

ANJUMAN-I-ISLAM'S
KALSEKAR TECHNICAL CAMPUS, NEW PANVEL
School of Engineering & Technology

Sub.:AM III
Date: 19/10/16

Unit Test: II
Duration: 1 hr

Branch: Electrical
Marks: 20

Note: Attempt any 4 questions each carrying 5 marks

1. Evaluate $\int_0^{\infty} \frac{\cos at - \cos bt}{t} dt$ [CO1]
2. Find the inverse Laplace Transform by using convolution theorem $\frac{s^2}{(s^2+2^2)^2}$ [CO1]
3. Solve by using Laplace Transform $(D^2 + 2D + 5)y = e^{-t} \sin t$, when $y(0)=0, y'(0)=1$ [CO1]
4. Find the Fourier series for $f(x) = \sqrt{1 - \cos x}$ in $(0, 2\pi)$ [CO3]
5. Find the Fourier expansion of $f(x) = |x|$ in $(-\pi, \pi)$ [CO3]
6. Obtain the expansion of $f(x) = x(\pi-x), 0 < x < \pi$ as a half range cosine series [CO3]

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Subject: EDC
Date:
Class: Second Year

Marks: 20
Duration: 1Hr
Branch: Electrical

Q.1 Solve any two out of three (5 marks each)

- (a) Draw and Explain Drain & Transfer Characteristics of n-channel JFET. [CO 4]
- (b) State and Explain Barkhausen's Criteria for sustained Oscillations. [CO 6]
- (c) Write a short note on N-channel E-MOSFET. [CO 3]

Q.2 Solve any one out of two (10 marks each)

- (a) Explain the effect of negative feedback on Input impedance, Output impedance, Voltage gain and Bandwidth of an Amplifier. [CO 5]
- (b) Draw and explain the circuit diagram of Hartley oscillator and also Derive the expression for frequency of oscillations. [CO 6]

.....ALL THE BEST.....

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School of Engineering & Technology

Subject: EDC
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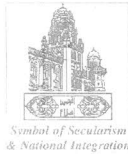
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**ANJUMAN-I-ISLAM'S
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School of Engineering & Technology**

Subject: CNCPG
Marks: 20
Duration: 1 hr
Class: SE

Date:

Branch: EE

Q 1. SOLVE ANY TWO OUT OF THREE. [10 MARKS]

- 1) Differentiate Nuclear fission and Nuclear fusion process. [CO5]
- 2) Draw layout of Nuclear power plant. [CO5]
- 3) Write a short note on Hydrograph and Flow duration curve. [CO4]

Q 2. SOLVE ANY ONE OUT OF TWO. [10 MARKS]

- 1) Explain classification of Hydropower plant in detail. [CO4]
- 2) Explain Pressurised Water Reactor in detail. [CO5]

*****BEST OF LUCK*****



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KALSEKAR TECHNICAL CAMPUS, NEW PANVEL
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Marks: 20
Duration: 1 hr
Class: SE

Date:

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Approved & Recognised by: All India Council for Technical Education and Council of Architecture, New Delhi
Directorate of Technical Education, Govt. of Maharashtra Affiliated to: University of Mumbai

Subject: EEM
Duration: 1-Hr/s
Department: Electrical Engg

Marks: 20
Class: SE

UNIT TEST II

I Answer any two question

(5 marks each)

- Q1) Explain how dc potentiometer is used to calibrate the following meter (CO2)
i) Voltmeter ii) Ammeter
- Q2) Explain the block diagram of digital energy meter (CO3)
- Q3) Explain the construction & working of photoelectric type tachometer (CO3)
- Q4) Explain the construction & working of RTD (CO5)

II Answer any one question

(10 marks each)

- Q1) Explain the construction & working of LVDT (CO5)
- Q2) Explain Anderson's bridge for measuring self inductance with a neat circuit diagram along with phasor diagram (CO2)
- Q3) Explain with the help of diagram linear ramp type DVM & write its advantage & disadvantages (CO3)