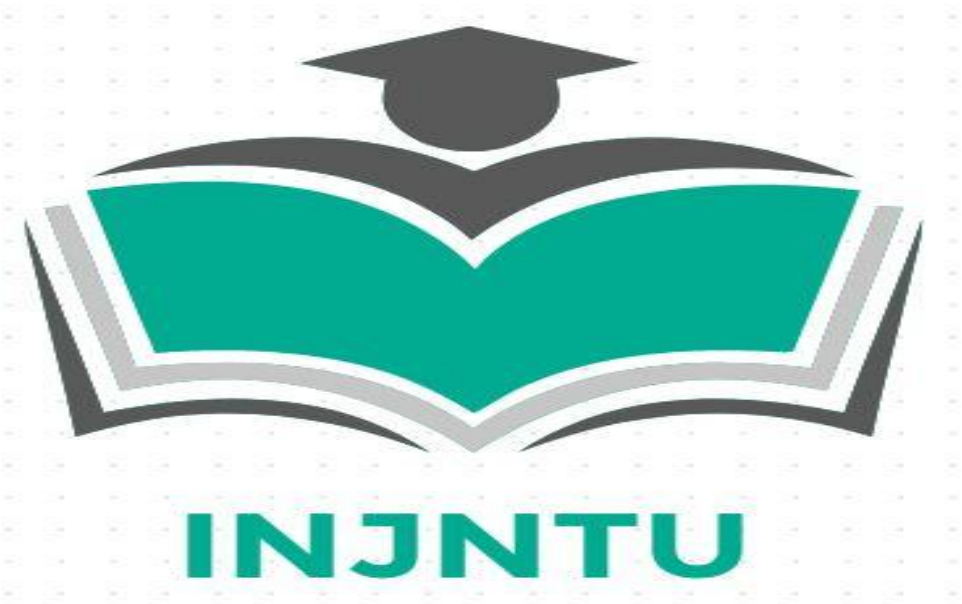

OBJECTIVES

To introduce students to the basic concepts which are used for construction purpose.

1. How the wood, cement, admixtures is used for buildings and construction process.
2. To develop the building walls and foundations and how they are useful for buildings.
3. In these mainly we know about building arches, roofs, doors, windows and ventilators and how they are given for buildings.
4. To develop the form work and finishing work which is used for buildings and to solve the defects of building properties which are able to know with material
5. Painting is also taken for a beautiful looking structure for the good manner.
6. These courses explain about the material which we want to use and how we want to use and how to give a good building for ma using purpose.

COURSE OUTCOMES:

After completing this course the students will be able to:

a) Demonstrate the ability to know about different materials such as stones, bricks, Tiles, wood, aluminium, glass & paints and their classification , manufacture and structural requirements

b) Ability to know about the materials used in making of concrete such as cement and admixtures.

c) Ability to know about tests on cement such as field and lab tests and uses of cement and admixtures.

d) Graduates will demonstrate an understand of various building components such as lintels, arches, types of roofs and joinery such as doors, windows and the materials used in making.

e) Graduates will demonstrate various building services such as plumbing services, sanitary and ventilations.

f) Graduates will demonstrate the various types of ventilations, air conditioning, types of air conditioning, fire protection and classification of fire hazards and fire resistant materials used in construction.

g) Graduates will demonstrate the types of masonry ,finishers and form work ,requirements ,standards

h) Graduates should be capable of self-education and clearly understand the value of building planning and principles of building planning, classification of buildings and building bye laws.

i) Graduates will be broadly educated and will have an understand of the impact of building construction on society and demonstrate awareness of contemporary issues.

j) Graduates will be familiar in applying software methods to analyze civil engineering problems.

