



**GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY**  
(AN AUTONOMOUS INSTITUTION)  
(Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu)  
(Accredited by NAAC with "A" Grade, NBA (EEE,ECE &ME) & ISO9001:2008 Certified Institution)

**QUESTIONBANK(DESCRIPTIVE)**

**Subject Name with Code: BUILDING MATERIALS & 22A0149T**

**Course & Branch: B.Tech-CS, DS, CSE,AI ML**

**Year& Semester: III & I**

**Regulation: RG22**

**UNIT - I**

S.No.	Question	[BT Level] [CO][ Marks]
<b>2 Marks Questions (Short)</b>		
1.	List out classification of stones?	L2 CO1 2M
2.	Define Dressing of a stone	L2 CO1 2M
3.	List out types of stone masonry	L2 CO1 2M
4.	List out composition of brick manufacture process	L2 CO1 2M
5.	What is the weight of the standard brick and how many are required per cubic meter of brick masonry?	L2 CO1 2M
6.	Define Fat Lime	L2 CO1 2M
7.	Define cement	L2 CO1 2M
8.	What is the main composition of cement and List out process of manufacture of cement	L2 CO1 2M
9.	Define Sapwood	L2 CO1 2M
10.	Define seasoning of Timber	L2 CO1 2M
<b>Descriptive Questions (Long)</b>		
11.	Explain briefly the following with respect to stone as building material with necessary sketches: (i) Quarrying. (ii) Dressing of stone. (iii) Preservation of stone	L2 CO1 12M
12.	Explain general principles of Stone masonry construction and types of stone masonry with neat sketches	L2 CO1 12M
13.	What are the field tests conducted for good quality bricks and explain the manufacturing process of bricks	L2 CO1 12M
14.	Explain characteristics of brick bond in brick masonry and types of brick bonds with neat sketches	L2 CO1 12M
15.	Explain the process, properties, classification of lime in detail	L2 CO1 12M
16.	Explain composition of cement & any one of the manufacturing process of cement with neat sketch	L2 CO1 12M
17.	What are the tests to be conducted on cement explain any one of the test in detail	L2 CO1 12M
18.	Explain production process and characteristics of timber	L2 CO1 12M
19.	Explain preservation & defects of timber in detail	L2 CO1 12M
20.	Illustrate seasoning of timber	L2 CO1 12M

**UNIT - II**

S.No.	Question	[BT Level] [CO][ Marks]
<b>2 Marks Questions (Short)</b>		
1.	What is function of lintel	L2 CO2 2M
2.	Define abutment in arch	L2 CO2 2M
3.	List out types of arches based on shape	L2 CO2 2M
4.	Write difference between traditional and modern vaults	L2 CO2 2M
5.	Define Rise and thread	L2 CO2 2M
6.	Define lift or elevator	L2 CO2 2M
7.	List out materials used in flooring	L2 CO2 2M
8.	Define Deck roof with neat sketch	L2 CO2 2M
9.	Sketch the king post and queen post truss with elements	L2 CO2 2M
10.	List out components of door and window	L2 CO2 2M

<b>Descriptive Questions (Long)</b>		
11.	Explain Lintel in detail with classification	L2 CO2 12M
12.	Illustrate arch with neat sketch including technical terms along stability of arch	L2 CO2 12M
13.	Interpret vaults with elements and types of vaults in detail	L2 CO2 12M
14.	Expound stair with technical terms and classification with neat sketch	L2 CO2 12M
15.	Explain elevator with neat sketch include components	L2 CO2 12M
16.	Describe flooring and types of flooring	L2 CO2 12M
17.	Explain Pitched Roof and lean to roof with neat sketch	L2 CO2 12M
18.	Illustrate with neat sketch i. King post truss ii. Queen post truss iii. Coupled roof	L2 CO2 12M
19.	Explain factors to be considered for door selection and types of doors	L2 CO2 12M
20.	Illustrate components and types of windows	L2 CO2 12M

