

15. From the Bernoulli's equation, derive an equation for the discharge through the venture meter.

Or

16. Explain how the actual discharge is measured by using (i) Triangular notch ; (b) Rectangular notch in a laboratory.
17. Explain the working of a centrifugal pump.

Or

18. Explain the main and operating characteristics of a centrifugal pump.
19. Derive an equation for acceleration head when air vessels are fitted on suction side and delivery side.

Or

20. Explain the working of following positive displacement pumps (a) Screw pump ; (b) Vane pump ; (c) Rotary radial piston pumps.

(5 × 12 = 60 marks)