Sl. No	Questions	Answers
1	1 MPa is _____	10 bar
2	The main purpose of the fluid in a fluid power system is to	Transmit power
3	_____states that in a confined fluid at rest, pressure acts equally in all directions and acts perpendicular to the confining walls.	Pascal's Law
4	Pump converts	Mechanical energy into hydraulic energy
5	_____ ejects a fixed amount of fluid per revolution of pump shaft rotation.	Positive displacement pumps
6	Power delivered to a pump from a prime mover via a rotating shaft is called	Brake power
7	Heavy lifting work is often accomplished by shifting fluids in big machines. The power system of such machines can be described as	Hydraulic
8	The scientific principle that makes hydraulic systems possible is	Pascal's principle
9	Which fluid is used in hydraulic power systems?	All the above
10	Why is fluid power preferred in mobile vehicles?	All the above
11	How is power transmitted in fluid power systems?	a. Power is transmitted instantaneously
12	The hydraulic system is	more precise than pneumatic system
13	Fluid power is the technology that deals with _____ power, using pressurized fluids	All the above
14	For a hydraulic jack magnified force can be found using	Option 1
15	In a hydraulic jack force multiplication factor _____ the motion reduction factor	Equals
16	Water cannot be used as a hydraulic fluid because	All the above
17	_____ is the heart of any hydraulic system because it generates the force necessary to move the load.	Pump
18	Variable displacement feature can be brought into vane pumps by varying _____ between the rotor and the cam ring.	Eccentricity
19	_____ is a device that translates the rotary motion of a shaft into the reciprocating motion in an axial piston pump.	A swash plate
20	_____ indicates the amount of leakage that takes place within the pump.	Volumetric efficiency
21	_____ indicates the amount of energy losses that occur for reasons other than leakage.	Mechanical efficiency
22	Pumps are selected by taking into account a number of considerations such as	All the above
23	For an external gear pump, as the discharge pressure increases, volumetric efficiency	decreases

24	A balanced vane pump has two intake and two outlet ports	TRUE
25	For a vane pump, maximum value of eccentricity produces maximum volumetric displacement.	TRUE
26	In an axial flow piston pump, when the center line of the cylinder block is parallel to drive shaft center line	No flow is produced
27	For the hydraulic jack, the following data are given: A1= 2cm², A2=20cm², S1=1cm, F1=100N, F2 and S2 value will be_____ respectively.	1000N and 0.1cm
28	A gear pump has a 75-mm outside diameter, a 50-mm inside diameter, and a 25-mm width. If the volumetric efficiency is 90% at rated pressure, what is the corresponding actual flow rate? The pump speed is 1000 rpm.	55.3 Lpm
29	A vane pump has a rotor diameter of 50 mm, a cam ring diameter of 75 mm,and a vane width of 50 mm. If the eccentricity is 8 mm, determine the volumetric displacement.	0.0785 L
30	A pump has a displacement volume of 100cm³. It delivers 0.0015 m³/s at 1000 rpm and 70 bars. If prime mover input torque is 120 N · m, a. What is the overall efficiency of the pump? b. What is the theoretical torque required to operate the pump?	a. 83.5% b.112 N m
31	Theoretical flow rate of a pump is	Volumetric displacement * Speed
32	A pump having displacement of 25m³, operates with a pressure of 250 bar and speed of 1390 rpm. volumetric efficiency of 0.85 and mechanical efficiency of 0.80. Calculate a) Pump delivery in LPM b) Input power at pump shaft in kW	a) 0.0295 m³/min 2) 18 kW