

2-Marks questions with answers:

UNIT -I

1. List out some traditional and organic building materials used in the Construction?

Ans: Traditional building materials are made from non-organic materials such as cement, concrete, and steel. Organic building materials are sourced from natural resources and include materials such as wood, straw, bamboo, and earth.

2. List out the main characteristics of ceramic?

Ans:

High hardness.

High elastic modulus.

Low ductility.

High dimensional stability.

Good wear resistance.

High resistance to corrosion and chemical attack.

High weather resistance.

High melting point.

3. Describe the standard sizes of bricks?

Ans: Indian standard brick dimensions: According to BIS, the standard brick measurement in India is 190 x 90 x 90 mm (length, depth, and height). The usual brick size for working applications is 200x100x100 mm in dimension, with mortar thickness (L x B x H)

4. State any six characteristics of good bricks?

Ans: Size,

Shape,

Color,

Texture,

Compactness,

Compressive strength,

Hardness,

Soundness.

5. State various stages involved in manufacturing of bricks?

Ans: There are four different operations are involved in the process of manufacturing of bricks:

Preparation of clay.

Molding.

Drying.

Burning.

UNIT -II

1. Explain about thermosetting Plastic?

Ans: Thermosetting plastics are made up from long chains of molecules that are cross-linked. They have a very

rigid structure. Once heated, thermosetting plastics can be moulded, shaped and pressed into shapes.

2. Write down some of the commonly used plastics?

Ans: Acrylic or Polymethyl Methacrylate (PMMA)

Polycarbonate (PC)

Polyethylene (PE)

Polypropylene (PP)

Polyethylene Terephthalate (PETE or PET)

Polyvinyl Chloride (PVC)

Acrylonitrile-Butadiene-Styrene (ABS)

3. Write about bullet proof glass and its uses

Ans: Bullet resistant glass has become a staple of high security efforts. It has been trusted as a barrier for many different uses, from protecting the storefront of a jewelry store from improvised projectiles, to protecting military and private vehicles from bullets.

4. Write a short note on flint glass

Ans: flint glass, also called Crystal, or Lead Crystal, heavy and durable glass characterized by its brilliance, clarity, and highly refractive quality. Developed by George Ravenscroft (q.v.) in 1675, it ushered in a new style in glassmaking and eventually made England the leading glass producer of the world.

5. Define polymerization?

Ans: polymerization, any process in which relatively small molecules, called monomers, combine chemically to produce a very large chainlike or network molecule, called a polymer

UNIT -III

1. Write down thermal properties of insulating materials?

Ans: The insulating capability of a material is measured as the inverse of thermal conductivity (k). Low thermal conductivity is equivalent to high insulating capability (resistance value). In thermal engineering, other important properties of insulating materials are product density (ρ) and specific heat capacity (c)

2. List out the sound insulating materials?

Ans: Acoustic Membrane.

Acoustic Mineral Wool Cavity Insulation.

Fiberglass.

Resilient Channels.

Acoustic Hangers (Mounts)

Soundproof Drywall (Plasterboard)

3. Define reverberation time

Ans: Reverberation time (RT) is the time required for the sound in a room to decay over a specific dynamic range, usually taken to be 60 dB, when a source is suddenly interrupted.

4. Define the term thermal insulation

Ans: Thermal insulation is the reduction of heat transfer between objects in thermal contact or in range of radiative influence. Thermal insulation can be achieved with specially engineered methods or processes, as well as with suitable object shapes and materials

5. Write a short on green insulation?

Ans: In construction, green insulation materials reduce thermal energy transmission through ceilings, floors, and walls.

UNIT -IV

1. Mention different types of foundations

Ans: Individual Footings. ...

Combined Footings. ...

Strip Footings. ...

Raft or Mat Foundations. ...

Deep Foundations. ...

Pile Foundations.

2. List out the different types of rubble masonry?

Ans: Random rubble Masonry

Squared rubble Masonry

3. Mention the functions of mortars

Ans: To bind building materials such as bricks and stones into a solid mass.

To carry out pointing and plasterwork on exposed surfaces of masonry.

To form an even and soft bedding layer for building units.

To form joints of pipes

4. Write down the uses of the cavity walls?

Ans: Cavity walls have a heat-flow rate that is 50 percent that of a solid wall. As a result, they are often used in colder climates. The cavity also allows moisture that penetrates the exterior wythe to drain

5. Mention the objectives of foundation?

Ans: To load the bearing surface at a uniform rate so as to prevent unequal settlement. To prevent the lateral movement of the supporting material. To secure a level and firm bed for building operations. To increase the stability of the structure as a whole

UNIT -V

1. Define partition walls?

Ans: A partition wall is a divider wall, typically non load bearing, used to separate spaces in residential, commercial, and industrial buildings.

2. State the purpose of domestic floor finishes

Ans: The primary function of a floor finish is to provide a durable, safe, clean, acoustically compatible, attractive and affordable surface.

3. Mention the uses of Emulsion paints

Ans: Emulsions are widely used in most of the major chemical industries. Pharmaceutical industries use it to make medicines more palatable and to improve overall effectiveness by controlling dosage of active ingredients. They are also used to provide improved aesthetics for topical drugs such as ointments.

4. Describe briefly about the oil paint?

Ans: Oil paint is a type of slow-drying paint that consists of particles of pigment suspended in a drying oil, commonly linseed oil.

5. Write down the characteristics of an ideal paint?

Ans: (i) It should have a good body or spreading power.

(ii) It should work smoothly and freely and be capable of being laid in a thin coat with the brush.

(iii) It should form durable, tough and resistant to wear film on drying.

(iv) Colour of paint should not fade or change.