King Saud University College of Engineering Department of Civil Engineering



GE 201 Statics Second Semester 1436-37 H Thursday, 7-7-1437 Time: 90 Min

## SECOND MID TERM EXAM Name (in Arabic): ..... Max. Marks Q. No. **Marks Obtained** Student No.: 1 25 Section / Instructor: ..... 2 20 Total 45 **Question #1(a) (5 points)** Sketch free body diagrams of the mechanical systems shown below. Description Mechanical System Free Body Diagram mg Bell crank supporting mass *m* with pin m support at A Flexible cable AΑv Uniform horizontal bar of mass m suspended by vertical Am cable at A and rough Bt mg Bn inclined surface at B Uniform heavy plate of mass *m* supported Δx in vertical plane by m cable C and hinge A Aν





