

GUJARAT TECHNOLOGICAL UNIVERSITY

BE-3 SEMESTER – OLD PAPER – S22 TO W25 – QUESTION BANK

Subject Name & Code: Building and Town Planning (3130609)

Unit 1 – Introduction to Buildings, Principles of Building Planning, Orientation, Architecture Composition, BIM

Repeated Questions:

1. **Enlist the principles of architectural composition.**
 - Appeared in: S25 (Q1a, 03 marks), S23 (Q3b, 04 marks)
 2. **Enlist the principles of planning and explain any one.**
 - Appeared in: S24 (Q1a, 03 marks), W23 (Q1a, 03 marks)
 3. **What is BIM? Give advantages/importance of BIM.**
 - Appeared in: S25 (Q2b, 04 marks), S24 (Q2b, 04 marks), W25 (Q3a, 03 marks), W23 (Q2a, 03 marks), W22 (Q2a, 03 marks)
 4. **Explain orientation of a building / factors affecting orientation.**
 - Appeared in: W25 (Q1b, 04 marks), W24 (Q1a, 03 marks)
 5. **Draw a residential building plan on a given plot as per building bye-laws and planning principles.**
 - Appeared in: S25 (Q1c, 07 marks), S24 (Q1c, 07 marks), S23 (Q1c, 07 marks), W24 (Q1c, 07 marks), W23 (Q1c, 07 marks), W22 (Q1c, 07 marks)
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Other Important Questions:

1. **Compare principles of planning with principles of architecture in terms of final design of building.**
 - Appeared in: W22 (Q1a, 03 marks)
 2. **Define terms: FAR, Set back, Control Line, Light Plane, Mezzanine Floor, etc.**
 - Appeared in: S25 (Q1b, 04 marks), S23 (Q1b, 04 marks), W24 (Q1b, 04 marks), W23 (Q1b, 04 marks)
 3. **Explain the scope/objectives of building bye-laws.**
 - Appeared in: S25 (Q2a, 03 marks), W24 (Q2a, 03 marks)
 4. **Explain the necessity of National Building Code (NBC).**
 - Appeared in: S23 (Q1a, 03 marks)
 5. **What is difference between NBC and local building bye-laws?**
 - Appeared in: W22 (Q1b, 04 marks)
 6. **Explain elements of BIM.**
 - Appeared in: W22 (Q2a, 03 marks)
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Unit 2 – Building Bye-Laws, NBC, RERA, ODPS, Earthquake Resistant Planning

Repeated Questions:

1. **Write short note on ODPS (Online Development Permission System).**
 - Appeared in: S25 (Q2c, 07 marks), S23 (Q2c, 07 marks), W25 (Q2a, 03 marks), W24 (Q2c, 03 marks), W23 (Q2c, 03 marks)
 2. **Explain objectives/necessity of ODPS.**
 - Appeared in: S24 (Q2b, 04 marks)
 3. **Explain principles of planning in detail.**
 - Appeared in: S25 (Q2c OR, 07 marks), S23 (Q2c, 07 marks), W24 (Q2c, 07 marks)
 4. **How building is made earthquake resistant using construction techniques?**
 - Appeared in: S23 (Q3b, 04 marks), W24 (Q3c, 07 marks), W23 (Q3c, 07 marks), W22 (Q3c, 07 marks)
 5. **Explain key features of RERA Act / influence of RERA in real estate.**
 - Appeared in: W25 (Q3b, 04 marks), W22 (Q2c OR, 07 marks)
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Other Important Questions:

1. **Write short note on “Software for ODPS”.**
 - Appeared in: W22 (Q2c, 07 marks)
 2. **Explain planning of earthquake resistant building / general principles.**
 - Appeared in: S23 (Q3b, 04 marks), W24 (Q3c, 07 marks)
 3. **Define terms: FSI, RERA, Set-back, etc.**
 - Appeared in: W22 (Q2b, 04 marks)
 4. **Explain the importance of building bye-laws and local regulations.**
 - Appeared in: W25 (Q3a, 03 marks)
 5. **What is NBC? How is it helpful in planning and design of buildings?**
 - Appeared in: S25 (Q5c OR, 07 marks), W23 (Q2b, 04 marks)
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Unit 3 – Building Drawing, Working Drawings, Building Services, Software for 2D Models

Repeated Questions:

1. **Draw line diagram of a Bank / Public Building as per bye-laws.**
 - Appeared in: S24 (Q2c, 07 marks), S23 (Q3c, 07 marks)
 2. **Discuss software application in building planning and drawing for 2D model generation.**
 - Appeared in: S25 (Q3c, 07 marks), S23 (Q3c, 07 marks), W22 (Q3c, 07 marks)
 3. **Explain with sketches, house drainage system of a building.**
 - Appeared in: S25 (Q3a OR, 03 marks), S24 (Q2c OR, 07 marks), W23 (Q3a, 03 marks), W22 (Q3a, 03 marks)
 4. **Differentiate between 2D model generation and 3D model generation.**
 - Appeared in: W22 (Q3c, 07 marks)
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Other Important Questions:

1. **Draw elevation/section for a given residential plan.**
 - Appeared in: W25 (Q2c, 07 marks)
 2. **Discuss working drawings.**
 - Appeared in: W22 (Q3b, 04 marks)
 3. **List various fittings and fixtures used in water distribution system in a building.**
 - Appeared in: W24 (Q5c OR, 07 marks)
 4. **Draw a line diagram of a Primary Health Centre for a village.**
 - Appeared in: W24 (Q3a, 03 marks)
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Unit 4 – Perspective Views, 3D Model Generation, Site Selection, Public Building Planning

