

B.Tech IV Year I Semester

JNTUA COLLEGE OF ENGINEERING (AUTONOMOUS) PULIVENDULA

19ACE75a-ARCHITECTURE AND TOWN PLANNING

(Open Elective-III)

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**Course Objectives:** The objectives of the course are to make the students learn about

- To know the western architecture and Indian architecture and also to gain knowledge on the principles of architectural design and historical background of town planning.

**A) ARCHITECTURE:**

**UNIT – I:**

At the end of this unit, the student will be able to

**History of Architecture:**

a) **Western Architecture:** Egyptian, Greek, Roman Architectures; influences- Comparative Analysis Orders

b) **Indian Architecture:** Vedic age - Indus Valley civilization - Buddhist period; stambas, Slenstas. Roranas, Chaityans, Viharas with one example for each Hindu temples - Evaluation of Dravidian and Indo Aryan Styles - Principle factors. Temple of Aibole, Mahabalipuram, Madurai, Deograph, Bhuvaneshwar, Mount Abu.

c) Indo - Sarsanic Architecture; Mosque - Place- FortTomb

**Learning Outcomes:**

Understand the different architectures of Indian and western countries

Understand the various principle factors of architecture

**UNIT – II:**

**Architectural Design:**

a) **Principle of designing :** Composition of plan Relationship between plan and elevation elements, form, surface Mass, Texture, Color, Tone.

b) **Principle of Compositions:** Unity, contrast, proportion, scale, Bab Rhuthm, character. Principles of Planning a Residence; Site Orientation prospect, Grouping, circulation, privacy, services and otherfactors

**Learning Outcomes:**

At the end of this unit, the student will be able to

- Understand the design prnciples and compositions of architecture

**UNIT – III:**

Introduction of Post-classic Architecture and contribution of eminent architects to modern period. Brief summary of post - classic architecture - Indian and Western Architectural contribution of Edward Lutyens, Le Corbusier), Frank Lloyd Wrigt, Walter Groping, Vender Rohe, Caarihan, Nervi, Oscar Niemyer, Edward Durell stone

**Learning Outcomes:**

At the end of this unit, the student will be able to

- Obtain the knowledge of contribution of different architects in architecture

**B) TOWNPLANNING:**

**UNIT – IV:**

**Historical Back Ground:** Town planning in India - town plans of Magad - town plans of ancient Indian towns; Mourya, Pataliputravijayanagara, Delhi. Town planning in the West-town plans of Acropolis, Rome, Paris, London

**Learning Outcomes:**

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At the end of this unit, the student will be able to

- Understand the need of town planning
- Knowledge on planning of different towns in India and other countries

#### UNIT – V:

##### Components of Planning;

- a) Zoning
- b) Roads and road Traffic.
- c) Housing-Slums, Parks, Playgrounds.
- d) Public Utility Services.
- e) Surveys and maps for planning.
- f) Neighbourhood Planning

Planning New town, planning standards, National and regional Planning, town planning and legislation. Garden cities and satellite town

##### Learning Outcomes:

At the end of this unit, the student will be able to

- Understand the different components of town planning
- Knowledge on national standards in country and town planning

##### Text Books:

##### Reference Books:

###### A) ARCHITECTURE

1. Indian Architecture – Vol:- I and II by Percy Brown, Taraporevala Publications, Bombay.
2. Planning and Design of Building -Section of Architecture by Y.S.Sane.
3. Modern Architecture and Design by Nikolans, Pevshar.
4. Modern Ideal Homes for India by R.S.Deshpande.

###### B) TOWNPLANNING

1. Town and Country Planning - A.J.Brown and H.M.Sherrard.
2. Town Design -Federik Gibbard, Architectural press, London.
3. National Building Code of India.
4. Town Planning in India - Town and Country Planning Organisation, New Delhi 1962.
5. Regional Planning - Misra R.P., Mysore University.
6. Urban and Regional Planning; Principles and case studies by K.S.Rama Gouda, Mysore University Publications.
7. Town and Country Planning - P. Abercrombe, Oxford University press.

##### Course Outcomes:

At the end of this Course the student will be able to

- Learn the importance of architecture and its principles in designing
- The different architectures till date and the contribution of different architects
- The necessity of town planning and different components of planning

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