NATIONAL INSTITUTE OF TECHNOLOGY

Department of Information Technology

Minor 1, Spring 2019

Course: Software Engineering | **Course No: IT 401**

Time Alloted: 1 ½ hrs | **Semester: 4th**

Dated: 24th April, 2019 | **Max Marks: 30**

Q1.a) Why is spiral model considered to be as a Meta model.

b) Compare spiral model with prototyping model in terms of risk handling.

c) What is Quality function deployment? What are normal, expected and exciting requirements

d) Is the classical waterfall model useful at all?

e) How to Identify the Use Cases of a System? **(5*2=10) (CO2)**

Q2: A super market needs to develop a software that would help it to automate a scheme that it plans to introduce to encourage regular customers. In this scheme, a customer would have first register by supplying his/her residence address, telephone number, and the driving license number. Each customer who registers for this scheme is assigned a unique customer number (CN) by the computer. A customer can present his CN to the check out staff when he makes any purchase. In this case, the value of his purchase is credited against his CN. At the end of each year, the supermarket intends to award surprise gifts to 10 customers who make the highest total purchase over the year. Also, it intends to award a 22 caret gold coin to every customer whose purchase exceeded Rs. 10,000. The entries against the CN are reset on the last day of every year after the prize winners' lists are generated. Draw the use case diagram for the same.

Q3: Explain the various phases involved in sequential waterfall lifecycle along with the diagram. **(2*10=20) (CO1, CO3)**