

RAMAKRISHNA MISSION VIDYAMANDIRA

(Residential Autonomous College under University of Calcutta)

SECOND YEAR

B.A./B.SC. THIRD SEMESTER (July–December), 2012

Mid-Semester Examination, September, 2012

ELECTRONICS (General)

Date : 11/09/12

Time : 11am - 12noon

Paper : III

Full Marks : 25

Answer *any five* questions

5 x 5=25

1. With a negative feedback an amplifier gives an output of 10V with an input of 0.5 V. When the feedback is removed it requires 0.25V input for the same output. Calculate the gain without feedback and feedback fraction ratio.
2. Draw and calculate the inverting gain of OP AMP?
3. Why OPAMP is called operational Amplifier? Define Offset Null, Input Offset Voltage, Virtual ground, Summing Point of an OPAMP.
4. How Transistor Works as an Amplifier? Explain.
5. Write down the Ideal & Practical Properties of OPAMP.
6. What are the advantages of Negative feedback? Calculate the gain of an amplifier with Negative Feedback.