

B.E. Fourth Semester (Civil Engineering) (C.B.S.)  
**Building Construction & Materials Paper – V**

P. Pages : 2

Time : Three Hours



**KNT/KW/16/7267**

Max. Marks : 80

- Notes :
1. All questions carry marks as indicated.
  2. Solve Question 1 OR Questions No. 2.
  3. Solve Question 3 OR Questions No. 4.
  4. Solve Question 5 OR Questions No. 6.
  5. Solve Question 7 OR Questions No. 8.
  6. Solve Question 9 OR Questions No. 10.
  7. Solve Question 11 OR Questions No. 12.
  8. Due credit will be given to neatness and adequate dimensions.
  9. Assume suitable data whenever necessary.
  10. Illustrate your answers whenever necessary with the help of neat sketches.
  11. Use of non programmable calculator is permitted.
  12. Solve all questions.

1. a) Define foundation. Explain with reason which type of foundation is suggested in the following cases: 7
- i) Construction of building on Black cotton soil with low bearing capacity.
  - ii) Construction of structure on coastal Area.

- b) Differentiate between load bearing and framed structure. 6

**OR**

2. a) Enumerate the causes and remedial measures for the failure of foundation. 7

- b) What is Timbering to the trenches? Discuss any two situation along with the method of trenching adopted. 6

3. a) Define 'Bond' in brick masonry work. Explain in detail English Bond with neat sketch. 7

- b) Briefly explain the following terms: 6

- i) Coping
- ii) Corbel
- iii) Reveals.

**OR**

4. a) Describe the construction of cavity wall. State its advantages & disadvantages. 7

- b) Discuss merits & demerits of Pre-cast construction over cast-in-situ construction. 6

5. a) Discuss briefly following terms related to stone:- 7

- i) Quarrying
- ii) Seasoning
- iii) Dressing

- b) Enumerate the causes & effects of dampness in to the structure. 7

**OR**

6. a) Enlist various Ashlar stone masonry. Describe any two with neat sketch. 7  
b) Describe stone lifting devices with neat sketches. 7
7. a) Enumerate good requirement of floors. 7  
b) Define 'Pitched Roof'. Explain lean-to-roof. in detail. 6

**OR**

8. a) Explain with reason what type of floor finish you would select in following cases. 7  
i) Ware House  
ii) Cinema Hall  
iii) College Library.
- b) Enlist various roof coverings. Describe any two with neat sketch. 6
9. a) Plan and design a dog-legged- stair for the hall size of 2.5 m x 4.5 m with clear headroom 3.6 m. Draw the sketch of plan & elevation. 7  
b) Discuss the following terms related to Doors: 6  
i) Location  
ii) Purpose  
iii) Size.

**OR**

10. a) Describe the following: 7  
i) Louvered window  
ii) Casement window.
- b) Discuss the following at length 6  
i) Revolving Door  
ii) Collapsible Door
11. a) Enumerate good requirements of paint. Also list the typical constituents of paint. 7  
b) Define scaffolding. Explain with neat sketch brick-layers scaffolding. 7

**OR**

12. a) State the objective of painting. Describe briefly various types of painting. 7  
b) Discuss at length the process of underpinning. 7

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