FM (FLUID MECHANICS)

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Short questions

1. Define fluid?
2. Define hydrostatics?
3. Define hydro kinematics?
4. Define hydrodynamics?
5. Define mass density?
6. Explain specific weight?
7. Define surface tension?
8. Define pressure?
9. Distinguish between steady flow and unsteady flow?
10. What is a Venturimeter?
11. Define a mouthpiece?
12. Explain a convergent-divergent mouthpiece?
13. Write a note on current meter?
14. Define a notch?
15. Define weir?
16. What is a pitot tube?
17. What is a laminar flow and turbulent flow?
18. What do you understand by water hammer?
19. Define an open channel?
20. Define wetted perimeter?
21. Define hydraulic mean depth?

Long questions

1. Write the significance of fluid mechanics?
2. Explain the points of differences between liquids and gases?
3. Explain hydraulics and its importance?
4. Explain different types of real fluids?
5. Explain the factors which affect the capillary rise or fall?
6. Explain Pascal's law of pressure?
7. Explain the working of the hydraulic press with the help of a neat sketch?
8. State and prove Bernoulli's theorem and state its limitations/
9. Explain the different types of hydraulic energy for a steady flow?
10. Difference between external mouthpiece and internal mouthpiece?
11. Distinguish between mouthpiece running free and mouthpiece running full?
12. Write the function of an orifice meter?
13. Explain the entrance and exit losses in a pipe line?

14. What are losses in pipe lines? Explain minor losses and major losses?
15. Explain the flow through a long pipe?
16. How do you define a most economical channel?
17. Give the general layout of centrifugal pump?
18. Write the common defects and their rectification in a centrifugal pump?
19. Explain the working of a single acting reciprocating pump?
20. What is a pump? How pumps are classified?
21. Explain cavitation and priming and why it is necessary?