

Fluid Machineries Sessional (ME-422): Ex-3 (new sir)

Date: 16-07-2023

Name of the Experiment:

- a) Study and performance test of a submersible pump
- b) Dismantling and assembling of a centrifugal pump

Centrifugal Pump : Where more flow rate required
submersible pump : Where more head is required

Characteristics of submersible pump:

- Submerged into fluid.
- No need for suction head
- Under water, due to pressure $P(= h\rho g)$, no pull required. Rather it pushes water.
- No cavitation & priming , unlike - centrifugal pump.
- Have Multiple impellers
- A diffuser between two impellers.
- Suction head is (0) zero.
- Delivery head is high.
- Flow rate at Most efficiency point in characteristic curve in known as operating point.

Components of Centrifugal pump:

Gland packing: friction decrease, silling, and prevent water backflow.