### **UNIT - III**

S.No.	Question	[BT Level] [CO][ Marks]
<b>2 Marks Questions (Short)</b>		
1.	Define Damp proofing	L2 CO3 2M
2.	What is DPC?	L2 CO3 2M
3.	List out materials used in damp proofing	L2 CO3 2M
4.	Where cavity wall used in damp proof	L2 CO3 2M
5.	List out methods used in treatment of basements	L2 CO3 2M
6.	Justify is bitumen is good material for damp proof course	L2 CO3 2M
7.	In which ratio cement concrete used in damp proof course	L2 CO3 2M
8.	How rain water will effect building without damp proof	L2 CO3 2M
9.	Justify labour skill will cause of dampness?	L2 CO3 2M
10.	Illustrate building components where dampness occurs?	L2 CO3 2M
<b>Descriptive Questions (Long)</b>		
11.	Explain causes and effects of dampness	L2 CO3 12M
12.	Illustrate precautions to be taken for causes of dampness	L2 CO3 12M
13.	Describe effects of dampness and illustrate the materials used to prevent dampness	L2 CO3 12M
14.	Illustrate methods of damp proofing with neat sketches	L2 CO3 12M
15.	Explain any two materials used to prevent dampness and treatment to foundations against gravitational water	L2 CO3 12M
16.	Describe damp proof course treatment to basement with neat sketches	L2 CO3 12M
17.	Interpret damp proof course treatment for roofs and walls	L2 CO3 12M
18.	Explain causes of dampness and treatment of DPC in flooring with neat sketch	L2 CO3 12M
19.	Describe precautions of dampness and Provision of foundation drains and DPC with neat sketch	L2 CO3 12M
20.	Describe Provision of R.C.C. raft and wall slab and asphalt tanking with neat sketches	L2 CO3 12M

### **UNIT - IV**

S.No.	Question	[BT Level] [CO][ Marks]
<b>2 Marks Questions (Short)</b>		
1.	List out any five basic principles of planning	L2 CO4 2M
2.	Abbreviate NBC	L2 CO4 2M
3.	Define Part2 of NBC 2005	L2 CO4 2M
4.	What are the general utilities in a residential building	L2 CO4 2M
5.	Define Part8 of NBC 2005	L2 CO4 2M
6.	Draw a neat sketch of aspect in planning	L2 CO4 2M
7.	List out benefits of energy efficiency in planning	L2 CO4 2M
8.	Define Part5 of NBC 2005	L2 CO4 2M
9.	Define prospect in terms of planning	L2 CO4 2M
10.	What is purpose of NBC	L2 CO4 2M
<b>Descriptive Questions (Long)</b>		

11.	Explain principles of planning in detail	L2 CO4 12M
12.	Explain orientation of building planning with any five basic principles of planning	L2 CO4 12M
13.	Illustrate planning for energy efficiency	L2 CO4 12M
14.	Describe planning based on utility of water distribution system	L2 CO4 12M
15.	Illustrate planning based on utility on storage tanks and house drainage system with neat sketch	L2 CO4 12M
16.	Explain planning based on utility on system of plumbing with neat sketch	L2 CO4 12M
17.	Illustrate planning based on utility on electric supply system along with earthwork with neat sketches	L2 CO4 12M
18.	Explain how NBC will use for principles of building planning	L2 CO4 12M
19.	Illustrate salient features of NBC	L2 CO4 12M
20.	Describe planning of energy efficiency with planning based on utilities	L2 CO4 12M

### **UNIT - V**

S.No.	Question	[BT Level] [CO][ Marks]
<b>2 Marks Questions (Short)</b>		
1.	Define Zoning	L2 CO5 2M
2.	List out aspects in zoning	L2 CO5 2M
3.	What are advantages of zoning	L2 CO5 2M
4.	Define base line	L2 CO5 2M
5.	List out types of buildings	L2 CO5 2M
6.	Define building bye laws	L2 CO5 2M
7.	List out any five aspects of building bye laws	L2 CO5 2M
8.	Define plinth area	L2 CO5 2M
9.	Define FAR with formula	L2 CO5 2M
10.	Define FSI	L2 CO5 2M
<b>Descriptive Questions (Long)</b>		
11.	Describe zoning regulations with site layout design	L2 CO5 12M
12.	Explain Building bye laws and regulations	L2 CO5 12M
13.	Illustrate Rules for special types of buildings in detail	L2 CO5 12M
14.	Describe principles underlying Building bye laws with FAR and FSI	L2 CO5 12M
15.	Illustrate Building area in detail	L2 CO5 12M
16.	Explain space requirement for a Building-Point to be considered	L2 CO5 12M
17.	Describe Terminology used in building bye laws 2016	L2 CO5 12M
18.	Explain i. objectives and scope of building bye laws ii. Plinth area and carpet area	L2 CO5 12M
19.	Explain functionalities of BIS in detail	L2 CO5 12M
20.	Illustrate on i. BIS ii. FAR iii. FSI	L2 CO5 12M

**Signature of the Staff:**

**Signature of Department Academic Committee Member 1:**

**Signature of Department Academic Committee Member 2:**

**Signature of Department Academic Committee Member 3:**