

Vision: "To impart quality technical education beneficial to industry and the society in the field of Civil Engineering.".

Mission: • To arrange academic and technical expertise.

• To improve the practical knowledge of the student as per current scenario of industry.

• To make the students socially and ethically responsible.

Subject Name: Construction Material(22204)

Assignment No :- 1

**Course Outcome: CO204.1** 

Date :- 10/02/2023

**Topic Name :- Overview of Construction Materials** 

- 1. What is the scope of Civil Engineering in Transportation Engineering.
- 2. What is the scope of Civil Engineering in Environment Engineering.
- 3. What is the scope of Civil Engineering in Irrigation Engineering.
- 4. Enlist Natural construction material.
- 5. Enlist Artificial construction material.
- 6. Enlist some special construction material
- 7. State the factors on which the selection of type of material depend.
- 8. Describe the factors for selection of construction materials on the basis of strength.
- 9. Describe the broad classification of materials.
- 10. What do you mean by eco-friendly building materials? State any two properties of it.

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Subject Name: Construction Material(22204)

Assignment No :- 2

Course Outcome: CO204.2

Date :- 10/02/2023

**Topic Name :- Natural Construction Materials** 

- 1. List the four tools required for dressing of stone.
- 2. Describe the selection criteria for selecting stone for face work of building.
- 3. Explain defects in timber with neat sketch .
- 4. Draw a neat sketch of cross-section of an exogenous tree and label the parts.
- 5. Describe four steps in operation of stone blasting.
- 6. Explain with neat sketch patterns provided in the dressing of trap stone.
- 7. Define slaking of lime and lime mortar. Explain its properties.
- 8. State the requirements of a good building stone.
- 9. Define lime and explain manufacturing of lime by continuous kiln with neat sketch.
- 10. Enlist the methods of quarrying and explain any one in brief.

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Subject Name: Construction Material(22204)

Assignment No :- 3

Course Outcome: CO204.3

Date :- 10/02/2023

**Topic Name :- Artificial Construction Materials** 

- 1. List major ingredients of cement.
- 2. State any two uses, advantages and disadvantages of precast concrete blocks .
- **3.** Draw neat sketches of: i) conventional bricks ii) standard bricks showing all the dimensions.
- 4. State any four situations where hollow concrete block masonry is used.
- 5. Write the field tests performed on bricks for its suitability.
- 6. Write any four uses of plywood .
- 7. State the applications of geo-polymer cement.
- 8. Classify burnt clay bricks.
- 9. Suggest the type of cement used for the following: i) for modular construction where form work needs to be removed early for re-use ii) mass concreting such as construction of dam iii) Decorative works in external surfaces of building iv)cementing the oil well.
- 10. State any two types of glass along with its uses.

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Subject Name: Construction Material(22204)

Assignment No :- 4

Date :- 10/02/2023

**Course Outcome: CO204.3** 

**Topic Name :- Artificial Construction Materials** 

- 1. State the uses of veneers and laminated boards.
- 2. State the characteristics of a good brick.
- 3. What is moulding?
- 4. Describe the field tests for cement.
- 5. Explain various types of tiles based on their use.
- 6. What are the properties of precast pavement blocks?
- 7. Enlist any four types of special bricks.
- 8. Suggest the type of glass used for the following work: i) Making panel of partition wall ii) Cashier cabin iii) Sky light iv) Door shutter
- 9. State important properties and uses of distemper.
- **10.** State the uses (two each) of the following construction materials : i) Soda lime glass ii) Ferrous metal

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Date :- 10/02/2023

Assignment No :- 5

**Course Outcome: CO204.4** 

**Topic Name :- Special Construction Materials** 

- 1. State suitability of : i) waterproofing materials and ii) Sound insulating materials
- 2. State situations where sound insulating and damp proofing materials are used.
- 3. List the materials used for water proofing.
- 4. Describe in brief termite proofing.
- 5. State the properties of thermal insulating materials.
- 6. What is wall cladding? State two merits & demerits of it.
- 7. State the uses of : i) Glass fibres ii) Asbestos fibres.
- 8. Explain the method by which waterproofing of existing old slab can be done.
- 9. List out any four mode of payment and explain any one mode.

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Subject Name: Construction Material(22204)

Date :- 10/02/2023

Assignment No :- 6

Course Outcome: CO204.5

**Topic Name :- Finishing Materials** 

- 1. Define Plaster of Paris. State any two uses of plaster of Paris.
- 2. State the situations where following paints are used: i) Oil Paints ii) Distempers iii) Varnishes iv) Cement paints
- 3. State properties of good mortar.
- 4. Write four types of special mortar and give one use of each.
- 5. Enlist the types of paints.
- 6. State the properties and uses of varnishes.
- 7. Define enamel paint and plastic paint.

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