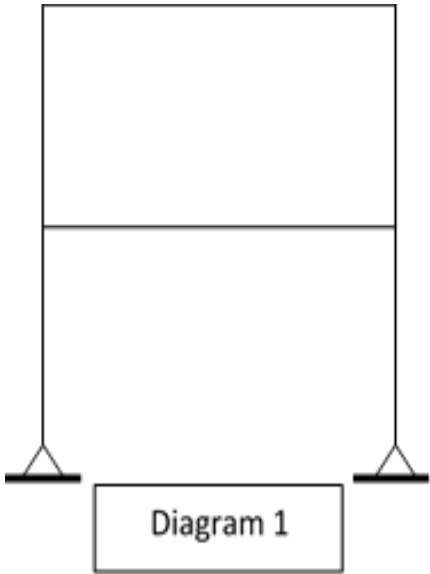


**SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)**  
**Ph D ENTRANCE TEST**

**The Sample questions of Civil Engineering**

Question No.	Question Text	Option 1	Option 2	Option 3	Option 4	Correct Option
1	<p>The degree of indeterminacy for the rigid jointed plane frame in Diagram 1 is;</p>  <p style="text-align: center;">Diagram 1</p>	2	3	4	5	Option 1
2	IS456 recommends that modulus of elasticity of concrete be taken as;	$5000\sqrt{f_{ck}}$	$2000\sqrt{f_{ck}}$	$45\sqrt{f_{ck}}$	$210\sqrt{f_{ck}}$	Option 1
3	The pre-stressed concrete beam of rectangular cross section of 200 mm x 400 mm is pre-stressed with a force of 400 KN at the eccentricity of 100mm. What should be the maximum compressible stress?	12.5 KN/m <sup>2</sup>	7.5 KN/m <sup>2</sup>	5 KN/m <sup>2</sup>	2.5 KN/m <sup>2</sup>	Option 1
4	The 7 days BOD reading at 20 <sup>o</sup> was found to be 150mg/l. What should be 5 days BOD at 20 <sup>o</sup> . Assume the BOD rate constant (k) at standard temperature of 20 <sup>o</sup> as 0.23 /day (base e)	128	475	187.39	190	Option 1
5	A saturated soil mass has a total density 22kN /m <sup>3</sup> and water content of 10%. The bulk density and dry density of this soil are	22 kN/m <sup>3</sup> and 20 kN/m <sup>3</sup> respectively	12 kN/m <sup>3</sup> and 20 kN/m <sup>3</sup> respectively	19.8kN /m <sup>3</sup> and 19.8 N/m <sup>3</sup> respectively	23.2kN/ m <sup>3</sup> and 19.8kN/ m <sup>3</sup> respectively	Option 1