**PROBABLE QUESTIONS OF FLUID MECHANICS AND HYDRAULIC MACHINES**

**4TH SEMESTER MECHANICAL ENGG**

**PREPARED BY: MR SANTOSH KUMAR JENA, PTGF in Mechanical Engg**

1) Define density, specific weight, specific gravity and specific volume.

2) Define dynamic viscosity and kinematic viscosity.

3) What is the relation between gauge pressure and absolute pressure?

4) Describe about Bourdon tube pressure gauge with neat sketch.

5) Define Hydrostatic pressure

6) Explain about Archimedes’ Principle.

7) Discussed about Concept of Buoyancy

8) Define Viscosity.

9) State and prove Bernoulli’s Equation.

10) Discussed about Venturimeter.

11) Discussed about Pitot tube.

12) Write the relation among orifice coefficient ( Cc, Cv and Cd )

13) Write the continuity equation.

14) Define Hydraulic efficiency of a turbine.

15) What is Hydraulic gradient?

16) Describe the working of single acting reciprocating pump with neat sketch.

17) Define steady flow.

18) What is the difference between notch and weir?

19) Define the slip of a pump.

20) With neat sketch explain the working of a pelton wheel.

21) With neat sketch explain the working of an impulse turbine.

22) What is vena contracta?

23) What do you mean by the negative slip of a pump?

24) Derive the condition for maximum power transmission through nozzle.

25) What is the function of draft tube? Explain various types of draft tube.

26) Describe the working and construction of Centrifugal pump.

27) What is function of nozzle?

28) Define head loss due to friction.

29) Explain the working of simple manometer.

30) Describe the layout and feature of hydroelectric power plant