



K L UNIVERSITY

K L University, 29-36-38, Museum Road, Governorpet
VIJAYAWADA - 520 002,
Phone Number 08662577715, [http:// www.kluniversity.in](http://www.kluniversity.in)

Model Questions for Entrance Test for PhD Admissions Department of Electrical and Electronics Engineering

- 1) Four resistors, each of resistance R ohms are available. The minimum resistance of the combination will be
a) $4R$ b) R c) $R/4$ d) $R/8$
- 2) Two resistors R_1 & R_2 give combined resistance of 4.5Ω when in series and 1Ω when in parallel, the resistance are
a) 2Ω and 2.5Ω b) 1Ω and 3.5Ω c) 1.5Ω and 3Ω d) 4Ω and 0.5Ω
- 3) Four resistances 80Ω , 50Ω , 25Ω , and R are connected in parallel. Current through 25Ω resistance is 4 A, Total current of the supply is 10 A. The value of the R will be
a) 66.66Ω b) 40.25Ω c) 36.36Ω d) 76.56Ω
- 4) Two coils with self inductance 4 H are connected in series (aiding). The mutual inductance is 2 H. What is effective inductance of the series combination is
a) 8 H b) 10 H c) 12 H d) 6 H
- 5) KCL is a consequence of law of conservation of
a) energy b) charge c) flux d) all of the above
- 6) What is the resonant frequency in ideal parallel LC circuit with $L=40$ mH and $C=0.01\mu$ F
a) 800 HZ b) 900 HZ c) 8000 HZ d) 7958 HZ
- 7) A circuit has the resonant frequency of 60 HZ and lower half-Power frequency of 40 HZ. What is its bandwidth?
a) 50 HZ b) 60 HZ c) 55 HZ d) 65 HZ