

Roll no. _____

ID: 180734/170734/120734/030734

Semester: 3rd

Branch: Civil,GE, Brick Tech, Const Mgmt, Highway Engg.

Subject Name: Construction Materials

Time Allowed : 3 Hrs.

MM:100

Section –A

Note: Multiple Choice questions. All questions are compulsory.

10x1=10

- Q.1 Which of the following has more fire resisting characteristics? (CO-1)
a) Granite b) Marble
c) Compact sand stone d) Lime stone
- Q.2 Specific Gravity for most of the building stones lies between (CO-1)
a) 1.5 to 2.0 b) 2.0 to 2.5
c) 2.5 to 3.0 d) 3.0 to 3.5
- Q.3 The most important purpose of frog in a brick is to (CO-2)
a) Reduce the weight of brick b) Emboss manufacturer's name
c) Form keyed joint between brick and mortar
d) Improve insulation by providing "Hollows"
- Q.4 What is efflorescence? (CO-2)
a) Formation of white patches on the brick surface due to insoluble salts in the brick clay
Impurities in the brick clay
b) which show after burning
c) Deformation of brick due to expose to rain
d) Swelling of brick due to presence of carbonaceous matter and gas
- Q.5 The temperature range in a cement kiln is (CO-3)
a) 500°C to 1000°C b) 1000°C to 1200°C
c) 1300°C to 1500°C d) 1600°C to 2000°C
- Q.6 The thinner used for oil paint is (CO-5)
a) Turpentine b) Water
c) Carbon tetrachloride d) None of these
- Q.7 The extenders are added to the paint body to (CO-5)
a) Reduce the viscosity b) Give colour
c) Accelerate the process of drying d) Increase the volume
- Q.8 Which of the following is the purest form of iron (CO-6)
a) Mild Steel b) Wrought Iron
c) High Carbon Steel d) Cast Iron
- Q.9 Bureau of Indian Standards classifies bitumen into grades 65/25, 85/40 etc. The first and second numbers respectively refer to (CO-7)
a) Softening point and penetration b) Flash point and penetration
c) Flash point and softening point d) Penetration and softening point
- Q.10 Gypsum consist of (CO-7)
a) CO₂ and Calcium b) CaSO₄ and H₂O
c) H₂S and CO₂ d) Lime and H₂O

Section-B

Note: Objective type questions. All questions are compulsory.

10x1=10

- Q.11 Limestone is derived from calcareous rocks. (True / False) (CO-1)
- Q.12 The process of taking out stones from natural rock bed is known as quarrying. (True / False) (CO-1)
- Q.13 The standard size of brick is (CO-2)
- Q.14 Kallar is a mixture of sodium sulphate and sodium chloride. (True / False) (CO-2)
- Q.15 The final setting time of OPC should not be more thanhours. (CO-3)
- Q.16 Annular rings representsof the trees. (CO-4)
- Q.17 Varnish provides uniform and pleasing appearance. (True / False) (CO-5)
- Q.18 Stainless steel is used for household utensils. (True / False) (CO-6)

- Q.19 is a building material that consists of a fine, white-coloured.
Q.20 Plastics are organic substances which are prepared out of (CO-7)

Section –C

Note: Short answer type Questions. Attempt any twelve questions out of fifteen questions. 12x5=60

- Q.21 What are the requirements of a good building stone? (CO-1)
Q.22 Write a short note on geological classification of rocks. (CO-1)
Q.23 Write a short note on vitrified tiles. (CO-2)
Q.24 Describe any five characteristics of good bricks. (CO-2)
Q.25 What are the main constituents of Portland cement? Explain any one of them. (CO-3)
Q.26 Write the properties and uses of Portland Pozzolana cement. (CO-3)
Q.27 What are the characteristics of a good building timber? (CO-4)
Q.28 Write any five advantages of plywood. (CO-4)
Q.29 Write a short note on cement paints. (CO-5)
Q.30 What are the characteristics of an ideal paint? (CO-5)
Q.31 Write any five uses of aluminium as a construction material. (CO-6)
Q.32 Differentiate between ferrous and non-ferrous materials. (CO-6)
Q.33 Write a short note on fire resisting materials. (CO-7)
Q.34 What are heat insulating materials? (CO-7)
Q.35 Write the properties of eco-friendly building materials used in construction. (CO-7)

Section-D

Note: Long answer questions. Attempt any two questions out of three questions.

2x10=20

- Q.36 Explain the working of Bull's Trench Kiln with the help of diagram. (CO-2)
Q.37 Explain the process of manufacture of cement with the help of flow diagram. (CO-3)
Q.38 Explain the process of kiln seasoning with the help of a diagram and write the advantages it. (CO-4)