Unit 1

1. What is the pressure difference between inside and outside of a droplet of water?
   (a) $12\sigma/d$
   (b) $4\sigma/d$
   (c) $8\sigma/d$
   (d) $2\sigma/d$

   Ans: b

2. substance that deforms continuously by applications of smallest shear force is
   (a) Fluid
   (b) solid
   (c) both solid & Fluid
   (d) Vapour
   Ans: a

3. The ratio of dynamic viscosity to mass density is termed as
   (a) Dynamic viscosity
   (b) static viscosity
   (c) kinematic viscosity
   (d) velocity
   Ans: c

4. The unit for pressure
   (a) Newton
   (b) Joule
   (c) Watt
   (d) Pascal

   Ans: d

5. Force acts to hold two separate bodies together is termed as
   (a) cohesive
   (b) visocity
   (c) surface tension
   (d) adhesive

   Ans: d

6. It is the measure of resistance to shearing motion
   (a) surface tension
   (b) viscosity

(c) Viscosity and surface tension

(d) capillary rise

Ans: b

7. Continuity equation is
   (a) A1V1 = A2V2
   (b) Q1/Q2
   (c) both Q1=Q2 & A1V1 = A2V2
   (d) Q1=Q2

   Ans: d

8. Calculate the density of petrol of specific gravity
   (a) 0.7
   (b) 0.7x13.6
   (c) 0.7/1000
   (d) 700kg/m3

   Ans: d

9. The Bernoulli's equation is based on the assumption that
   (a) there is no loss of energy of the liquid flowing
   (b) the velocity of flow is uniform across any cross-section of the pipe
   (c) no force except gravity acts on the fluid
   (d) all of these there is no loss of energy of the liquid flowing,no force except gravity acts on
       the fluid & the velocity of flow is uniform across any cross-section of the pipe

