Salahaddin University-Erbil College of Science Dept. of Earth Sci and Petrol. Brittle Structural Geology- Practical Third Year Students Ouestion bank

s **338/49 SW**, while of the

Starting Time: 10:30 am

Duration: 60minutes

Q1/ Average attitude of first limb of an anticline fold is 338/49 SW, while of the second limb of the same anticline is 140/64. By using stereographic projection find: (65 marks)

- 1- Interlimb angle and folding angle of the fold.
- 2- Orientation of hinge line.
- 3- Attitude of Axial surface.
- 4- Pitch angle of hinge line within axial surface.
  - 5- Are the fold plunged or not? Why?
  - 6- Is the fold symmetrical or asymmetrical? Why?
  - 7- Q. I/ True dip of a fault is 046/24. Find by stereographic method
  - **8- apparent dip amount in the given directions.** (25m)

9-

- 10-(S29E/42) and (S41W/26) are two apparent dips measured from a fault surface. This fault intersects with a joint (N69W/62). Find:
- 11-True dip of the fault. (18m)
- 12-Attitude of the intersection line. (12m)
- 13-Angle between the fault and joint. (10m)
- 14-Pitch (Rake) angle of intersection line in the fault.
- 15-True dip (angle & direction) and strike of fault surface.
- 16-Apparent dip angle in direction (050) and (172).
- 17-Attitude of striation.
- 18-Write steps for finding apparent dip amount in Rockwork software.