**MEHRAN UNIVERSITY OF ENGINEERING AND TECHNOLOGY, JAMSHORO**

**MID SEMESTER EXAMINATION 2024**
**3rd SEMESTER (REGULAR)**
**B.E (PETROLEUM ENGINEERING) (22- BATCH)**

**SUBJECT (Code)** | **FLUID MECHANICS (CE-261)**

Dated: 19-02-2024                 Time Allowed: 1 Hours (2 C.H)                 Max: Marks: 15

**NOTE : ATTEMPT ALL QUESTIONS.**

Q.No. 01(a)                                                                 4 Marks
Analyze the flow behavior of the Bingham Plastic and Herschel Bulkley fluids . (**CLO-1:C3, PLO-2**)

Q.No. 01(b)                                                                 4 Marks
If the velocity distribution of a plate is given by $U = 2/3y - y^2$ . where y is the distance from the solid boundary in meters , U is velocity in m/s determine shear stress at y = 0 m & y = 0.15 m. $\mu = 8.63$ poise (**CLO-1:C3, PLO-2**)

Q.No. 02                                                                 07 Marks
Demonstrate the concept of newton's law of viscosity in detail  (**CLO-1:C3, PLO-2**)

Name of Subject Teacher: Engr. Mukhtiar Ali Talpur

---The End---