FACULTY OF ENGINEERING AND BUILT ENVIRONMENT

SUPPLEMENTARY EXAMINATION 2019

DEPARTMENT	**DEPARTMENT OF QUALITY AND OPERATIONS MANAGEMENT**
PROGRAMME	ND MANAGEMENT SERVICES ND OPERATIONS MANAGEMENT
MODULE	ORGANISATIONAL EFFECTIVENESS 2A
CODE	ORE22A2
DATE	JULY 2019
DURATION	3 HOURS
TOTAL MARKS	100

EXAMINER	MR. M MOLEFE
MODERATOR	MS. J MHLANGA
NUMBER OF PAGES	5 PAGES

INSTRUCTIONS TO CANDIDATES:

- Please answer all questions.
- Calculators are allowed
- Question papers must not be handed in.
- This is a closed book assessment.
- Read the questions carefully and answer only what is asked.
- Number your answers clearly.
- Write neatly and legibly.
- Structure your answers by using appropriate headings and sub-headings.
- The general University of Johannesburg policies, procedures and rules pertaining to written exam apply.

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QUESTION 1

1.1. Describe the following terms

1.1.1. Work Study (1)
1.1.2. List any eight {8} skills acquired by MS practitioners (8)
1.1.3. Single Specialism (2)
1.1.4. Efficiency (2)

1.2. Debate five {5} understanding concerning productivity (5)

[18]

QUESTION 2

	ACTIVITY	TIME (min)	
A	ULOAD THE WOOD	20	-
B	MEASURE THE WOOD	40	A
C	CUT THE WOOD	90	B
D	GLUE THE WOOD	40	B
E	WAIT FOR THE GLUE TO DRY	10	A,D
F	PAINT THE WOOD	80	C,E

2.1. Develop a Gantt chart (3)
2.2. Show the duration of the activities on a Gantt Chart (6)
2.3. Which elements will be complete by 9 weeks? (2)

2.4. which elements will be completed by 60 hours (2)

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QUESTION 3
(ANSWER ON PROVIDED SHEET

ACTIVITIES	Predecessors	Duration (weeks)
A	-	6
B	-	5
C	A	3
D	A	2
E	B	4
F	B	10
G	D,E	12
H	D,E	8
I	D,E	9
J	CG	7
K	I,F	4
L	H,J,K	5

4.1. Draw a network to show the relationship of activities (draw on answer book) (5)

4.2. Estimate the ES, EF, LS, LF, SLACK, CP (36)

4.3. List all activities found in CP. What is the total duration CP?

_____ (2)

[43]

Question 4

OUTPUT:	**Department 1**	**Department 2**	**Department 3**
	1550 Bricks @R360 each	1950 Bricks @R410 each	1600 Bricks @R360 each
INPUT:			
Manpower	4 man hours @R13 6 man hours @R14	4 man hours @R15 6 man hours @R10	5 man hours @R11 5 man hours @R9
Machinery	25 machine hours @R19	30 machine hours @R23	26 machine hours @R18
Material	23 litres @R45 1200 Km @R35	25 litres @R55 1200 Km @R35	25 litres @R55 1250 Km @R40

use the table provided to calculate productivity department 2, by using department 1 cost values for department number 2. The acquired will information will be used as a cost productivity forecast to develop department 4.

2.1. SRP and PI of SRP (15)
2.2. TRP and PI of SRP (11)
[26]

[100]

Student No:_____

	Department 2	Department 4	PI
OUTPUT			
Manpower			
Manpower			
MACHINE			
Oil (literes)			
Rope (km)			

QUESTION 5

STUDENT NO:_____

ACTIVITY	ES	EF	LS	LF	SLACK
A					
B					
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					

CP:_____