S. No	QUESTION	Blooms Taxonomy Level	Course Outcome
	UNIT - I		
1	Define Seasoning of timber. List out the defects in timber.	Remember	a
2	Write down the characteristic properties of good stone?	Understand	a
3	Describe properties and uses of mild steel.	Remember	a
4	What are the paints commonly used in building construction?	Understand	a
5	What are the constituents of glass?	Understand	a
6	What role does aluminum play in building construction?	Evaluate	a
7	Write any four properties of clay products?	Evaluate	a
8	What are the properties of glass?	Remember	a
9	State the points to be considered in selecting a site for the quarry of stones.	Evaluate	a
10	State four advantages of mangalore tiles.	Evaluate	a
	UNIT-II		
1	List out the ingredients of cement.	Remember	b
2	List out the various grades of cement in India.	Remembering	b
3	What do you mean by setting time of cement	Understand	b
4	Enumerate various types of cement?	Remember	b
5	What are admixtures? List out their types.	Remember & Evaluate	c
6	State the need of soundness of cement.	Understand	c
7	What are the properties of OPC	Remember	c
8	Describe the role of admixtures.	Remember	c
9	List harmful constituents in cement.	Remember	b
10	State 4 important uses of rapid hardening cement.	Remember	b
	UNIT-III		
1.	Define arch .what are the components of an arch?	Understand	d
2.	Define the following terms: i) Span of an arch ii) Rise of an arch.	Understand	d
3.	Define lintel. Classify lintels.	Remember	d
4.	Explain about the types of roofs.	Remembering	d
5.	What are the advantages of damp proof coursing	Evaluate	e
6.	Define the following: i) Step iii)riser ii) Thread iv) nosing	Remembering	d
7.	Explain the following sanitary fittings with neat sketches i) Wash basins ii) Bath tub	Evaluate	e
8	Define water distribution system and acoustic design.	Remembering	d
9.	Explain about the characteristics of acoustic	Evaluate	d
10.	Classify among fire resistant materials	Remember	f
	UNIT - IV		
1.	Write down the general requirements of mortars?	Evaluate	g
2.	Differentiate between brick masonry and stone masonry	Analyze	g
3.	Define the following terms : i) Masonry, ii) precast iii) concrete block masonry	Remember	g

S. No	QUESTION	Blooms Taxonomy Level	Course Outcome
4.	Explain about the types of bonds in brick work	Evaluate	g
5.	Explain about tools used in brick masonry	Evaluate	g
6.	Define and explain about the importance of form work	Evaluate	g
7.	List any three reasons why concrete is used as a building material.	Remember	g
8.	State the principles of form work design	Remember	g
9.	Explain about the purpose of plastering	Evaluate	g
10.	Define the following: i) back ground ii) blistering	Remember	g
	UNIT - V		
1	Define building planning. State its significance.	Remember	h
2	Write briefly the factors affecting building planning.	Evaluate	h
3	Write any four basic principles of building planning?	Remember	h
4	What is orientation? state the factors affecting orientation	Analyze	h
5	What is a local authority? And state its functions.	Remember	h
6	Define floor area ratio	Remember	h
7	Classify the building based on their occupancy.	Apply	h
8	Classify the building based on type on construction.	Evaluate	h
9	Define open space	Remember	h
10	What are the points to be considered while selecting a site for any particular building?	Remember	h

2. Group - II (Long Answer Questions)

S. No	QUESTION	Blooms Taxonomy Level	Course Outcome
	UNIT – I		
1	What are the operations involved in manufacturing of bricks?	Evaluate	a
2	Differentiate between exogenous trees and endogenous trees	Analyze	a
3	Explain the manufacturing process of aluminum.	Evaluate	a
4	Explain the classification of bricks With neat sketch.	Evaluate	a
5	What do you Understand about the dressing of stones and explain the methods of dressing of stones?	Analyze	a
6	Explain in brief about the alternative materials for wood.	Apply	a
7	Describe the geological classification of rocks. Give example of each type?	Evaluate	a
8	Describe various types of paints and their suitability or use?	Analyze	a
9	What are the various methods of quarrying of stones? Explain each thod briefly.	Apply	a
10	Explain in detail the process of manufacturing of glass?	Evaluate	a
	UNIT - II		
1	Explain briefly about the tests conducted on cement to find its properties	Evaluate	c
2	Describe in briefly any type of manufacture of cement with the help of flow diagram.	Evaluate	b
3	Explain about different mineral admixtures	Evaluate	c
4	Explain the field tests on cement? Write the chemical composition of ordinary Portland cement.	Evaluate	c