   Ans: d

10. Density of water is maximum at

(a) 0°C (b)
0°K   (c)
4°C

(d) 100°C
Ans: c

11. The value of mass density in kgsecVm4 for water at 0°C is

(a) 1

(b) 1000 (c)
100

(d) 101.9

Ans: d

12. Property of a fluid by which its own molecules are attracted is called

(a) adhesion

(b) cohesion

(c) viscosity

(d) compressibility

Ans: b

13. Mercury does not wet glass. This is due to property of liquid known as

(a) adhesion

(b) cohesion

(c) surface tension

(d) viscosity

Ans: c

14. The property of a fluid which enables it to resist tensile stress is known as

(a) compressibility

(b) surface tension

(c) cohesion

(d) adhesion

Ans: c

15. Property of a fluid by which molecules of different kinds of fluids are attracted to each other is called

(a) adhesion
(b) cohesion
(c) viscosity

(d) compressibility
Ans: a

16. The specific weight of water is 1000 kg/m"
(a) at normal pressure of 760 mm

(b) at 4°C temperature

(c) at mean sea level

(d) all the above

Ans: d

17. Specific weight of water in S.I. units is equal to

(a) 1000 N/m3
(b) 10000 N/m3

(c) 9.81 xlO3 N/m3

(d) 9.81 xlO6N/m3

Ans: c

18. When the flow parameters at any given instant remain same at every point, then flow is said to be

(a) quasi static
(b) steady state
(c) laminar

(d) uniform
Ans: d

19. Which of the following is demensionless

(a) specific weight

(b) specific volume

(c) specific speed

(d) specific gravity
Ans: d

20. The normal stress in a fluid will be constant in all directions at a point only if

(a) it is incompressible

(b) it has uniform viscosity

(c) it has zero viscosity

(d) it is frictionless

Ans: d

21. The pressure at a point in a fluid will not be same in all the directions when the fluid is

(a) moving

(b) viscous

(c) viscous and static

(d) inviscous and moving

Ans: e

22. An object having 10 kg mass weighs 9.81kg on a spring balance. The value of 'g' at this place is

(a) 10m/sec2

(b) 9.81 m/sec2
(c) 10.2/m sec

(d) 9.75 m/sec2
Ans: a

23. The tendency of a liquid surface to contract is due to the following property

(a) cohesion

(b) adhesion

(c) viscosity

(d) surface tension

Ans: d

24. The surface tension of mercury at normal temperature compared to that of water is

(a) more

(b) less

(c) same

(d) more or less depending on size of glass tube

Ans: a

25. A perfect gas

(a) has constant viscosity

(b) has zero viscosity

(c) is in compressible

(d) is of theoretical interest

Ans: d

26. For very great pressures, viscosity of moss gases and liquids

(a) remains same

(b) increases

(c) decreases

(d) shows erratic behavior

Ans: d

27. A fluid in equilibrium can't sustain

(a) tensile stress

(b) compressive stress

(c) shear stress

(d) bending stress

Ans: c

28. Viscosity of water in comparison to mercury is

(a) higher (b)
lower (c)
same

(d) higher/lower depending on temperature

(e) unpredictable.
Ans: a

29. The bulk modulus of elasticity with increase in pressure

(a) increases

(b) decreases

(c) remains constant

(d) increases first up to certain limit and then decreases

Ans: a

30. The bulk modulus of elasticity

(a) has the dimensions of 1/pressure

(b) increases with pressure

(c) is large when fluid is more compressible (d)
is independent of pressure and viscosity

Ans: b

Unit 2

1. Energy gradient line takes into consideration
   (a) potential and pressure heads only
   (b) kinetic and pressure heads only
   (c) potential, kinetic and pressure heads
   (d) potential and kinetic heads only

   Ans: c

2. With the boundary layer separation, displacement thickness_____
   (a) Decreases
   (b) Increases
   (c) Remains Same
   (d) Independent

   Ans: b

3. Which among the following is not a loss that is developed in the pipe?
   (a) Liquid velocity
   (b) Exit
   (c) Connection between two pipes
   (d) Viscosity

   Ans: a

4. What is the unit of flow rate?
   (a) kg.m
   (b) kg/m
   (c) kg/s
   (d) m3/s

   Ans: d

5. Energy Loss due to friction of the pipe is given by the Darcy's formula is
   (a) (V1-V2)2/g
   (b) 4fLV/2dg
   (c) 2v2/2g
   (d) 4fLV2/2dg

   Ans: d

6. Reynolds number is significant in

   (a) supersonics, as with projectile and jet propulsion

(b) full immersion or completely enclosed flow, as with pipes, aircraft wings, nozzles etc. (c) simultaneous motion through two fluids where there is a surface of dis-continuity, gravity forces, and wave making effect, as with ship's hulls

(d) all of the above

Ans: b

7. The fluid forces considered in the Navier Stokes equation are

 (a) gravity, pressure and viscous

 (b) gravity, pressure and turbulent

 (c) pressure, viscous and turbulent

 (d) gravity, viscous and turbulent

Ans: a

8. A large Roynold number is indication of

 (a) smooth and streamline flow

 (b) laminar flow

 (c) steady flow

 (d) turbulent flow

Ans: d

9. For pipes, laminar flow occurs when Roynolds number is

 (a) less than 2000

 (b) between 2000 and 4000
 (c) more than 4000

 (d) less than 4000

Ans: a

10. In order that flow takes place between two points in a pipeline, the differential pressure between these points must be more than

 (a) frictional force

 (b) viscosity

 (c) surface friction

 (d) all of the above

Ans: d

11. At the center line of a pipe flowing under pressure where the velocity gradient is zero, the shear stress will be

(a) minimum

(b) maximum

(c) zero

(d) negative value

Ans: d

12. The pressure in Pascals at a depth of 1 m below the free surface of a body of water will be equal to

(a) 1 Pa

(b) 91 Pa

(c) 981 Pa

(d) 9810 Pa

Ans: d

13. Two pipe systems can be said to be equivalent, when the following quantites are same

(a) friction loss and flow

(b) length and diameter

(c) flow and length

(d) friction factor and diameter

Ans: a

14. For pipes, turbulent flow occurs when Reynolds number is

(a) less than 2000

(b) between 2000 and 4000
(c). more than 4000

(d) less than 4000

Ans: c

15. Bernoulli equation deals with the law of conservation of

(a) mass

(b) momentum

(c) energy

(d) work

Ans: c

16. A hydraulic press has a ram of 15 cm diameter and plunger of 1.5 cm. It is required to lift a weight of 1 tonne. The force required on plunger is equal to

(a) 10 kg

 (b) 100 kg

(c) 1000 kg

(d) 1 kg

Ans: a

17. Cavitation is caused by

(a) high velocity

(b) high pressure

(c) weak material

(d) low pressure

Ans: d

18. Cavitation will begin when

(a) the pressure at any location reaches an absolute pressure equal to the saturated vapour pressure of the liquid

