BOWEN UNIVERSITY IWO, OSUN STATE
COLLEGE OF COMPUTING AND COMMUNICATION STUDIES
COMPUTER SCIENCE PROGRAMME
B. SC. DEGREE SECOND SEMESTER EXAMINATION SESSION: 2022/2023
COURSE TITLE: SOFTWARE ENGINEERING PROCESS
COURSE CODE: SEN 212 TIME ALLOWED: 2 HOURS CREDIT: 2 UNITS
INSTRUCTION: Answer any four (4) questions in all

1. a. Samson is one of your friends in Mass Communication Department and has just approach you as a software engineering student to explain to him what Software Engineering is all about. What will be the content of your discussion? **(13marks)**

   b. A seminar is being organized by an association in a university environment. You have been invited to deliver a paper titled "software development life cycle and its usefulness in software manufacturing industry " Discuss what you will consider to be the major content of your seminar paper. **(12marks).**

2. a. Consider the trend of technological development in the world and also in the software manufacturing industry, explain with major points why you feel there is a need to study software engineering? **(10marks)**

   b. One of the functions of software engineers is to develop good software .Discuss at least five major qualities of a good software that you have learnt **(15marks)**

3. a. In software engineering process, how do you ensure comprehensive and correct software specifications? **(10marks)**

   b. Explain in detail the concept of "testing" as it is applicable to software engineering process **(15marks)**

4. a. With the aid of diagram(s) explain the structure and the functionality of Waterfall model. **(12marks).**

   b. Would you see the waterfall model as an ideal model? Give reason(s) for your answer. **(5marks).**

   c. Give at least 8 reasons why there could be software failure **(8marks)**

5. Write briefly on each of the following:
   i.   prototype model **(8marks)**
   ii. evolutional model **(8marks)**
   iii. spiral model **(9marks)**
   (Diagrams and illustrations are required)

6. a. Write briefly on each of the following as it applies to software b engineering process:
   i.   Bugs **(3marks)**
   ii. faults **(3marks)**
   iii. fault tolerant **(3marks)**
   iv. Failure **(3marks)**

   b. (i) What is a defect? **(4marks)**
      (ii) Briefly explain different types of defects you are familiar with **(9marks)**