

Q.21 What do you mean schedule no?

No. of Printed Pages : 4
Roll No.

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Q.22 Mention uses of ball valve & needle valve.

SECTION-D

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

Q.23 A venturimeter has the entrance diameter of 10 cm & throat diameter 4 cm. the Venturimeter head is 49 cm of water. Determine the discharge in litre/hour The venture constant may be taken as 0.97 ?

Q.24 List various type of manometer. Describe each with suitable diagram.

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

- a) Friction losses in pipe
- b) Rotational & Irrotational flow
- c) BWG No.
- d) Priming & NPSH

Time : 3 Hrs.

M.M. : 60

SECTION-A

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

Q.1 Which of the following is the basic principle of fluid mechanics?

- a) Momentum principle
- b) Energy equation
- c) Continuity equation
- d) All of the above

Q.2 When is the fluid is called laminar?

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

(400)

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Q.3 Which of the following is the type of fluid based on viscosity?

- a) Real fluid
- b) ideal fluid
- c) Newtonian fluid
- d) All of the above

Q.4 A positive pressure less than atmospheric pressure is _____

- a) Absolute pressure
- b) Gauge pressure
- c) Vacuum pressure
- d) Static pressure

Q.5 What is pressure

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

Q.6 What is the SI unit of velocity?

- a) ms
- b) s/m
- c) m/s
- d) None

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Which flow is called rotational flow?

Q.8 Write any one property of incompressible fluid.

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Q.9 Mention one effect of roughness in pipe on flow of fluid.

Q.10 Where rotameter is used?

Q.11 Name any one type of centrifugal pump.

Q.12 Why ball valve is used?

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 What do you mean by streamline flow?

Q.14 List various types of fluid.

Q.15 Explain Hydrostatic law.

Q.16 Define continuity equation.

Q.17 Determine the viscosity of a liquid having kinematic viscosity $6\text{cm}^2/\text{sec}$ & Specific gravity 1.9?

Q.18 Draw neat sketch of orifice meter.

Q.19 Differentiate between centrifugal pump & reciprocating pump.

Q.20 Describe efficiency of centrifugal pump.

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