

FACULTY OF ENGINEERING AND BUILT ENVIRONMENT

SUPPLEMENTARY-EXAMINATION

DEPARTMENT

DEPARTMENT OF QUALITY AND OPERATIONS
MANAGEMENT

PROGRAMME

ND MANAGEMENT SERVICES
ND OPERATIONS MANAGEMENT

MODULE

ORGANISATIONAL EFFECTIVENESS 1B00

CODE

ORE1B00/OEF1B00

DATE

: SUMMER SSA EXAMINATION 2015

7 DECEMBER 2015

DURATION

: (SESSION 1) 08:00 - 11:00

TOTAL MARKS

EXAMINER

MR V. LUKONGA

MODERATOR

MISS. T. NEMARUMANE

NUMBER OF PAGES

6 PAGES

INSTRUCTIONS TO CANDIDATES:

- Please answer all questions.
- · Calculators are allowed
- Question papers must not be handed in.

100

- 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.

...Cont/

30/11/2015 **QUESTION 1**

	Define the following	
1.1	Relaxation allowances	(2)
1.2	Contingency	(2)
1.3	Policy allowance	(2)
1.4	Standard time	(2)
1.5	Work study.	(3)
1.6	List seven types of filling equipment discussed in Form Design chapter.	(7)
1.7	List the Time Study Procedure (step-by-step).	(9)
		[27]

FIRST NAME S-NAME		STUDENT#	COURSE	SIGNATURE	

QUESTION 2

2.1 Use the form provided below to Calculate the sample size for elements 1, 2 & 4 (show calculations) (15)

FILL in the form provided below to answer question 2.2

2.2 Calculate rating for ALL the elements.

(25)

Elem no	Rating	Obs Time	Elem no	Rating	Obs Time
1		18 seconds	1		21 seconds
2		62seconds 2			107cm
3		130 seconds	3 2.28min		2.28min
4		148cm			1.68min
5		2.47min	5		147 seconds
1		19 seconds	1		20 seconds
2		1.05min	2		63 seconds
3	3 1232 cm		3		1236cm
4	4 168cm		4		100 seconds
5		149 seconds	5		244cm
1		22 seconds			
2		62 seconds			
3		1235cm			
4		99 seconds			
5		148 seconds			

[40]

QUESTION 3

Complete the time study sheets provided below.

(33)

Note:

The observed times provided are in seconds

Allowances have been provided in the sheets.

ALL answers must be in 2 decimal places

[33]

FIRST NAME	S-NAME	STUDENT #	COURSE	SIGNATURE

OBSERVATION SHEET

	Time Finished	TEBS	DATE (yy/mm/dd)
		+ TEAS	OPERATION NO;
	- Time Started	+Obs Time OF	TAKEN BY;
		all elements	
m/f			Elapsed time
	= Elapsed Time	= RT	Recorded Time
			Watch Error (ET-RT/ET *100)
		m / f	- Time Started +Obs Time OF all elements

Element Break Points;	TEBS;	
	TEAS;	

Elem no	Rating	Obs Time	Basic Time	Total Basic Time	Elem no	Rating	Obs Time	Basic Time	Total Basic Time	Elem no	Rating	Obs Time	Basic Time	Total Basic Time
1	87	34			1	100	39							
2	122	611			2	123	617							
3	100	54			3	100	54							
4	98	82			4	102	86							
5	101	330			5	100	329							
6					6	101	95							
1	103	40			1	115	45							
2	120	599			2	15	76							
3	98	53			3	93	50							
4	96	81			4	95	80							
5	101	332			5									
6	98	92			6									
	S273033													
1	92	36												
2	120	600												
3	106	57												
4	106	89												
5	97	319										5000000		
6	102	96												

No of Obs

Elem Basic Time

ANALYSIS SHEET

DEDAN	TMENT.								DAT	FF (xaylm	m/dd)			
	MACHINE no;									DATE (yy/mm/dd) OPERATION NO;				
MACH	INE DESC	RIPTI	ON·							KEN BY;				
TASK I	DESCRIPT	CION:	J11,						TA.	LLII DI,	<u> </u>			
TASICI	DESCRIT	1011,												
											-			
												- A.		
								ments						
	7	1	2	3	4	5	6	7	8	9	10	11	12	
	1													
	2													
	3	ļ												
	4	1						-						
	5													
	6													
	7													
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	9													
	10							-						
	11			_			-							
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un	14						-							
2	15	-					-	-						
Cycle Number	16	-					-	-	-			-		
Ŋ.	17	-					-	-						
	18						-			-				
	19	-	-	-				-		-				
	20	-	-				+	-	-	-	-			
	21 22 23		+								-			
	23	 		_				+			+	-		
	24	+	-				+				 			
	25						-	-		-	-			
	26	+	-	-	-			+			-			
	27													
	28	+		-			1	-						
	29		+								-			
Totals	47	 						+		-				

SUMMARY SHEET

DEPARTMENT;	DATE (yy/mm/dd)
MACHINE DISCR;	OPERATION NO;
TASK DESCRIPTION;	TAKEN BY;
PART DESCRIPTION;	

Elm no	Typ e of	Element Description	Element basic time	Volume	Frequenc	Element Repres
	elm				У	Basic Time
		PRESENTATIVE BASIC TIME				
		al needs Allowance (1.6%)				
	Allowa	Allowance (109 cm)				
		RK CONTENT				
,	Tool M	ontingency Allowance (0.15 hrs) aintenance Allowance			4	
		Illowance				
		IC WORK CONTENT				
		owance (210 cm)			·	
	PIED					
		$= (OT \ of \ IW + UT)$				
		(MCT - BT of IW)				
		Time Allowance				
		TIME				
Poli	cy Allo	wance (1 min14seconds)				,
		TIME (SECONDS)		7.00		
		TIME (STD. MIN)				
		TIME (STD. HR)				