DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ANNA UNIVERSITY - CHENNAI 600 025

B.E Computer Science and Engineering

V Semester – Lab Examination

CS6110 - OBJECT ORIENTED ANALYSIS AND DESIGN LABORATORY

Date: 16.12.2021

Time: 1.30 hr   **Max. Marks: 25**

1. The department of public works for a large city has decided to develop a Web-based pothole tracking and repair system. A description follows:

   Citizens can log onto a Web site and report the location and severity of potholes. As potholes are reported they are logged within a "public works department repair system" and are assigned an identifying number, stored by street address, size(on a scale of 1 to 10), location (middle, curb, etc), district(determined from street address), and repair priority(determined from the size of the pothole). Work order data are associated with each pothole and include pothole location and size, repair crew identifying number, number of people on a crew, equipment assigned, hours applied to repair, hole status(work in progress, repaired, temporary repair, not repaired), amount of filler material used, and cost of repair(computed from hours applied, number of people, material, and equipment used).Finally, a damage file is created to hold information about reported damage due to the pot hole and includes the citizen's name, address, phone number, type of damage, rupees amount of damage. The system is a web-based system; all queries are to be made interactively.

   a. Identify the Use cases and draw Use case Diagram. (**5 marks**)
   b. Expand any two Use cases into Sequence Diagrams. (**6 marks**)
   c. Draw Activity diagram with swim lanes. (**5 marks**)
   d. Identify the classes and draw the Class Diagram. (**9 marks**)