S. No	QUESTION	Blooms Taxonomy Level	Course Outcome
5	Explain why gypsum is added during the manufacture of cement?	Evaluate	b
6	What are air entraining agents? How these air entraining agents help in improving performance of cement?	Under stand	b
7	Differentiate between the following: a) Initial setting time and final setting time b) Clinker and nodules	Analyze	c
8	What do you Understand by the term setting and hardening of cement? What chemical reaction takes place during the process of setting?	Analyze	b
9	Explain about different chemical admixtures	Evaluate	c
10	Write short notes on: a) Soundness test of cement b) Tensile strength test of cement	Remember	c
	UNIT - III		
1	What are different types of arches that are used for engineering construction? Describe any three types in detail with sketches.	Remember	d
2	a) How are new foundations constructed near old excising structures? b) Discuss about the combined footings?	Evaluate	d
3	a) State briefly the requirement of good stair.b) State the various types of stairs through flow diagrams.	Understand & Remember	d
4	Define roof covering? What are various types in roof covering commonly, used in India? Explain in detail.	Analyze	d
5	Define the term foundation? Explain in detail various types of building foundations.	Remembering	d
6	What do you Understand by a) Ventilation b) Air conditioning Explain the necessity of each of them?	Evaluate	e
7	Write a short note on: a) Storage tanks b) Water requirements of building c) Materials for service pipe	Evaluate	d
8	What is acoustics? State various types of sound absorbing materials according to mode of their performance.	Remembering &Evaluate	f
9	Explain the various types of fire protection systems in detail.	Understand	f
10	Describe briefly the functional requirements of a ventilation system.	Remembering	d
	UNIT - 1V		
1	What is brick masonry? State and explain briefly the various classifications of brick masonry.	Understand	g
2	Describe the ashlar stone masonry and state its uses in construction of structures.	Evaluate	g
3	Define the terms in masonry: 1) Header, 2) Stretcher, 3) Course, 4) Quion, 5) Facing, 6) queen closer, 7) King closer, 8) Jams	Remembering	g
4	What is Reinforced concrete cement (R.C.C) and explain its importance in construction of structures.	Remembering &Evaluate	g
5	State and explain briefly the various types of plastering along with their suitability in the building works.	Evaluate	g
6	What is scaffolding. State different types of scaffolding. Explain briefly with neat sketches.	Remembering &Evaluate	g
7	What is form work? What are the stages involved in construction of form work? Explain briefly.	Understand	g

S. No	QUESTION	Blooms Taxonomy Level	Course Outcome
8	What is underpinning of structure .explain the methods of underpinning?	Remembering & Evaluate	g
9	State and explain the methods of determining the bearing capacity of soils?	Evaluate	g
10	Mention the objectives of providing painting and plastering to the proposed surface.	Analyze	g
	UNIT - V		
1	State and explain the various basic principles of building planning?	Remembering	h
2	What is meant by orientation and state the factors affecting the orientation of building?	Understand	h
3	Explain briefly the practical considerations in building planning?	Evaluate	h
4	What are the factors to be considered while selecting site for any practical building.	Evaluate	h
5	Explain the significance of building planning and scope of building planning.	Analyze	h
6	Explain the various types of classification of building.	Analyze	h
7	Explain various principles underlying building bye-laws.	Evaluate	h
8	Explain briefly the following principles in planning the building: a) Circulation b) Privacy c) Sanitation	Evaluate	h
9	Explain briefly the factors affecting building planning	Evaluate	h
10	Explain the following terms : i) Floor area ratio ii) Floor space index	Remembering	h