(b) pressure becomes more than critical pressure

(c) flow is increased

(d) pressure is increased

Ans: a

19. Principle of similitude forms the basis of

(a) comparing two identical equipments

(b) designing models so that the result can be converted to prototypes

(c) comparing similarity between design and actual equipment

(d) hydraulic designs

Ans: b

20. For similarity, in addition to models being geometrically similar to prototype, the following in both cases should also be equal

(a) ratio of inertial force to force due to viscosity

(b) ratio of inertial force to force due to gravitation

(c) ratio of inertial force to force due to surface tension

(d) all the four ratios of inertial force to force due to viscosity, gravitation, sur-face tension, and elasticity

Ans: d

Unit 3

1. The dimension of the dynamic viscosity is
   (a) ML-1T-2
   (b) ML-2T-2
   (c) ML-1T-1
   (d) MLT

   Ans: c

2. The square root of the ratio of inertia force to gravity force is called
   (a) Mach number
   (b) Euler number
   (c) Froude number
   (d) Reynolds number

   Ans: c

3. Euler number is defined as the ratio of inertia force to:
   (a) Gravity force
   (b) Pressure force
   (c) Viscous force
   (d) Elastic force

   Ans: b

4. Surface tension is a phenomenon due to
   (a) viscous force
   (b) adhesion and cohesion between the liquid molecules
   (c) cohesion between the liquid molecules
   (d) adhesion between the liquid molecules

   Ans: c

5. How can we determine whether the flow is laminar or turbulent?

(a) Mach number
(b) Froude number
(c) Knudsen number
(d) Reynold's number

Ans: d

6. What is a prototype?
(a) Adopted structure
(b) Actual structure
(c) A small-scale replica
(d) Theory structure.

Ans: b

7. Which among the following is the main application for Similitude?
(a) Ships
(b) Cars
(c) Train
(d) Hydraulics

Ans: d

8. Which among the following is not a criteria to achieve similitude?
(a) Dynamic similarity
(b) Conditional similarity
(c) Kinematic similarity
(d) Geometric similarity

Ans: b

9. Which of the following number is applicable in open hydraulic structure such as spillways, where gravitational force is predominant?
(a) Weber's Number
(b) Euler's Number
(c) Froude's Number
(d) Reynold's Number

Ans: c

10. Ratio of inertia force to viscous force is known as
(a) Grashof number
(b) Peclet number
(c) Stanton number
(d) Reynolds number

Ans: d

11. What is a model analysis?
    (a) A small-scale replica
    (b) Actual structure
    (c) Theory structure.
    (d) Adopted structure

    Ans: a

12. The repeated variables in the dimensional analysis should
    (a) not include the dependent variables
    (b) have two variables with the same dimensions
    (c) form the dimensional parameters among themselves
    (d) must contain jointly all the fundamental dimensions involved in the phenomenon

    Ans: d

13. It is observed in a flow problem that total pressure, inertia and gravity forces are important.
    Then, similarly requires that
    (a) Reynolds and Weber numbers be equal
    (b) Mach and Froude numbers be equal
    (c) Euler and Froude numbers be equal
    (d) Reynolds and Mach numbers be equal

    Ans: c

14. If the number of fundamental dimensions equals 'm', then the repeating variables shall be equal
    to:
    (a) m and none of the repeating variables shall represent the dependent variable
    (b) m + 1 and one of the repeating variables shall represent the dependent variable
    (c) m and one of the repeating variables shall represent the dependent variable
    (d) m + 1 and none of the repeating variables shall represent the dependent variable

    Ans: d

15. The fundamental dimensional quantities are related by_____
    (a) Avagadaro's law
    (b) Newton's first law
    (c) Newton's second law
    (d) Newton's third law

    Ans: c

16. Which among the following is not a criteria to achieve similitude?

(a) Geometric similarity

(b) Kinematic similarity

(c) Dynamic similarity

(d) Conditional similarity

Ans: d

17. Webber number deals about

    (a) Interface between two different fluids

    (b) Fluid flow over the plate

    (c) Flowing fluid viscosity variation

    (d) Pressure gradient of the flowing fluid

Ans: a

18. Ratio of inertia force to surface Jension is known as

(a) Mach number

(b) Froude number

(c) Reynold's number

(d) Weber's number

Ans: d

19. A ship whose hull length is 100 m is to travel at 10 m/sec. For dynamic similarity, at what velocity should a 1:25 model be towed through water ?

