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Code No. : 14116 N

VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD
B.E. (Civil Engg.: CBCS) IV-Semester Main Examinations, May-2019

Building Materials and Construction

Time: 3 hours

Max. Marks: 60

Note: Answer ALL questions in Part-A and any FIVE from Part-B

Q.No.	Stem of the question	M	L	CO	PO
Part-A (10 × 2 = 20 Marks)					
1.	What is quarrying?	2	1	1	1
2.	Mention any two advantages of light weight bricks over normal bricks?	2	1	1	1
3.	Identify the grading of ordinary Portland cement and mention them.	2	3	2	1
4.	Explain different zones of sand as per IS code.	2	4	2	1
5.	Classify different types of mortar?	2	4	2	1
6.	Write down the specifications for reinforcing steel?	2	1	2	1
7.	Distinguish the various timbers under various methods of seasoning?	2	4	4	11
8.	What are the ingredients of varnish?	2	1	4	1
9.	Explain the importance of maintenance in floors?	2	2	5	1
10.	Differentiate between ceramic and mosaic tiles?	2	4	5	1
Part-B (5 × 8 = 40 Marks)					
11. a)	Write down properties and uses of sand stone?	4	2	1	1
b)	Categorize the various constituents of brick earth and how do they influence the quality of brick?	4	4	1	1
12. a)	Define initial and final setting time of cement and explain its significance?	4	1	2	1
b)	What do you understand by bulking of sand? How does it affect quantity of sand by volume batching?	4	1	2	1
13. a)	Identify the factors that influence the strength of the concrete? Briefly discuss the water cement ratio and workability on strength of concrete.	4	3	2	1
b)	Describe the various stages in the making of cement mortars.	4	2	2	1
14. a)	Enlist Various types of paints used in building construction	4	4	4	1
b)	Explain the preservative treatment of wood using various wood preservatives	4	3	3	5
15. a)	Write down merits and demerits of stone flooring and concrete flooring?	4	1	5	1
b)	Briefly discuss about industrial floors?	4	6	3	1
16. a)	List out the Engineering properties of the bricks. What are the characteristics of brick?	4	4	1	1
b)	What are types of Portland cement as per Indian code of practice? Discuss any two.	4	1	2	1

Contd... 2

17. Answer any <i>two</i> of the following:				
a) Explain setting and curing of mortar?	4	2	2	1
b) List out the characteristics of ideal paints?	4	4	4	1
c) Mention the types of flooring and describe in detail the method of construction of concrete flooring?	4	1	5	1

M: Marks; L: Bloom's Taxonomy Level; CO: Course Outcome; PO: Programme Outcome

S. No.	Criteria for questions	Percentage
1	Fundamental knowledge (Level-1 & 2)	44
2	Knowledge on application and analysis (Level-3 & 4)	52
3	*Critical thinking and ability to design (Level-5 & 6) (*wherever applicable)	4
