



Date of issue :  Centre :   
Sup. Sign. :  Seat No. :

**PAU-6501-O**  
**B. Arch. (Sem. V) Examination**  
**October / November - 2018**  
**Building Material & Construction - V**

Time : **30** Minutes ]

[Total Marks : **30**

**SECTION - A**

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**Important notes for Students and Supervisor**

- The Building Materials paper is divided into **Sections A** and **Section B**.
- Section A is objective type, which shall be answered in the question paper itself and returned back on attempting all questions OR on completion of first 30 minutes; **whichever is earlier. Attempting Section A first is compulsory.**
- Only tick (✓) the correct answer.
- Section B will be given after handing over of Section A.
- Section B should be answered in a separate answer sheet. At end of exam, Section A should be stapled preceding Section B.

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- 1 In painting a 'base coat' is done for
- (A) Acting as water proofing layer on external surface of basement walls.
  - (B) Protecting wall against any vibration and lateral movement
  - (C) Strengthening the fixing of wall paper on the masonry wall.
  - (D) Allowing actual color of the paint to be seen and avoiding absorption of moisture from the paint.

- 2 The main ingredients of glass are
- (A) Silica, Soda Ash and Lime
  - (B) Soda Ash, Lime and Granulated Sodium
  - (C) Sand, Potash Alum and Lime
  - (D) Sand, water and pigments
3. Stainless steel gets its Corrosion resistance and Luster because of
- (A) Chromium
  - (B) Silver
  - (C) Aluminum
  - (D) Zinc
- 4 Castellated beam(girder) is prepared with an intention of
- (A) Decreasing the inefficiency of the structural member by decreasing depth
  - (B) Increasing the efficiency of the structural member by decreasing width
  - (C) Increasing the efficiency of the structural member by increasing depth
  - (D) Increasing the deficiency of the structural member by increasing depth
- 5 An aluminum section with five tracks can accommodate
- (A) Only three panels of sliding shutter with clear float glass of 6mm, not more than that.
  - (B) Only three panels of sliding shutter with clear float glass of 6mm and one panel of nylon thread knitted mosquito mesh, not more than that
  - (C) All possible combination of sliding panels numbering into five panels, not more than that
  - (D) One panel of each type of glass, i.e. toughened, reinforced, low-e and bulletproof resulting in only four number of panels, not more than that

- 6 For pharmacy labs, due to high hygiene conditions, one should use
- (A) Teflon coated highly durable paint finish with vitrified tiles
  - (B) Glossy or Matte finish stainless steel sheeting which is seamless
  - (C) PVC flooring and ceiling finish which is seamless
  - (D) High grade carpet finish which is washable and durable made of nylon threading.
- 7 The following properties define glass most correctly
- (A) Brittle, Porous, Transparent, Non-Ductile, Good conductor of heat and electricity
  - (B) Flexible, Porous, Translucent, Non-Malleable, Bad conductor of heat and electricity
  - (C) Brittle, Non-Porous, Transparent, Good conductor of heat and Good resistivity of electricity
  - (D) Fibrous, Porous, Non-Elastic, High resistance to radioactive elements, Good insulation
- 8 \_\_\_\_\_ is extensively used for coolant pipes in Air-conditioners and Refrigerators.
- (A) Copper
  - (B) Aluminum
  - (C) Ferrous
  - (D) Lead
- 9 A Dry Wall is
- (A) A Masonry Wall with no mortar.
  - (B) A Masonry Wall with dry mortar
  - (C) A Stud wall with gypsum sheets on both sides
  - (D) A Wall made using sun dried bricks
- 10 Vitrified tiles are :
- (A) Very strong in comparison to flooring done from stone, ceramic tiles and wooden floor.
  - (B) Uniform across its cross section.
  - (C) Made up of cement base with white cement and small pieces of marble and aggregate.
  - (D) Are used only for antistatic flooring.

