

AR-1880

Faculty of Engineering & Technology

B.Arch. (Architectural Engg.) Third Semester (C.G.S.) Examination

APPLIED MATERIALS

(10019)

Paper—03 AR 01

Time : Three Hours]

[Maximum Marks : 80

INSTRUCTIONS TO CANDIDATES

- (1) All questions carry marks as stated.
 - (2) Answer **FOUR** questions.
 - (3) Question Nos. 5 and 6 are compulsory.
 - (4) Due credit will be given to neatness and adequate dimensions.
 - (5) Assume suitable data wherever necessary.
 - (6) Retain the construction lines.
 - (7) Illustrate your answers wherever necessary with the help of neat sketches.
 - (8) Use pen of Blue/Black ink/refill only for writing the answer book.
1. (a) Explain Paving and Cladding materials. What types of natural and artificial paving and cladding materials available in market that can be used for different public and residential buildings ? Justify your selection. 12
- (b) Explain glass as applied material with the help of neat sketches. Also explain its advantages and disadvantages. 8
- OR**
2. (a) What types of furnishing and finishing materials available in market will you suggest for a residential building ? Explain. 12
- (b) Explain (any two) :
- (i) Varnishes.
 - (ii) Aluminium paint.
 - (iii) Emulsion paint.
 - (iv) P.V.C. 8

3. (a) Explain term—False Ceiling, its use, advantages, disadvantages. Also explain different types of materials for false ceiling with the help of neat sketches. 12
- (b) Explain (any **two**) :
- (i) Synthetic rubber paint.
 - (ii) Characteristics of an ideal paint.
 - (iii) Wall paper.
 - (iv) Linoleum. 8

OR

4. (a) Explain partition, its purpose, requirements of good partition, different materials available in market for partition. Explain with neat sketches, what type of partition will you suggest for an Architects Cabin. Justify your selection. 12
- (b) Explain (any **two**) :
- (i) Glass blocks.
 - (ii) Plywoods.
 - (iii) Timber as a building material. Its advantages and disadvantages. 8
5. Explain (any **two**) :
- (a) Explain—Acoustical materials, their purpose. What are different acoustical materials that are available in market which can be used for different types of buildings ?
 - (b) Explain different types of metals as building as well as applied materials.
 - (c) Explain defects in painting. What care should be taken while the process of painting ? 20
6. Explain any **two** :
- (a) Explain Polymer and Polymer based materials and their use in Building Industry.
 - (b) Explain objects of painting. Explain process of painting on :
 - (i) New woodwork.
 - (ii) Plastered surface.
 - (c) Explain :
 - (i) Distemper.
 - (ii) Anticorrosive paint. 20