(a) 10 m/sec

(b) 25 m/sec

(c) 2 m/sec

(d) 50 m/sec

Ans: c

20. A model of a reservior is drained in 4 mts by opening the sluice gate. The model scale is 1: 225. How long should it take to empty the prototype ?

(a) 900 minutes

(b) 4 minutes

(c) 4 x (225)3/2 minutes

(d) 4 (225)1/3 minutes

Ans: d

Unit 4

1. Pump is said to be
    (a) Power producing and obsorbing machine
    (b) Power obsorbing machine
    (c) Power producing machine
    (d) Mechanical machine

    Ans: b

2. Which component of fluid velocity is responsible for transmission of power through rotodynamic machine?
    (a) Radial
    (b) Tangential
    (c) Axial
    (d) stream

    Ans: b

3. Centrifugal pump is a
    (a) Flow regulating device
    (b) Drafting device
    (c) Intercooling device
    (d) Turbomachinery

    Ans: d

4. Reciprocating pump is a
    (a) Positive displacement pump
    (b) Negative displacement pump
    (c) Diaphragm pump
    (d) Emulsion pump

    Ans: a

5. Rotary pumps
    (a) Are positive displacement pumps
    (b) Are low-pressure pumps
    (c) Must be primed before each use
    (d) Must use mechanical seals

Ans: a

6. Hydraulic energy is converted into another form of energy by hydraulic machines. What form of energy is that
   (a) Electrical Energy
   (b) Nuclear Energy
   (c) Mechanical Energy
   (d) Elastic Energy

   Ans: c

7. Centrifugal pumps transport fluids by converting _____
   (a) Hydrodynamic energy to kinetic energy
   (b) Mechanical energy to kinetic energy
   (c) Mechanical energy to Hydrodynamic energy
   (d) Kinetic energy to hydrodynamic energy

   Ans: d

8. When a cylinder has inlet and outlet ports at each end, then it is called as _____
   (a) Double acting
   (b) Air lift pumps
   (c) Reciprocating pumps
   (d) Centrifugal pumps

   Ans: a

9. The characteristic curves of a centrifugal pump, plots _____ required by the pump.
   (a) NPSH
   (b) Velocity
   (c) Pressure
   (d) Velocity and pressure

   Ans: a

10. Indicator diagram used to find the
    (a) Temperature acting outside the pump
    (b) Pressure acting inside a closed chamber
    (c) P-V curve to find the temperature
    (d) Flow velocity inside the diagram

    Ans: b

11. In a centrifugal pump casing, the flow of water leaving the impeller, is
    (a) radial flow

(b) free vortex motion

(c) rectilinear flow

(d) forced vortex

Ans: b

12. Internal cavitation in reciprocating pumps occurs due to
    (a) Flow speed
    (b) Drag force
    (c) Shock waves
    (d) Cyclic stress

    Ans: c

13. In a single casing, multistage pump running at constant speed, the capacity rating is to be slightly lowered. It can be done by

(a) designing new impeller

(b) trimming the impeller size to the required size by machining

(c) not possible

(d) some other alterations in the impeller

Ans: b

14. If a pump is handling water and is discharging a certain flow Q at a constant total dynamic head requiring a definite B.H.P., the same pump when handling a liquid of specific gravity 0.75 and viscosity nearly same as of water would discharge

(a) same quantity of liquid

(b) 0.75 Q

(c) Q/0.75

(d) 1.5 Q

Ans: a

15. The horse power required in above case will be

(a) same

(b) 0.75 B.H.P.

(c) B.H.P./0.75

(d) 1.5 B.H.P.

Ans: b

16. Low specific speed of a pump implies it is

(a) centrifugal pump

(b) mixed flow pump

(c) axial flow pump

(d) any one of the above

 Ans: a

17. The optimum value of vane exit angle for a centrifugal pump impeller is

(a) 10-15°

(b) 20-25°

 (c) 30-40°

 (d) 50-60°

Ans: b

18. In a centrifugal pump, the liquid enters the pump

(a) at the top

(b) at the bottom

(c) at the center

(d) from sides

Ans: c

19. For small discharge at high pressure, following pump is preferred

(a) centrifugal

(b) axial flow

(c) mixed flow

(d) propeller

Ans: d

20. In centrifugal pumps, maximum efficiency is obtained when the blades are

(a) straight

(b) bent forward

(c) bent backward

(d) radial

Ans: c

21. Motion of a liquid in a volute casing of a centrifugal pump is an example of

(a) rotational flow

(b) radial

(c) forced spiral vortex flow

(d) forced cylindrical vortex flow

Ans: d

22. For very high discharge at low pressure such as for flood control and irrigation applications, following type of pump is preferred

