



SIDDHARTH GROUP OF INSTITUTIONS :: PUTTUR
Siddharth Nagar, Narayanavanam Road – 517583

QUESTION BANK AND OBJECTIVES

Subject with Code : BMC(15A01302)

Course & Branch: B.Tech - CE

Year & Sem: II-B.Tech & I-Sem

Regulation: R15

UNIT –I

INTRODUCTION TO BUILDING MATERIALS

1. What are the characteristics of good building stones and explain it?
2. What is meant by quarrying of building stones and brief explain the dressing of stones and varieties of finishes?
3. Describe the manufacturing process of bricks and explain it?
4. What are the classification of bricks and explain it?
5. What is artificial stone? Explain procedure adopted in making artificial stone and forms of artificial stones?
6. How to selection for low cost housing and briefly explain?
7. What are the ceramic materials? Name some of important ceramic materials? Explain manufacturing process?
8. What are the waste materials from buildings and how they utilize these materials?
9. Explain the sustainable materials in construction?
10. a) What is traditional and organic building materials?
b) What is the composition of a good brick earth?
c) What are the tools for stone quarrying?
d) What is kiln and types of kiln?
e) What is pug mill?

Objectives

1. A good brick when immersed in water bath for 24 hours, should not absorb water more than []

(a) 20% of its dry weight	(b) 15 % of its saturated weight
(c) 10% of its saturated weight	(d) 20% of its saturated weight
2. The number of bricks required per cubic meter of brick masonry is []

(a) 400	(b) 450
(c) 500	(d) 550
3. Excess of silica makes brick []

(a) Brittle on burning	(b) To melt on burning
(c) To crack on drying	(d) To warp.
4. In the process of brick manufacturing the pug mill is used in which of the following operation? []

(a) Weathering	(b) Blending
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- (c) Tempering (d) Burning
5. Bricks are burnt at a temperature range of []
(a) 500° to 700° C (b) 700° to 900° C
(c) 900° to 1200° C (d) 1200° to 1500° C
6. For centering of R.C.C. structures the bricks used should be []
(a) Ist Class (b) IInd Class
(c) IIIrd Class (d) IVth Class
07. The weight of a standard brick should be []
(a) 1000 g (b) 1500 g
(c) 2500 g (d) 3000 g
08. A heavy stone is suitable for []
(a) Arches (b) Rubble masonry
(c) Roads (d) Retaining walls
09. The preparation of surface of stone to obtain plain edges or to obtain stones of required size and shape is known as []
(a) Quarrying of stones (b) Blasting of stones
(c) Seasoning of stone (d) Dressing of stones
10. The main function of alumina in brick earth is []
(a) To impart plasticity (b) To make the brick durable
(c) To prevent shrinkage (d) To make the brick impermeable
11. The percentage of alumina in a good brick earth lies between []
(a) 5 to 10% (b) 20 to 30%
(c) 50 to 60% (d) 70 to 80%
12. Excess of alumina in brick earth makes the brick []
(a) Impermeable (b) Brittle and weak
(c) To lose cohesion (d) to crack and warp on drying
13. The nominal size of the modular brick is []
(a) 190 mm x 90mmx 80 mm (b) 190 mm x 190 mm x 90 mm
(c) 200 mm x 100 mm x 100 mm (d) 200 mm x 200 mm x 100 mm
14. Percentage of silica in a good brick earth lies between []
(a) 5 to 10% (b) 20 to 30%
(c) 50 to 60% (d) 70 to 80%
15. Excess of silica in brick earth results in []
(a) Cracking and warping of bricks (b) Loss of cohesion
(c) Enhancing the impermeability of bricks (d) None of the above
16. Which of the following ingredients of the brick earth enables the brick to retain its shape?

- (a) Alumina (b) Silica []
 (c) Iron (d) Magnesia
17. Which of the following pairs gives a correct combination of the useful and harmful constituents respectively of a good brick earth? []
 (a) Lime stone and alumina (b) Silica and alkalies
 (c) Alumina and iron (d) Alkalies and magnesium
18. Pug mill is used for []
 (a) Preparation of clay (b) Molding of clay
 (c) Drying of bricks (d) Burning of bricks
19. Glazing is used to make earthenware []
 (a) Hard (b) Soft
 (c) Porous (d) Impervious
20. The red color of the brick is due to []
 (a) Iron oxide (b) Silica
 (c) Magnesia (d) Alumina
21. Organic material are derived directly from []
 (a) Hydrogen (b) Oxygen
 (c) Carbon (d) Non-Metallic
22. _____ exhibits highest compressive strength []
 (a) Granite (b) Gneiss
 (c) Limestone (d) Laterite
23. Stoneware products are usually []
 (a) Hard (b) Impervious to moisture
 (c) Compact (d) All of the above
24. Hard silicious rocks which could not be scratched by knife represent a hardness of []
 (a) 2 (b) 4
 (c) 6 (d) 7
25. Sandstone are general weak in []
 (a) Hardness (b) Abrasion
 (c) Compression (d) All of the above
26. Excess of alumina in clay in bricks []
 (a) Makes the bricks crack and wrap on drying (b) Makes bricks crack
 (c) Makes bricks wrap on dry (d) Makes brick dense and sound
27. Hollow bricks are used for []
 (a) Ornamental designs (b) Increasing the bearing area
 (c) Resistive towards heat (d) Earthquake proof
28. Excess of silica in clay for bricks []
 (a) Makes brick hard and sound (b) Makes bricks crack and wrap on dry
 (c) Imparts deep redcolour to bricks (d) improves durability and impermeability
29. The indentation marks left on bricks during the process of molding are known as []
 (a) Fillets (b) Frogs
 (c) Marks (d) Projections
30. A bull nose brick is not used in []
 (a) Walls (b) Arches
 (C) Pillars (d) Rounding of sharp corners
31. Fire bricks are always set in a mortar of []
 (a) Fire clay (b) Cement

- (c) Lime (d) All of the above
32. Crushing strength of first class brick []
(a) 3N/mm^2 (b) 5.5N/mm^2
(c) 0.3N/mm^2 (d) 10.5N/mm^2
33. Which of the following has high percentage of water absorption by dry weight []
(a) Common building bricks (b) Engineering bricks
(c) Pressed bricks (d) Fire bricks
34. Thickness of galze []
(a) 0.5mm (b) 0.1mm
(c) 0.01mm (d) 1mm
35. Efflorescence is caused by []
(a) Low silica content (b) Alkaline salts
(c) High pH of water during pugging (d) All of the above
36. Characteristic of a good tile []
(a) Uniform color (b) Properly burnt
(c) Durable (d) All of the above
37. Color of Mangalore tile []
(a) Red (b) Pink
(c) White (d) Yellow
38. Refractory bricks resist []
(a) High temperature (b) Dampness
(c) Chemical action (d) Shocks and vibrations
39. Major constituent of fireclay []
(a) Hydrocarbon (b) Lime
(c) Iron oxide (d) Hydrated aluminum silicate
40. Expected moisture content of dry brick []
(a) 2% (b) 6%
(c) 7% (d) 8%