Software Development Fundamentals Lab – I [15B17CI171] Assignment Sheet Week 2 [13 Sep-18 Sep] Lab A

Q1. Please complete Remaining Questions of Lab A, Week 1.

- **Q2.** Three drinks- Coke, Limca or Either (Either Coke or Limca) are offered by a machine at the bus stop. But the machine has been wired up wrongly by the staff at the bus stand so that each button does not give what it claims. If each drink costs Rs 10, how much minimum money do you have to put into the machine to work out which button gives which selection?
- Q3. A new airlines company is planning to start operations in a country. The company has identified ten different cities which they plan to connect through their network to start with. The flight duration between any pair of cities will be less than one hour. To start operations, the company has to decide on a daily schedule. The underlying principle that they are working on is the following:

Any person staying in any of these 10 cities should be able to make a trip to any other city in the morning and should be able to return by the evening of the same day.

If the underlying principle is to be satisfied in such a way that the journey between any two cities can be performed using only direct (non-stop) flights, then the minimum number of direct flights to be scheduled is:

- A. 45
- B. 90
- C. 180
- D. 135
- **Q4.** An agent emailed a code word to his head office. They are "COS AIS EUC RAO REI". But four of these five words are fake and only one contains the information. He also mailed a sentence as a clue "if I tell you any one character of the code word, you would be able to tell the number of vowels in the code word". Can you tell what the code word is?
- **Q5.** In a shop, there are 4 dolls of different heights P,Q,R and S. S is neither as tall as P nor as short as R. Q is shorter than S but taller than R. If Kittu wants to purchase the tallest doll, which one should she purchase?
 - 1. Only P
 - 2. Only S

- 3. Either P or S
- 4. Either Q or S