

UNIVERSITY OF CALCUTTA

FAKIR CHAND COLLEGE

B.SC. SEM-II (H) EXAMINATION : 2020

CMSA

PAPER : CC4

F.M. : 50(10+25+15)

TIME : 2 Hrs

INTERNAL

Answer any 2 question :

5x2=10

1. Write down the FET parameters and give the relation between them?
2. Draw and explain the working of OPAMP differential amplifier?
3. Draw and explain the working of zero crossing detector?

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THEORY

Answer any 5 of the following questions:

5x5=25

1. Explain the working of a full wave bridge rectifier with diagram?
2. Explain the working of zener diode as a voltage regulator with diagram?
3. Draw and explain the working of a transistor as an amplifier?
4. What is trans conductance of FET? Derive an expression of trans conductance from the FET characteristics equation?
5. What is CMRR of OPAMP? Give three basic characteristics of an OPAMP
6. Draw and explain the working of OPAMP as an integrator?
7. Draw and explain the working of OPAMP as a Schmitt trigger?

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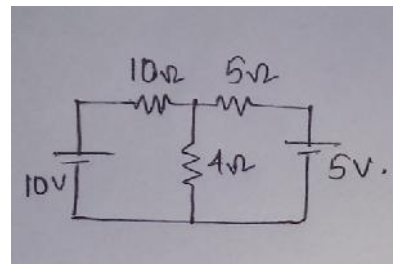
PRACTICAL

Answer the following questions:

5x3=15

1. What is Thevenins and Nortons theorem?

2. In the adjacent circuit calculate the current through 4Ω resistance using Thevenins theorem?



3. In the adjacent circuit calculate the output voltage V_0