- 11 Expansion joint is provided
- (A) As an accommodation for horizontal movement in structure of building due to thermal expansion and contraction.
  - (B) At a junction where glass is fixed in a M.S or Aluminum frame.
  - (C) At junction of railway tracks and railways bridge.
  - (D) All of above
- 12 Glass wool is used
- (A) Occasionally as an outer covering for A.C ducts.
  - (B) As a Sound insulating material.
  - (C) As a thermal insulating material.
  - (D) All of above
- 13 Glass is a
- (A) Re-perishable material
  - (B) Biodegradable material
  - (C) Recyclable material
  - (D) None of above
- 14 A glass block is understood as a
- (A) Solid lump of molten glass
  - (B) A neatly cut piece of float glass stuck together to form layers of glass.
  - (C) A combination of two glass plates fused to form a void
  - (D) Solid slab of 25m thick glass
- 15 Toughened glasses will \_\_\_\_\_ under impact of very strong force
- (A) not react
  - (B) only dent
  - (C) only bend
  - (D) get granulated, but not shatter
- 16 For a Low-e glass, 'e' stands for
- (A) Emission
  - (B) Electricity
  - (C) Emissivity
  - (D) Elasticity

- 17 What is added to a metal, to form an ALLOY?  
(A) Other metals  
(B) Non-metals  
(C) Other metals and/or Non-metals.  
(D) None of the above
- 18 Fabric is versatile building material due to its  
(A) Flexibility  
(B) Joinery  
(C) Tensile strength  
(D) All of above
- 19 What is the main ORE for Aluminum?  
(A) Laterite  
(B) Bakelite  
(C) Bauxite  
(D) Copper
- 20 Which of the following is NOT widely used as a conductor of electricity?  
(A) Copper  
(B) Aluminum  
(C) Stainless Steel  
(D) None of above
- 21 For laminating a glass  
(A) A layer of film is applied on one side of the glass  
(B) A layer of film is applied on both sides of the glass  
(C) A layer of film is sandwiched between two or more sheets of glass  
(D) All of above
- 22 The correct statement would be  
(A) Bronze is an alloy of Tin and Aluminum  
(B) Brass is an alloy of Zinc and Copper  
(C) Zinc is an alloy of Brass and Copper  
(D) S.S is an alloy of Iron and Brass

- 23** Aluminum is widely used metal because
- (A) Light in weight
  - (B) Non corrosion
  - (C) Strong tensile strength
  - (D) All of above
- 24** Full form of PVC
- (A) Polyvinyl Carbone
  - (B) Polyvinyl chloride
  - (C) Polyvinyl Carbohydrates
  - (D) None of above
- 25** Full form of UPVC
- (A) Unplasticized Polyvinyl Carbone
  - (B) Unplasticized Polyvinyl Carbohydrates
  - (C) Unplasticized polyvinyl chloride
  - (D) None of above
- 26** In a grid ceiling, the ceiling tiles are made up of
- (A) Perforated metal sheet
  - (B) Gypsum
  - (C) Particle board
  - (D) All of above
- 27** Oil based and Plastic Emulsion are a type of
- (A) Partition Wall System
  - (B) Paint finish
  - (C) Floor finish
  - (D) False ceiling tiles
- 28** If a 'spacer' is specified then it would result in
- (A) Laying of tiles for flooring and wall cladding with uniform gaps.
  - (B) Use of cement mixed with water as adhesive in different proportions for different spaces.
  - (C) China mosaic flooring with uneven pattern and spacing
  - (D) None of the above

- 29** Paper joint and spacer joint are
- (A) Types of joinery in M.S and S.S
  - (B) Glass hardware joints
  - (C) Junction details between two tiles
  - (D) None of the above
- 30** For running cables once the slab is casted, one can adopt method of
- (A) Raising floor
  - (B) Laying cable trays in screed
  - (C) False ceiling.
  - (D) All of the above
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