Department of Electronics & Communication Engineering

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Quiz 4

Basic Electrical Engineering (IEN-101)

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Section : EC-1

Name & Roll Number :

Date :

Problems: 10

- 1. The angular velocity of a sinusoidal wave is given by (a) θ/t (b) $2\pi/t$ (c) $2\pi f$ (d) all of these
- 2. When two alternative waves attain their peak values sim areultaneously, the waves
 (a) in quadrature
 (b) in phase
 (c) out of phase by 180⁰
 (d) none
- 3. The root mean square value of an alternating quantity is another name for its(a) instantaneous value(b) peak value(c) effective value(d) average value
- A sinusoidal voltage wave is represented by e=311sin(377t). The frequency of the voltage is
 - (a) 50 cps (b) 60 cps (c) 70 cps (d) 80 cps
- 5. The average value of a half wave rectified sine wave is
 (a) 0.318 x maximum value
 (b) 0.637 x maximum value
 (c) 1.273 x maximum value
 (d) none
- 6. If the maximum value of a sinusoidal wave is 100V, the effective value of the voltage is
 (a) 100
 (b) 70.7
 (c) 63.7
 (d) none
- 7. The form factor of a rectangular wave is equal to

(a) 1.0	(b) 1.11	(c) 1.15	(d) 1.414
(u) 1.0	(0) 1.11	(0) 1.15	(4) 1.111

- 8. The phasor can be denoted by(a) amplitude (b) angle (c) amplitude and angle (d) none of these
- 9. A phasor quantity X can be represented in complex form by
 - (a) $X \le \theta$
 - (b) X $e^{j\theta}$
 - (c) a+jb
 - (d) all of these

10	. A capacitance (C farad is connected acro	ss a 50 Hz sinusoidal vo	oltage source. The
	capacitive	reactance is given by		
	(a) C	(b) 50C	(c) 314C	(d) 1/314C

Basic Electrical Engineering By T.K.NAGSARKAR AND M.S.SUKHIJA, Oxford University Press