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) Outlineseven 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)*