

**PSG COLLEGE OF ARTS & SCIENCE**  
(AUTONOMOUS)  
**MSc DEGREE EXAMINATION DECEMBER 2025**  
(First Semester)

Branch - **HOSPITAL ADMINISTRATION**

**HOSPITAL PLANNING AND ARCHITECTURE**

Time: Three Hours

Maximum: 75 Marks

**SECTION-A (10 Marks)**

Answer **ALL** questions

**ALL questions carry EQUAL marks** (10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	The Hospital Utilisation Index is primarily used to measure: a. Hospital building design efficiency b. Utilization of hospital services by patients c. Staff performance d. Financial budgeting accuracy	K1	CO1
	2	The concept of a Green Building in hospital design mainly focuses on: a. Reducing administrative workload b. Minimizing environmental impact and energy consumption c. Expanding the number of beds d. Increasing construction speed	K2	CO1
2	3	Equipping a hospital mainly refers to: a. Hiring new employees b. Procuring and installing medical and non-medical equipment c. Planning hospital meals d. Conducting safety drills	K1	CO2
	4	Bed distribution in a hospital should be based on: a. Staff convenience only b. Specialty needs, patient load, and hospital functions c. Random departmental preference d. Equipment availability	K2	CO2
3	5	The Diagnostic Zone of a hospital consists of: a. Laundry and kitchen areas b. Radiology, pathology, and laboratory departments c. Administrative offices d. Wards and ICUs	K1	CO3
	6	Voluntary standards for hospitals are: a. Legally mandatory for operation b. Adopted by choice to improve quality and performance c. Enforced by law under all circumstances d. Related only to mechanical design	K2	CO3
4	7	Day care services are meant for: a. Patients needing continuous hospital stay b. Procedures and treatments that do not require overnight admission c. Long-term rehabilitation d. Home-based care only	K1	CO4
	8	The Cardiac Catheterization Laboratory (Cath Lab) is primarily used for: a. Brain imaging                      b. Diagnostic and therapeutic heart procedures c. Dialysis treatment                d. Radiation therapy	K2	CO4
5	9	The Central Sterile Supply Department (CSSD) is responsible for: a. Supplying food to patients   b. Sterilizing and distributing surgical instruments c. Managing hospital security   d. Handling medical records	K1	CO5
	10	Heating, Ventilation, and Air Conditioning (HVAC) systems are essential in hospitals to: a. Provide luxury to patients only b. Maintain air quality, temperature, and infection control c. Improve external aesthetics d. Reduce the need for cleaning staff	K2	CO5

Cont...

**SECTION - B (35 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Discuss the changing roles of hospitals.	K2	CO1
		(OR)		
	11.b.	Discuss the key factors to be considered when choosing a site for a hospital.		
2	12.a.	Examine the relationship between bed distribution and space utilization in a multispecialty hospital.	K3	CO2
		(OR)		
	12.b.	Evaluate how interior design and environmental considerations influence patient recovery.		
3	13.a.	Analyze the significance of mechanical and electrical standards in hospital construction.	K4	CO3
		(OR)		
	13.b.	Examine the planning and safety requirements for a centralized medical gas system.		
4	14.a.	Evaluate the design and workflow requirements of the Outpatient Department.	K4	CO4
		(OR)		
	14.b.	Examine the design considerations for Dialysis Units, and Radiotherapy Units that balance patient comfort with clinical efficiency.		
5	15.a.	Assess the effectiveness of Lighting and Wayfinding systems in improving patient experience.	K4	CO5
		(OR)		
	15.b.	Examine the emerging trends in hospital design and layout, focusing on sustainability.		

**SECTION - C (30 Marks)**

Answer ANY THREE questions

ALL questions carry EQUAL Marks (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Analyse the importance of green building concepts in promoting sustainability in hospital infrastructure.	K3	CO1
2	17	Examine emerging trends and environmental considerations shaping the future of hospital architecture.	K4	CO2
3	18	Critically assess the role of biomedical equipment standards in maintaining quality and patient safety.	K4	CO3
4	19	Examine how laboratory and imaging services should be planned for maximum diagnostic accuracy and workflow.	K4	CO4
5	20	Evaluate the interrelationship between CSSD, Laundry, and Catering units in maintaining hospital hygiene.	K5	CO5