

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Explain in detail Bernoulli's theorem. Also derive Bernoulli's equation with suitable assumption.

Q.24 Give the classification of pumps. Write the construction & working of reciprocating pump.

Q.25 Write short note on any two of the following

- a) Color coding of industrial piping used for transportation of various fluids.
- b) Cavitation
- c) Friction losses due to sudden enlargement & contraction
- d) Properties of fluid

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2nd Sem. / Chemical, Chem. P & P

Subject : Fluid Flow

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 What is fluid mechanics?

- a) Study of fluid behavior in motion
- b) Study of fluid behavior in rest
- c) Both a & b
- d) None

Q.2 When fluid is called turbulent?

- a) High viscosity of fluid
- b) Reynold no is greater than 2000
- c) Reynold no is less than 2000
- d) None

Q.3 Pressure measured above atmospheric pressure is called?

- a) Absolute
- b) Gauge
- c) Static pressure
- d) None

Q.4 One poise is equal to _____

- a) 100 centipoise
- b) 10 centipoise
- c) 1000 centipoise
- d) None

Q.5 What is pressure?

- a) F/A
- b) F/A
- c) A/F
- d) None

Q.6 Vacuum pressure is also called _____

- a) Negative gauge pressure
- b) Positive gauge pressure
- c) Both a & b
- d) None

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. $(6 \times 1 = 6)$

Q.7 Write any one difference between steady & unsteady flow.

Q.8 Mention any one application of manometer.

Q.9 What is the effect of temp on the mass density of fluid?

Q.10 Which apparatus is used for flow measurement?

Q.11 Expand NPSH.

Q.12 Where butterfly valve is used?

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. $(8 \times 4 = 32)$

Q.13 Difference between laminar & turbulent flow.

Q.14 What are the properties of Newtonian fluid?

Q.15 Explain Pascal law.

Q.16 Write a note on Hagen Poiseuilli's equation.

Q.17 Draw neat sketch of Venturimeter.

Q.18 Discuss the working of orifice meter.

Q.19 What is priming & NPSH?

Q.20 Mention the uses of blowers & compressor.

Q.21 List various type of valves used in industry.

Q.22 Define BWG No.