



# NADAR SARASWATHI COLLEGE OF ENGINEERING AND TECHNOLOGY, THENI.

Course/Branch : B.E/Civil	Year / Semester :IV/VII	Format No.	NAC/TLP-07a.13
Subject Code : CE8703	Subject Name :STRUCTURAL DESIGN AND DRAWING	Rev. No.	02
Unit No : V	Unit Name : GIRDERS AND CONNECTIONS	Date	30.09.2020

## OBJECTIVE TYPE QUESTION BANK

	d) 15	
8.	The load stress of a section can be reduced by a) Decreasing the lever arm b) Increasing the total perimeter of bars <b>c) Replacing larger bars by greater number of small bars</b> d) None of these	L5
9.	For M 150 grade concrete (1:2:4) the moment of resistance factor is a) 0.87 <b>b) 8.50</b> c) 7.50 d) None of these	L5
10.	For a ribbed slab a) Clear spacing between ribs shall not be greater than 4.5 cm b) Width of the rib shall not be less than 7.5 cm c) Overall depth of the slab shall not exceed four times the breadth of the rib <b>d) All the above.</b>	L5
11.	The maximum ratio of span to depth of a slab simply supported and spanning in two directions, is a) 25 b) 30 <b>c) 35</b> d) 15	L5
12.	.The neutral axis of a T-beam exists a) Within the flange b) At the bottom edge of the slab c) Below the slab <b>d) All the above.</b>	L5
13.	A pre-stressed concrete member is preferred because a) Its dimensions are not decided from the diagonal tensile stress b) Large size of long beams carrying large shear force need not be adopted c) Removal of cracks in the members due to shrinkage <b>d) All the above.</b>	L5
14.	A very comfortable type of stairs is a) Straight b) Dog legged c) Geometrical <b>d) Open newel</b>	L5
15.	A ribbed slab is provided for a) A plain ceiling b) Thermal insulation c) Acoustic insulation <b>d) All the above</b>	L5
16.	For a number of columns constructed in a craw, the type of foundation provided, is	L5

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	a) Footing b) Raft c) Strap <b>d) Strip</b>	
<b>17.</b>	As the percentage of steel increases a) Depth of neutral axis decreases <b>b) Depth of neutral axis increases</b> c) Lever arm increases d) Lever arm decreases	L5
<b>18.</b>	If W is weight of a retaining wall and P is the horizontal earth pressure, the factor of safety against sliding, is a) 1.0 b) 1.25 <b>c) 1.5</b> d) 2.5	L5
<b>19.</b>	An intermediate T-beam reinforced with two layers of tensile steel with clear cover 13 cm encasted with the floor of a hall 12 metres by 7 metres, is spaced at 3 metres from adjoining beams and if the width of the beam is 20 cm, the breadth of the flange is a) 300 cm b) 233 cm c) 176 cm d) 255 cm	L5
<b>20.</b>	Side face reinforcement shall be provided in the beam when depth of the web in a beam exceeds a) 50 cm b) 75 cm <b>c) 100 cm</b> d) 120 cm	L5
<b>21.</b>	By over-reinforcing a beam, the moment of resistance can be increased not more than a) 10% <b>b) 15%</b> c) 20% <b>d) 25%</b>	L5
<b>22.</b>	The minimum thickness of a flat slab is taken a) 13 cm b) L/32 for end panels without drops c) L/36 for end panels without drops <b>d) All the above</b>	L5
<b>23.</b>	<b>Q3.According to I.S.: 456, slabs which span in two directions with corners held down, are assumed to be divided in each direction into middle strips and edge strips such that the width of the middle strip, is</b> a) Half of the width of the slab. b) Two-third of the width of the slab	L5

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	c) <b>Three-fourth of the width of the slab</b> d) Four-fifth of the width of the slab	
24.	<b>Q4.Minimum spacing between horizontal parallel reinforcement of the same size should not be less than</b> a) <b>One diameter</b> b) 2.5 diameters c) 3 diameters d) 4 diameters	L5
25.	<b>Q5.Columns may be made of plain concrete if their unsupported lengths do not exceed their least lateral dimension</b> a) Two times b) Three times c) <b>Four times</b> d) Five times	L5

