



Yashoda Shikshan Prsarak Mandal's

# Yashoda Technical Campus

Approved by AICTE Delhi/ Govt. of Maharashtra/ Accredited by NAAC  
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Faculty of Engineering

## DEPARTMENT OF CIVIL ENGINEERING

### Review Report

Review of Innovations by the  
Faculty (Prof A. S. Shah) in Teaching and Learning  
(Review to be sent to [civilhod@yes.edu.in](mailto:civilhod@yes.edu.in))

Details of Innovative Practice

|                                   |  |
|-----------------------------------|--|
| <b>1. Subject Area</b>            | Design of Beam   |
| <b>2. Innovative Practice</b>     | Snake & Ladder Puzzle used for effective understanding   |
| <b>3. Goals/Objectives</b>        | <ol style="list-style-type: none"><li>To provide the practice of objective type questions on design of beam.</li><li>To help students understand the methods for systematic solving of objective type questions.</li><li>To provide different environment for students while solving the questions.</li></ol>  |
| <b>4. Methodology</b>             | <ol style="list-style-type: none"><li>Sharing of objective type questions on RC Structure of beam for better understanding subject.</li><li>Providing practice of .</li><li>The students are expected to:<ul style="list-style-type: none"><li>Understand the concept of design of beam.</li><li>Understand the importance of Sequential solving to get ultimate target.</li></ul></li></ol> |
| <b>5. Significance of results</b> | <ol style="list-style-type: none"><li>Encourages self-learning and independent analysis.</li><li>Promotes reflective thinking and problem-solving approaches.</li></ol>  |

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Course: Design of RC Structures

CLASS: TY 23-24

#### ACTIVE LEARNING – SNAKE AND LADDER GAME



#### RULES

- Start the game from Pawn position 1, WINNING POSITION IS 30.
- The number of moves for each option is marked within {}

|   |   |
|---|---|
| <p>1. <del>Max</del> value for <math>F_c</math> 415 is</p> <ol style="list-style-type: none"> <li>0.148 <math>F_c k b d_2</math> - (2)</li> <li>0.138 <math>F_c k b d_2</math> - (3)</li> <li>0.143 <math>F_c k b d_2</math> - (4)</li> <li>0.133 <math>F_c k b d_2</math> - (3)</li> </ol> | <p>5. The maximum area of tension reinforcement in beams shall not exceed</p> <ol style="list-style-type: none"> <li>0.15% - (1)</li> <li>1.5% - (3)</li> <li>4% - (2)</li> <li>1% - (1)</li> </ol>   |
| <p>2. If actual NA lies below Balance NA then the section is</p> <ol style="list-style-type: none"> <li>Balanced section - (1)</li> <li>Under R/T section - (2)</li> <li>Over R/T section - (2)</li> <li>None of the above - (3)</li> </ol>   | <p>4. Superimposed load is</p> <ol style="list-style-type: none"> <li>Dead load - (1)</li> <li>Live load - (1)</li> <li>Wind load - (4)</li> <li>Floor Finish - (2)</li> </ol>  |
| <p>3. IS 456:2000 is used for practice of</p> <ol style="list-style-type: none"> <li>Plain concrete - (2)</li> <li>Reinforced concrete - (2)</li> <li>High Strength Concrete - (1)</li> <li>Steel Structure - (3)</li> </ol>  | <p>7. The minimum number of main steel bar provided in RCC</p> <ol style="list-style-type: none"> <li>Rectangular column is 4 - (2)</li> <li>Circular column is 7 - (1)</li> <li>Octagonal column is 8 - (2)</li> <li>Triangular column is 5 - (2)</li> </ol> |
| <p>4. Which of the following is an example for aspect of structural design?</p> <ol style="list-style-type: none"> <li>Inexpensive - (2)</li> <li>Appearance - (1)</li> <li>Safety - (3)</li> <li>All of the above - (2)</li> </ol>   | <p>8. Value of <math>XU_{MAX}</math> for <math>F_c</math> 415 is</p> <ol style="list-style-type: none"> <li>0.53 <math>d</math> - (1)</li> <li>0.48 <math>d</math> - (1)</li> <li>0.46 <math>d</math> - (2)</li> <li>0.43 <math>d</math> - (2)</li> </ol>     |

Kindly share your Review for this SNAKE AND LADDER GAME

Review -

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### Snake & Ladder game for design of Beam

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