

19201

**11920**

**3 Hours / 100 Marks**

Seat No.

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- Instructions :**
- (1) All Questions are *compulsory*.
  - (2) Answer each next main Question on a new page.
  - (3) Illustrate your answers with neat sketches wherever necessary.
  - (4) Figures to the right indicate full marks.
  - (5) Assume suitable data, if necessary.
  - (6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks**

**1. Attempt any TEN :**

**10 × 2 = 20**

- (a) State uses of sheet glass.
- (b) List four physical properties of glass.
- (c) What is meant by mud plastering ?
- (d) Define Pointing.
- (e) Define oil bound distemper.
- (f) List any four types of paints.
- (g) Define : (i) Intrados (ii) Extrados.
- (h) State any two functions of lintel.
- (i) List any four types of brick arches.

[1 of 4]

**P.T.O.**

**19201**

**[2 of 4]**

- (j) List any four fixtures and fastenings for door.
- (k) Give any four brand names of fixtures and fastenings.
- (l) Name any four types of window.
- (m) Name any four types of door.
- (n) State the purpose of providing doors and windows.

**2. Attempt any FOUR :**

**4 × 4 = 16**

- (a) Explain manufacturing process of glass.
- (b) Explain with neat sketch flush pointing and V-grooved pointing.
- (c) State the characteristics of good paint.
- (d) Distinguish between a lintel and an arch.
- (e) Draw neat sketches of (i) Mortise lock (ii) Door Handle (iii) Tower-bolt (iv) Parliamentary Hinge.
- (f) Describe the fixing of door in brick masonry wall.

**3. Attempt any FOUR :**

**4 × 4 = 16**

- (a) State the applications of different glass in building construction.
- (b) State the properties of plastic wall tiles and give its uses.
- (c) Explain application procedure of Oil & Spirit varnish to wooden member.

- (d) Draw neat sketch of semicircular brick arch and label the components.
- (e) Draw neat sketches of :
  - (i) Hasp and Staples
  - (ii) Floor door stopper
  - (iii) Fan light pivot
  - (iv) Door spring.
- (f) Draw neat labelled sketch of corner window.

**4. Attempt any FOUR :****4 × 4 = 16**

- (a) Explain how would you do selection of glass for application in building.
- (b) Explain procedure of cement plastering to brick masonry wall.
- (c) Distinguish between distempers and varnishes.
- (d) Enlist the materials used for construction of lintel. Draw neat sketch of R.C.C. lintel.
- (e) Define the terms related to an arch :
  - (i) Voussoirs
  - (ii) Key
  - (iii) Spandril
  - (iv) Rise
- (f) Describe the fixing of (i) Hasp & Staple (ii) Tower bolt, to the door.

**P.T.O.**

**5. Attempt any FOUR :****4 × 4 = 16**

- (a) Explain with neat sketch Relieving arch.
- (b) Describe with neat sketch construction of flat brick-arch.
- (c) Describe with sketches lever handle barrel bolt and mosquito proof wire gauge.
- (d) Draw neat sketch of Panelled door (elevation and section).
- (e) Draw neat sketch of Battened, ledged and braced door (elevation and section).
- (f) Describe with neat sketch Clerestory window.

**6. Attempt any FOUR :****4 × 4 = 16**

- (a)
    - (i) State the use of safety glass.
    - (ii) State the use of wallpapers.
  - (b)
    - (i) State emulsion paint and give its covering capacity.
    - (ii) State the types of doors used in the modern public buildings.
  - (c) Differentiate between Gable window and Dormer window.
  - (d) Explain method of fixing the flush door.
  - (e) State IS specifications for materials used for fixtures and fastenings.
  - (f) Describe the fixing of latches, door closer and their working.
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