



**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.