School of University Polytechnic

Diploma in Civil Engineering
Semester End Examination - Aug 2024

Duration : 180 Minutes
Max Marks : 100

Sem IV - N1DB402B - Hydraulics

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1)	Define Weber number.	K1(2)
2)	Compare mechanical gauges with Manometers.	K2(4)
3)	Write different types of minor losses in pipe.	K2(6)
4)	Explain the types of fuild flow .	K3(9)
5)	State Bernoulli's theorem with assumptions also give practical examples of bernoulli's theorem.	K3(9)
6)	State the principle of pressure measurement by manometer.Explain the difference between a simple and a differential manometer.	K5(10)
7)	Derive the expression for measurement of discharge through V-notch.	K4(12)
8)	Derive the expression for measurement of discharge through rectangular notch.	K5(15)
9)	A simple U-tube manometer containing mercury is connected to a pipe in which a fluid of sp. Gr. 0.8 and having vacuum pressure is flowing.the end of the manometer is open to atmosphere.Find the vacuum pressure in pipe , if the difference of mercury level in the two limbs is 40 cm and the height of fluid in left from the centre of pipe is 15 cm below.	K5(15)
10)	Explain the phenomenon of capillarity.Obtain an expression for capillarity rise of a liquids.	K6(18)