Repeated Questions:

1. **Differentiate between isometric view and perspective view.**
 - Appeared in: S25 (Q3b, 04 marks), W24 (Q3b, 04 marks)
 2. **Differentiate between one-point, two-point, and three-point perspective views.**
 - Appeared in: S25 (Q3b OR, 04 marks), W25 (Q3c, 07 marks), W23 (Q3b, 04 marks), W22 (Q3b, 04 marks)
 3. **Explain typical characteristics of perspective drawings / perspective projection.**
 - Appeared in: S25 (Q3a, 03 marks), W24 (Q3a, 03 marks)
 4. **Define terms: Picture plane, Vanishing point, Station point, Line of sight, etc.**
 - Appeared in: S24 (Q3a, 03 marks), S23 (Q3a, 03 marks), W23 (Q3a, 03 marks), W22 (Q3a, 03 marks)
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Other Important Questions:

1. **Draw a two-point perspective view of a given sketch.**
 - Appeared in: S24 (Q3c, 07 marks)
 2. **Explain perspective view and its importance.**
 - Appeared in: S23 (Q3a, 03 marks)
 3. **Explain factors influencing selection of site for various types of public buildings.**
 - Appeared in: S24 (Q1b, 04 marks), W24 (Q3c, 07 marks)
 4. **Write step-by-step procedure for drawing a two-point perspective view.**
 - Appeared in: W25 (Q3c OR, 07 marks)
 5. **Draw a perspective view of a single room with given dimensions.**
 - Appeared in: S23 (Q3c OR, 07 marks)
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Unit 5 – Historical Aspects, Civic Surveys, Town Planning Principles, GIS

Repeated Questions:

1. **Explain historical development of town planning in ancient India / world.**
 - Appeared in: W25 (Q4a, 03 marks), W22 (Q5a, 03 marks)
 2. **What is civic survey and its necessity?**
 - Appeared in: S23 (Q4a OR, 03 marks), W25 (Q4b, 04 marks)
 3. **Differentiate between social survey and vital/territorial survey.**
 - Appeared in: W24 (Q4a, 03 marks), W23 (Q4a, 03 marks), W22 (Q4a, 03 marks)
 4. **Explain fundamental principles of town planning.**
 - Appeared in: W25 (Q4a OR, 03 marks), S23 (Q4c, 07 marks)
 5. **Explain use of GIS in modern town planning.**
 - Appeared in: W25 (Q4b OR, 04 marks)
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Other Important Questions:

1. **Explain necessity / purposes of survey.**
 - Appeared in: W23 (Q5a OR, 03 marks)
 2. **Write short note on origin of town / growth of town according to origin and direction.**
 - Appeared in: W25 (Q4c, 07 marks), S23 (Q4c, 07 marks)
 3. **Explain types of data collected and methods of presentation for town planning.**
 - Appeared in: W25 (Q4c OR, 07 marks)
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Unit 6 – Town Components, Zoning, CBD, Slums, Neighborhood Planning

Repeated Questions:

1. **Explain Zoning / principles of zoning.**
 - Appeared in: S25 (Q4a OR, 03 marks), S23 (Q5a, 03 marks), W23 (Q4a, 03 marks), W22 (Q4a, 03 marks)
2. **Explain CBD and its characteristics.**
 - Appeared in: S25 (Q5b, 04 marks), S23 (Q5a OR, 03 marks), W24 (Q4b, 04 marks), W23 (Q5b, 04 marks), W22 (Q5b, 04 marks)
3. **Explain multiple nuclei model.**
 - Appeared in: S25 (Q4b OR, 04 marks), S23 (Q5b, 04 marks)
4. **Discuss causes, characteristics, and effects of slums / slum clearance methods.**
 - Appeared in: S25 (Q4c OR, 07 marks), W25 (Q5c, 07 marks), W24 (Q4c, 07 marks), W23 (Q4c, 07 marks), W22 (Q4c, 07 marks)
5. **Explain principles of neighborhood planning.**
 - Appeared in: S25 (Q5c, 07 marks), S23 (Q4b, 04 marks), W24 (Q5c, 07 marks), W22 (Q5c, 07 marks)

Other Important Questions:

1. **Write short note on satellite town.**
 - Appeared in: S25 (Q5b OR, 04 marks), S24 (Q3b, 04 marks)
2. **Explain importance of road network in town planning.**
 - Appeared in: S24 (Q5b, 04 marks), W25 (Q5a, 03 marks)
3. **List various components of a town / neighborhood.**
 - Appeared in: S25 (Q5a OR, 03 marks), W25 (Q5b, 04 marks)
4. **Write short note on ribbon development.**
 - Appeared in: S24 (Q4a, 03 marks), W23 (Q5b, 04 marks)
5. **Explain smart city case study / characteristics.**
 - Appeared in: S25 (Q4b, 04 marks), S23 (Q5c, 07 marks), W24 (Q4b, 04 marks), W22 (Q4b, 04 marks)
6. **Discuss development controls in new town planning.**
 - Appeared in: W25 (Q5c OR, 07 marks)
7. **Write short note on Master plan / Development plan.**
 - Appeared in: W22 (Q4c, 07 marks)
