

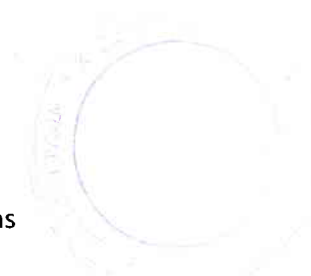
CONSTRUCTION MATERIALS

FULL MARKS – 70

PASS MARKS – 28

TIME – THREE HOURS

The figure in the margin indicate full marks for the questions



- 1 Answer the following questions. 1 x 25 = 25**
- I. Fat lime hardens due to the reaction with _____.
 - II. Efflorescence occurs in brick is due to the presence of _____
 - III. The maximum water absorption of a brick should not be more than _____ %
 - IV. The innermost part of the tree is known as _____
 - V. The material that facilitates spread of paint is known as _____
 - VI. The fresh properties of cement mortar are workability and _____
 - VII. A viscous liquid derived from the destructive distillation of coal is known as _____
 - VIII. Cracks that are caused on the exterior surface of the stem by shrinkage due to weathering effect is known as _____
 - IX. The reaction between cement and water is known as _____
 - X. Give an example of a pozzolanic material.
 - XI. Polyvinyl chlorides is an example of thermosetting plastic. True/False
 - XII. Quick lime is the purest form of lime. True/False
 - XIII. Cement paint can be applied on any surface. True/False
 - XIV. The rocks formed by cooling down of magma or molten material is called
(a) Metamorphic rock (b) sedimentary rock
(c) Igneous rock (d) Stratified rock
 - XV. A relatively high water absorption of a common burnt clay brick indicates
(a) High bond strength with mortar (b) High shrinkage of brick
(c) Low strength brick (d) need for more mortar for bedding
 - XVI. The ingredient of brick earth which enables the brick to retain shape is
(a) Alumina (b) Silica
(c) Iron oxide (d) Magnesia
 - XVII. Bakelite is
(a) A semi-conductor (b) Incombustible
(c) Low resistant conductor (d) Highly inflammable
 - XVIII. Hydraulic lime is obtained by
(a) Burning of kankar (b) Burning of lime stone
(a) Adding water to quick lime (c) All of the above
 - XIX. The trunk of tree left after cutting all the branches is known as
(a) Plank (b) Log
(c) Wane wood (d) None of the above
 - XX. In paints, pigment is added for
(a) Shining surface (b) Colour
(c) Smoothing the surface (d) Easy drying
 - XXI. The decay of timber caused by alternate wetting and drying is called
(a) Dry rot (b) Wet rot
(c) Foxiness (d) Doatiness
 - XXII. Sand is mixed with lime mortar to

- (a) Improve strength (b) Reduce cost
 (c) Reduce setting time (d) Prevent shrinkage
- XXIII. In plywood manufacturing, the veneers are placed so that the grains of adjacent veneers
 (a) Run at right angles (b) Run at 30°
 (c) Run at 45° (d) Run at 60°
- XXIV. The red color in brick is due to the presence of
 (a) Lime (b) Silica
 (c) Magnesia (d) Iron
- XXV. The main constituent of varnish is
 (a) Turpentine oil (b) Petrol
 (c) Resin (d) Solvent



From Question 2 to 6 Answer Any Four

- 2 (a) What are the good engineering properties of a burnt clay brick? **07**
 (b) What are adhesives and how are they classified? **03**
- 3 (a) What are the characteristics of a good paint? **05**
 (b) Explain how an old concrete surface is painted? **05**
- 4 (a) Define glass and its types with uses. **06**
 (b) What do you understand by seasoning of timber? **04**
- 5 (a) Explain how cement is manufactured by dry process. **08**
 (b) What is heart shake? **02**
- 6 (a) What are various types of tar? List their application? **07**
 (b) What are cast iron and wrought iron? **03**

Answer Question No. 7 Compulsorily

- 7 Write note on any one of the following: **05**
 (a) Tiles
 (b) Batten Board