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Register Number:
Name of the Candidate:

B.Sc. DEGREE EXAMINATION December 2014

(INTERIOR DESIGN)

(SECOND YEAR)

203. PRINCIPLES AND CONCEPT OF STRUCTURES

(Old Regulation)

Time: Three hours Maximum: 60 marks

SECTION – A **(10×1=10)**

Fill in the blanks

1. _____- can be defined as the power to recover equilibrium.
2. _____describes the pulling force exerted by each end of a string.
3. When the forces are aligned in to each other they are called_____
4. Bending moment is measured in terms of_____
5. _____ is the longer face of the brick.
6. _____is the exterior angle or corner of a wall.
7. _____is a method for overcoming concrete's natural weakness in tension.
8. The external force acting on the body is called_____
9. A beam extending over more than 2 support is called_____
10. _____ __ is a term applied to that form of wood construction which has to resist stresses due to loads coming on it.

SECTION – B **(4× 5=20)**

Answer any FOUR questions

11. Write short notes on tensile strain.
12. Explain modulus of elasticity.
13. What is meant by elastic limit?
14. Explain the conception of shear force and Bending moment.
15. Draw few sketches showing form active structures.
16. Difference between fixed beam and cantilever beam.

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SECTION – C **(3×10=30)**

Answer any THREE questions

17. Draw the bending moment diagram for the beams freely supported at the two ends and explain.

18. Explain singly reinforced beam.

19. Write the quality of good building stone.

20. Explain the role of economy and aesthetics in structural requirement.

21. Explain any 2 types of bond with sketches.

22. Explain the design process in structural design.

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