

SOUTHWESTERN UNIVERSITY NIGERIA

KM 20, SAGAMU-BENIN EXPRESSWAY, OKUN OWA, IJEBU-ODE, OGUN STATE.

FACULTY OF PURE & APPLIED SCIENCES

DEPARTMENT OF COMPUTER SCIENCE

HND TO BSC CONVERSION PROGRAMME

2018/2019 FIRST SEMESTER EXAMINATION

COURSE CODE: CSC 303 **COURSE TITLE:** Operating System

INSTRUCTION: Answer question 1 and any other three (3). **TIME:** 2hrs

1. (a) Write short note on the three goals and functions of the operating system.
(b) Using a block diagram explain how the Kernel connects the application software to the hardware of a computer.
(c) (i) What do you understand by the term process
(ii) Distinguish between a process and a program
(iii) List and explain the possible states of process
(d) Write short note on the following:
(i) Batch processing OS
(ii) Time sharing OS
(iii) Single-user, multi tasking OS.
2. Describe a process control block (PCB) using a block diagram and its contents at each stage.
3. Write short note on the following:
(i) Direct Communication
(ii) Indirect Communication
(iii) Interprocess Communication
4. (a) Give 4 circumstances under which CPU scheduling decisions can take place.
(b) Write short note on the following:
(i) Round-robin (RR) scheduling
(ii) Short-job-first (SJF) scheduling
5. (a) Give two advantages and disadvantages of deterministic modelling
(b) Write short note on three conditions in which deadlock situation can occur in a system.