(a) centrifugal

(b) axial flow

(c) reciprocating

(d) mixed flow

Ans: b

23. Medium specific speed of a pump implies it is

(a) centrifugal pump

(b) mixed flow pump

(c) axial flow pump

(d) any one of the above

Ans: b

24. High specific speed of a pump implies it is

(a) centrifugal pump

(b) mixed flow pump

(c) axial flow pump

(d) any one of the above

Ans: c

25. Indicator diagram of a reciprocating pump is a graph between

(a) flow vs swept volume

(b) pressure in cylinder vs swept volume

(c) flow vs speed

(d) pressure vs speed

Ans: b

26. Low specific speed of turbine implies it is

(a) propeller turbine

(b) Francis turbine

(c) impulse turbine

(d) any one of the above

Ans: c

27. Any change in load is adjusted by adjusting following parameter on turbine

(a) net head

(b) absolute velocity

(c) blade velocity

(d) flow

Ans: d

28. Runaway speed of a hydraulic turbine is

(a) full load speed

(b) the speed at which turbine runner will be damaged

(c) the speed if the turbine runner is allowed to revolve freely without load and with the wicket gates wide open

(d) the speed corresponding to maximum overload permissible

Ans: c

29. The maximum number of jets generally employed in impulse turbine without jet interference is

(a) 4

(b) 6

(c) 8

(d) 12

Ans: b

30. Medium specific speea of turbine implies it is

(a) propeller turbine

(b) Francis turbine

(c) impulse turbine

(d) any one of the above

Ans: b

31. High specific speed of turbine implies it is

(a) propeller turbine

(b) Francis turbine

(c) impulse turbine

(d) any one of the above

Ans: a

32. The specific speed of turbine is defined as the speed of a unit

(a) of such a size that it delivers unit dis-charge at unit head

(b) of such a size that it delivers unit dis-charge at unit power

(c) of such a size that it requires unit power per unit head

(d) of such a size that it produces unit horse power with unit head

Ans: d

33. Puck up the wrong statement about centrifugal pump

(a) discharge a diameter

(b) head a speed2

(c) head a diameter

(d) Power a speed3

Ans: a

34. A turbine pump is basically a centrifugal pump equipped additionally with

(a) adjustable blades

(b) backward curved blades

(c) vaned diffusion casing

(d) inlet guide blades

Ans: c

35. Casting of a centrifugal pump is designed so as to minimize

(a) friction loss

(b) cavitation

(c) static head

(d) loss of kinetic energy

Ans: d

Unit 5

1. Which energy generated in a turbine is used to run electric power generator linked to the turbine shaft?
   (a) Potential Energy
   (b) Mechanical Energy
   (c) Elastic Energy
   (d) Kinetic Energy

   Ans: b

2. Which among the following which is not an efficiency of turbine?
   (a) Mechanical efficiency
   (b) Volumetric efficiency
   (c) Hydraulic efficiency
   (d) Electrical efficiency

   Ans: d

3. Velocity triangles are used to analyze _____
   (a) Angle of deflection of jet

(b) Measure discharge of flow
(c) Flow of water along blades of turbine
(d) Flow of water, measure of discharge, angle of deflection.

Ans: d

4. What is the water flow direction in the runner in a Francis turbine?
   (a) Axial and then radial
   (b) Radial and then axial
   (c) Axial and then tangential
   (d) Tangential and then axial

   Ans: b

5. Kaplan turbine is an _____ reaction turbine
   (a) Outward flow
   (b) Radial
   (c) Axial
   (d) Inward flow

   Ans: d

6. Power of a turbine is measured _____
   (a) Mechanically
   (b) Electrically
   (c) Chemically
   (d) Thermally

   Ans: a

7. _____ is ratio of volume of water actually striking the runner and volume of water supplied to turbine?
   (a) Volumetric efficiency
   (b) Hydraulic efficiency
   (c) Mechanical efficiency
   (d) Overall efficiency

   Ans: c

8. To obtain maximum hydraulic efficiency of pelton turbine, blade velocity should be
   _____ Times the inlet velocity of jet.
   (a) One quarter
   (b) Twice
   (c) Thrice
   (d) Half

