tomography: Recent Advances.
- Magnetic Resonance imaging basic Principles Ultrasound: general principles.
- Radionuclide Imaging: General Principles.
- Radionuclide Imaging: Pediatric Nuclear Medicine.
- Dual Energy X-ray Absorptiometry.
- Functional and Physiological Imaging.
- Medicolegal issues in Diagnostic Radiology.
- Radiation Protection and patient doses in diagnostic radiology.

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SECTION - 2 (Aptitude Knowledge)

General Intelligence & Reasoning

It would include questions of both verbal and non-verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgment, decision making, visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. the topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Classification, Symbolic/Number Classification, Figural Classification, Semantic Series, Number Series, Figural Series, Problem Solving, Word Building, coding & decoding, Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing inferences, Punched hole/pattern-folding & unfolding, Figural Pattern – folding and completion, indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small & Capital letters/numbers coding, decoding and classification, Embedded Figures, Critical thing, Emotional Intelligence, Social Intelligence, Other sub-topics, if any.

Quantitative aptitude

The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be computation of whole numbers, decimals, fractions and relationships between numbers, Percentage. Ratio & Proportion, Square & cube roots, Averages, Interest, Profit and Loss, Discount, Partnership Business, Mixture and Allegation, Time and distance, Time & Work.

