

SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act, 1956)

Course & Branch: B.Arch

Title of the paper: ** Building Materials and Construction - II

Semester: II

Max. Marks: 50

Sub.Code: 621205(2006-2007)

Time: 3 Hours

Date: 17-12-2008

Session: FN

PART – A

(5 x 4 = 20)

Answer All the Questions

1. What are the rules that are adopted to ensure good bonding in Brick Masonry?
2. Write short notes on 'Composite Masonry'.
3. List out the advantages and disadvantages of cavity wall construction?
4. What are the properties and qualities of Tiles for good building construction?
5. Briefly Explain the properties and uses of rural materials for building construction?

PART – B

(3 x 10 = 30)

Answer All the Questions

6. Draw the neat sketches for the following and explain
 - (a) Stretcher Bond
 - (b) Header Bond
 - (c) English Bond
 - (d) Flemish Bond

(or)

7. List out the steps involved in the brick wall construction and also mention the few defects that occur in brick work.
8. In a neat sketch of an Arch work, name the following terms and also define them.
- | | |
|---------------|--------------|
| (a) Crown | (f) Haunch |
| (b) Key | (g) Spandril |
| (c) Rise | (h) Extrados |
| (d) Span | (i) Intrados |
| (e) Voussoirs | (j) Soffit |
- (or)
9. Draw the neat sketches of the following and explain:
- (a) Axed Brick Arches.
 - (b) Rough Brick Arches
 - (c) Brick Flat Brick Arches
 - (d) Gauged Brick Arches
10. With a neat sketch, explain the use of Hollow clay blocks in the construction of walls and partitions.
- (or)
11. With suitable sketches, explain the applications of following rural materials in the construction industry
- (a) Bamboo
 - (b) Mud
 - (c) Palm