

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

**The Sample questions of Electronics & Telecommunication Engineering**

<b>Question No</b>	<b>Question Text</b>	<b>Option 1</b>	<b>Option 2</b>	<b>Option 3</b>	<b>Option 4</b>	<b>Correct Option</b>
1	A transmission line has a characteristic impedance of $50 \Omega$ and a resistance of $0.1 \Omega/m$ , if the line is distortion less, the attenuation constant (in Np/m) is	500	5	0.014	0.002	Option 4
2	A radar receiver has a noise figure of 10 dB at 300 K having a bandwidth of 2.5 MHz. The minimum power it can receive is	$3.45 \times 10^{-15} \text{ W}$	$1.38 \times 10^{-15} \text{ W}$	$7.5 \times 10^{-15} \text{ W}$	$93.15 \times 10^{-15} \text{ W}$	Option 4
3	How many flip flops are required to construct a decade counter	10	4	3	2	Option 2
4	How many select lines will a $8 \times 1$ multiplexer will have	8	3	5	1	Option 2
5	A waveguide section in a microwave circuit will act as a	low-pass filter	band-pass filter	high-pass filter	band-stop filter	Option 3