COURSE CODE: BUS801	**CREDIT UNIT: 2**
COURSE TITLE: OPERATIONS MANAGEMENT	
TIME ALLOWED: 2Hours	

INSTRUCTIONS: 1. Attempt question Number one (1) and any other two (2).
2. Question number 1 is compulsory and carries 30 marks, while the other questions carry 20 marks each
3. Present all your points in coherent and orderly manner

1a. A time study was conducted on a job consisting of three elements. Stopwatch reading in hundred of a minute are given. Using cumulative timing method along with rating factors. Calculate the standard time if allowance is 12%.

Element	Stop watch readings					Rating
	1	2	3	4	5	
A	10	73	139	203	266	80
B	25	88	155	218	280	100
C	64	128	193	257	320	110

b. Discuss five key procedures for conducting a work sampling study.   **30Marks**

2a. Succinctly explain the five basic options for adjusting production capacity. **3Marks each = 15Marks**

b. Discuss the two types of supplier relationships. **2½ marks each = 5Marks**

3a. Discuss four basic demand options in aggregate planning. **2½Marks each = 10Marks**

b. Discuss the following factors that should be considered before making site-selection decisions. **2½marks each = 10Marks**

i. Staffing

ii. Inherent Local Condition

iii. Infrastructure

iv. Construction

4. Assuming six jobs are waiting to be processed. The processing time and due dates for the jobs are given below: Determine the sequence processing according to (a) FCFS (b) SPT and (c) EDD in the light of the following criteria: sequence, total flow time, average flow time, average job lateness and average number of jobs in the system. In the light of the following criteria: (i) Average flow time (ii) Average job lateness (iii) Average tardiness (iv) Average number of jobs

20marks

Jobs	Processing Time (days)	Due date (days)
A	2	7
B	8	16
C	4	4
D	10	17
E	5	15
F	12	18