



**DAT-161001010502**

Seat No. \_\_\_\_\_

**B. Arch. (Sem. V) Examination**

**May - 2022**

**Building Materials & Construction - V**

Time : 2 Hours]

[Total Marks : 50

**Instruction :** Draw neat sketches with labelling wherever it necessary.

**1** Explain the Properties as 'Building Material', with examples **20** (any 4)

- (a) Thermosetting Plastics
- (b) Cast Iron
- (c) Toughened Glass
- (d) Aluminum
- (e) Stainless Steel
- (f) Natural Fiber
- (g) Emulsion Paint

**2** Draw with the neat diagrams : (any 4) **20**

- (a) M.S. Safety Grill in the Window
- (b) Lattice Column and Battened Column
- (c) UPVC window with operable shutters
- (d) Aluminum sliding window
- (e) Glass door in Aluminum partition
- (f) Stainless Steel railing in the balcony
- (g) Glass stair with glass Railing

**3** Multiple Choice (Any 10) **10**

- (1) Epoxy adhesives are used in the manufacturing of \_\_\_\_\_
  - (i) Glass
  - (ii) Fabric
  - (iii) Plywood
  - (iv) Plastic
- (2) \_\_\_\_\_ is used for making Sleeping bags.
  - (i) Rayon
  - (ii) Nylon
  - (iii) Polyesters
  - (iv) All of the above

(3) To join 'Light Metals', \_\_\_\_\_ glues is used.  
(i) PVC Cement (ii) Albumin glue  
(iii) Araldite glue (iv) Rubber glue

(4) \_\_\_\_\_ is a Synthetic fiber.  
(i) Cotton (ii) Nylon  
(iii) Flax (iv) Wool

(5) \_\_\_\_\_ is used for making gunny bags.  
(i) Cotton (ii) Jute  
(iii) Wool (iv) Polyester

(6) What type of glass is ideal for skylights?  
(i) Tempered (ii) Float  
(iii) Laminated (iv) Wired

(7) Addition of which material in steel, increases the hardness of steel?  
(i) Chromium (ii) Sulphur  
(iii) Vanadium (iv) Tungsten

(8) Which material makes an 'Aluminum Alloy' more ductile?  
(i) Silicon (ii) Iron  
(iii) Copper (iv) Zinc

(9) Which variant is most economical out of all given?  
(i) Acrylics (ii) Distempers  
(iii) Enamels (iv) Color wash

(10) How many components a 'Paint' normally consists of?  
(i) 3 (ii) 4  
(iii) 5 (iv) 6

(11) The 'Lacing' arrangement provides unified behavior and axial compression in built up steel column - True or False.

(12) Cast iron is having 'More compressive strength than its Tensile strength' - True or False.

(13) A metallic alloy is 'More corrosion resistant' in general as compared to their pure metal components - True or False.

(14) Bolts are most suitable to carry 'Shear and Bending' - True or False.

(15) Riveting is more noisy than Bolting - True or False.