   Ans: d

9. Hydraulic Machines fall under the category :
   (a) Roto-dynamic machinery
   (b) Condensers
   (c) Pulverizers
   (d) Kinetic machinery

   Ans: a

10. Which among the following is not an important parameter to determine the performance of
    the turbine?
    (a) Volume of tank
    (b) Speed
    (c) Discharge
    (d) Head

    Ans: a

11. Which kind of turbines changes the pressure of the water entered through it?
    (a) Impulse turbines
    (b) Kinetic turbines
    (c) Reactive turbines
    (d) Reaction turbines

    Ans: d

12. Which of the following efficiencies for Kaplan Turbine is defined as the ratio between the
    power available at the shaft of the turbine to the power produced by the runner?
    (a) Hydraulic efficiency
    (b) Mechanical efficiency

(c) Volumetric efficiency

(d) Overall efficiency

Ans: b

13. In reaction turbine, draft tube is used

(a) to transport water downstream without eddies

(b) to convert the kinetic energy to flow energy by a gradual expansion of the flow cross- section

(c) for safety of turbine

(d) to increase flow rate

Ans: b

14. Guide angle as per the aerofoil theory of Kaplan turbine blade design is defined as the angle between

(a) lift and resultant force

(b) drag and resultant force

(c) lift and tangential force

(d) lift and drag

Ans: a

15. Francis turbine is best suited for

(a) medium head application from 24 to 180 m

(b) low head installation up to 30 m

(c) high head installation above 180 m

(d) all types of heads

Ans: a

16. The flow rate in gear pump

(a) increases with increase in pressure

(b) decreases with increase in pressure

(c) more or less remains constant with in-crease in pressure

(d) unpredictable

Ans: c

17. Impulse turbine is generally fitted

(a) at the level of tail race

(b) little above the tail race

(c) slightly below the tail race

(d) about 2.5 m above the tail race to avoid cavitation

Ans: b

18. Francis, Kaplan and propeller turbines fall under the category of

(a) Impulse turbines

(b) Reaction turbines

(c) Axial flow turbines

(d) Mixed flow turbines

Ans: b

19. Reaction turbines are used for

(a) low head

(b) high head

(c) high head and low discharge

(d) low head and high discharge.

Ans: d

20. The discharge through a reaction turbine with increase in unit speed

(a) increases

(b) decreases

(c) remains unaffected

(d) first increases and then decreases

Ans: b

21. The angle of taper on draft tube is

(a) greater than 15°

(b) greater than 8°

(c) greater than 5°

(d) less than 8°

Ans: d

22. Specific speed for reaction turbines ranges from

(a) 0 to 4.5

(b) 10 to 100

(c) 80 to 200

(d) 250 to 300

 Ans: b

23. In axial flow fans and turbines, fluid enters and leaves as follows

(a) radially, axially

(b) axially, radially

(c) axially, axially

(d) radially, radially

Ans: c

24. Which place in hydraulic turbine is most susceptible for cavitation

(a) inlet of draft rube

(b) blade inlet

(c) guide blade

(d) penstock

Ans: a

25. According to fan laws, for fans having constant wheel diameter, the air or gas capacity varies

(a) directly as fan speed

(b) square of fan speed

(c) cube of fan speed

(d) square root of fan speed

Ans: a

26. Pressure intensifier increases the pressure in proportion to

(a) ratio of diameters

(b) square of ratio of diameters

(c) inverse ratio of diameters

(d) square of inverse ratio of diameters

Ans: b

27. A hydraulic accumulator normally consists of

(a) two cylinders, two rams and a storage device

(b) a cylinder and a ram

(c) two co-axial rams and two cylinders

(d) a cylinder, a piston, storage tank and control valve

Ans: b

28. A hydraulic intensifier normally consists of

(a) two cylinders, two rams and a storage device

(b) a cylinder and a ram

(c) two co-axial rams and two cylinders

(d) a cylinder, a piston, storage tank and control valve

Ans: c

29. Hydraulic accumulator is used for

(a) accumulating oil

(b) supplying large quantities of oil for very short duration

(c) generally high pressures to operate hydraulic machines

(d) supplying energy when main supply fails

Ans: d

30. Maximum impulse will be developed in hydraulic ram when

(a) waste valve closes suddenly

(b) supply pipe is long

(c) supply pipe is short

(d) ram chamber is large

Ans: a