



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI – ABUJA**  
**FACULTY OF SCIENCES**  
**DEPARTMENT OF COMPUTER SCIENCE ...**  
**2020\_2 EXAMINATION**

**COURSE CODE: CIT333**

**COURSE TITLE: SOFTWARE ENGINEERING**

**COURSE CREDIT: 2 UNITS**

**TIME ALLOWED: 2 HOURS**

**INSTRUCTION: ANSWER QUESTION 1 AND ANY OTHER THREE (3) QUESTIONS**

- 1)
  - a) Briefly describe “Computer software” (*1½ marks*)
  - b) Highlight and discuss the types of computer software (*9 marks*)
  - c) Identify the sub-disciplines of software engineering (*2½ marks*)
  - d) Differentiate between “software configuration management” and “software engineering management” (*2 marks*)
  - e) Discuss the goals attached to the software engineering (*2 marks*)
  - f) Briefly discuss evolution areas of software engineering (*2 marks*)
  - g) Briefly analyse some renowned software engineers with their specialization (*4 marks*)
  - h) In the pioneer era, state any high level language developed to translate old software to meet the need of the new machines (*1 mark*)
  - i) Analyse who the software engineer is (*1 marks*)
- 2)
  - (a) Discuss who a software Engineer is. (*4 marks*)
  - (b) Outline seven functions of a software Engineer. (*7 marks*)
  - (b) Describe “**Realistic**” and “**Investigative**” categories as occupational characteristics or features of a software Engineer. (*4 marks*)
- 3)
  - (a) What do you understand by software crisis? (*5 marks*)
  - (b) Discuss poor **marketing efforts** and **lack of quality products** as causes of software Engineering crisis. (*10 marks*)
- 4)
  - (a) Define software development. (*2 marks*)
  - (b) Outline eight common stages in software development methodologies. (*8 marks*)
  - (c) Describe software life cycle using appropriate items. (*5 marks*)
- 5) Explain the following software life cycle model.
  - i) Waterfall model (*5 marks*)

- ii) V-Shaped model (*5 marks*)
- iii) Incremental model (*5 marks*)