

7th Semester	RBM7D001	Hospital Engineering and Management	L-T-P 3-0-0	3 Credits
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Module I:**(06 hours)**

Organization of the Hospital : Organizational Structure, Governance, Duties & Responsibilities of Governing Board, Management Structure, Duties, responsibilities & functions of CEO, CEO & his management team.

Module II:**(10 hours)**

Classification of Hospitals – Primary Health Care Centre, General Hospital, Specialty Hospital, Teaching & Research Hospital- Their Role and Functions. Planning the Hospital Building- General principles, General Features, Building Contracts & Contract Documents, Furnishing & Equipping the Hospital. The Design team & its role – The Architect, Engineers & Hospital Administrators

Module III:**(11 hours)**

Overview, Location, Design & Organization of the Following Departments: Emergency Services, Clinical Laboratories, Diagnostic Radiology, Surgical Department (OT), Intensive Care Units(ICU), Central Sterilization & Supply Department (CSSD).

Overview, Design, Location & Organization of the following Engineering services: Electrical Engineering, Civil Engineering, Maintenance Engineering, Air-Conditioning system, Centralized Medical Gas System, Information Technology (IT), and Telecommunication Engineering.

Module IV: (10 hours)

Clinical Engineering: Definition of Clinical Engineering, Evolution of Clinical Engineering, Hospital Organization & role of Clinical Engineering, Clinical Engineering programs, Major Functions of Clinical Engineering department. Management & Assessment of Medical Technology: The Health Care Delivery System, Strategic Technology planning, Technology Assessment, Equipment Acquisition & Deployment.

Books:

- [1] Hospital: Planning, Design & Management – G.D. Kunders, S.Gopinath, A, Katakam-Tata McGraw Hill -1998.
- [2] Biomedical Engineering Hand Book 3rd Edition (Medical Devices & Systems) – Joseph D. Bronzino- CRC- Tylor & Francis-2006.