Shree M.P.Shah Arts & Science College, Surendranagar
Physics Department
Semester:-3 Assignments - 2019

Assignment:-1

1. Write short note on the "operating point".
2. Discuss: operator ∇.
3. Prove that: $\nabla \cdot (\vec{A} \cdot \vec{B}) = \vec{A} \times (\nabla \times \vec{B}) + \vec{B} \times (\nabla \times \vec{A}) + (A \cdot \nabla)B + (B \cdot \nabla)A$.

Assignment submitted on 20/07/2019 in your lecture time

Assignment:-2

1. Define A.C. and D.C. load line.
2. Discuss why stabilization of operating point is necessary?
3. Derive the gauss's theorem in integral form.

Assignment submitted on 03/08/2019 in your lecture time

Assignment:-3

1. Find the $\vec{E} = -\nabla V$.
2. Discuss curl of E
3. Draw the practical circuit of a single stage transistor amplifier and explain the function of its various   elements, also explain the various circuits current.

Assignment submitted on 21/08/2019 in your lecture time

Assignment:-4

1. Explain: polarizability of a dielectric material.
2. Write boundary condition on $\vec{D}$ and $\vec{E}$ in the presence of dielectric.
3. Describe magnetic field above a straight wire.

Assignment submitted on 14/09/2019 in your lecture time