



# All India Institute of Medical Sciences, Jodhpur

## Indicative Syllabus for the Examination for the Post of MANIFOLD ROOM ATTENDANT

(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)

### Section A

40% Questions to be based on General Aptitude from the following topics:-

**General Intelligence & Reasoning:** It would include questions of non-verbal type. The test will include questions on similarities and differences, space visualization, problem solving, analysis, judgment, decision making, visual memory, discriminating observation, relationship concepts, figure classification, arithmetical number series, non-verbal series etc. The test will also include questions designed to test the candidate's abilities to deal with abstract ideas and symbols and their relationship, arithmetical computation and other analytical functions.

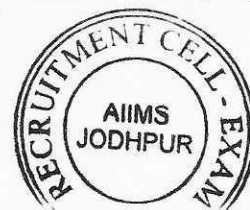
**Quantitative Aptitude:** This paper will include questions on problems relating to Number Systems, Computation of Whole Numbers, Decimals and Fractions and relationship between Numbers, Fundamental arithmetical operations, Percentages, Ratio and Proportion, Averages, Interest, Profit and Loss, Discount, use of Tables and Graphs, Mensuration, Time and Distance, Ratio and Time, Time and Work, etc.

**Computer Knowledge:** Candidates' understanding of the Basics of Computer Knowledge, its parts, functions, emails, MS office, etc.

### Section B

60% Questions to be based on Subject/Domain knowledge from the following topics:-

1. Gas Distribution Systems: Compressed gas cylinders, Colour coding, Cylinder valves; Pin index, Gas piping system, Recommendations for piping system, Alarms & safety devices.
2. MGPS Design and Techniques: Statutory obligations and safe system operation, MGPS design and installation requirements, Basic fault-finding, Structure and management of the permit-to-work system, MGPS equipment performance requirements (plant and pipeline); Technical reporting including system capacities/limitations, upgrading requirements/equipment replacement, system compliance.



3. MGPS Policies and documentation: MGPS documentation; Emergency procedures; MGPS operational policy preparation, implementation and monitoring; MGPS testing and quality control requirements; Manifold systems; Cryogenic liquid cylinders; Bulk cryogenic (VIE) systems Alarm requirements.
4. Piping materials and specification of W.I. & steel pipes, Pipe threads, Pipe fittings, Specifications of fittings, Brief description of different types of pipe joints, Pipe fittings, Flanges, Unions, Valves etc., Different types of pipes lay out systems, Different types of pipe joint
5. Working principals of valves and their description.
6. Mechanical faults on terminal outlets, Line regulators, Zone valve boxes and faults on electrically controlled line, Pressure alarms.
7. Oxygen acetylene welding procedure of medical gas pipeline using inert gas shielding
8. Installation, maintenance and repair of liquid oxygen plant and high-pressure cylinder manifolds
9. Types of many gas manifolds.
10. Manifolds selection criteria.
11. Manifolds assemblies.
12. Semi- automatic manifolds.
13. Manifolds accessories.
14. Manifolds valves etc.

