

Scheme – G

Sample Test Paper - I

Course Name : Civil Engineering Group

Course Code : CE/CS/CR/CV

Semester : Second

Subject Title : Construction Materials

Marks : 25

17209

Time: 1 Hour

Instructions:

1. All questions are compulsory.
2. Illustrate your answers with neat sketches wherever necessary.
3. Figures to the right indicate full marks.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.

Q.1) Attempt any THREE

09 Marks

- a) Describe in brief role of Civil Engineering in human life.
- b) Enlist any three requirements of good building stone.
- c) Enlist three purposes of seasoning of timber.
- d) List three characteristics of good bricks.

Q.2) Attempt any TWO

08 Marks

- a) Name each two materials of Natural, Artificial, Finishing & Recycled construction material.
- b) Define Asphalt & write its three properties.
- c) List any four common field tests on bricks.
- d) Define artificial sand & write any two advantages of it.

Q.3) Attempt any TWO

08 Marks

- a) List the constituents of cement.
- b) Describe the process of field slaking of lime.
- c) Define sand and list requirements of good sand (Mention three points)
- d) Define precast concrete and list three advantages of it.

Scheme – G

Sample Test Paper - II

Course Name : Civil Engineering Group

Course Code : CE/CS/CR/CV

Semester : Second

Subject Title : Construction Materials

Marks : 25

17209

Time: 1 Hour

Instructions:

1. All questions are compulsory.
2. Illustrate your answers with neat sketches wherever necessary.
3. Figures to the right indicate full marks.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.

Q.1) Attempt any THREE

09 Marks

- a) Define particle- board and veneers.
- b) List three properties of glass.
- c) List three required properties of damp proofing materials.
- d) Write three trade names of termite proofing material.

Q.2) Attempt any TWO

08 Marks

- a) List any four ceramic materials used as construction materials.
- b) List any four properties of artificial timber.
- c) Suggest suitable type of internal plaster for following situation
 - i) A Middle Class Residential Building
 - ii) Swimming Pool

Q.3) Attempt any TWO

08 Marks

- a) Define cladding and list three materials used in its construction.
- b) List four properties of coir fibres.
- c) List four uses of plastic in construction.

Scheme - G

Sample Question Paper

Course Name : Civil Engineering Group

Course Code : CE/CS/CR/CV

Semester : Second

Subject Title : Construction Materials

Marks : 100

17209

Time:3 Hrs.

Instructions:

1. All questions are compulsory.
2. Illustrate your answers with neat sketches wherever necessary.
3. Figures to the right indicate full marks.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.

Q.1 Attempt any TEN

20 Marks

- a) Write the role of transportation engineering in human life.
- b) Write the role of irrigation engineering in human life.
- c) Distinguish between stone & rock.
- d) Define timber.
- e) Define slaking of Lime.
- f) Write any two advantages of pre cast concrete blocks.
- g) Define particle- board and veneers.
- h) List any two types of fibres.
- i) State two properties of adhesive material.
- j) List any four damp proofing materials.
- k) Write any two points for suitability of burnt clay bricks used for construction.
- l) List any two properties and two uses of rice husk.

Q.2 Attempt any FOUR

16 Marks

- a) Write any four criteria for selection of construction materials.
- b) Give one example of each category of material like natural, Artificial, special and recycled materials.
- c) Enlist any four requirements of good building stone.
- d) Enlist any four defects in timber.
- e) Compare Asphalt, Bitumen & Tar on the basis of

- i) Colour ii) State iii) Percentage of carbon vi) Adhesiveness
f) Enlist any four properties of good timber.

Q.3 Attempt any FOUR

16 Marks

- a) Define Asphalt. Write any two properties of Asphalt.
b) Define Tar. Write any two uses of Tar.
c) Define seasoning of timber. Write any two objects of seasoning of timber.
d) List the constituents of brick earth.(Mention four)
e) Write any four characteristics of good brick.
f) List any four common field tests on bricks.

Q.4 Attempt any FOUR

16 Marks

- a) Write any four properties of plywood.
b) Write two properties of particle board and veneers.
c) Write the flow diagram of manufacturing process of cement.
d) Write two properties and two advantages of artificial sand and natural sand.
e) State the situation where soda lime glass, lead glass are suitable (Mention two each)
f) Write any four properties of precast concrete product.

Q.5 Attempt any FOUR

16 Marks

- a) List four uses of glass fibres as construction materials.
b) List any four properties of artificial timber used in construction materials.
c) Write four uses of asbestos fibres as construction materials.
d) List any four properties of thermal insulating materials.
e) Write any four required properties of water proofing materials.
f) Give any two situations where thermal insulation and sound insulation are necessary.

Q.6 Attempt any FOUR

16 Marks

- a) Enlist any four properties of good paint.
b) List four qualities of good distemper.
c) List four properties of plaster of paris.
d) Write the meaning of Bagasse, coir fibres, Coconut and Areca nut tree trunks.
e) Write the meaning of Blast furnace slag and fly ash.
f) Write use of fly ash, construction waste, Rubber waste and Saw dust (one each)