



**DICT LEVEL III**

**COMPUTER APPLICATIONS PRACTICAL II**

**MONDAY: 26 November 2018.**

**Time Allowed: 3 hours.**

**Answer ALL questions. Marks allocated to each question are shown at the end of the question.**

**Additional instructions:**

- 1. Save all your work in the flash disk provided and in a folder bearing your registration number.**
- 2. Work on each question should be saved in the subfolder contained in the folder created in number 1 above. The name of the subfolder should correspond to the question number.**
- 3. Your registration number MUST appear as a header on every printout containing your answers.**
- 4. You must indicate the number of the question answered on the header created in number 3 above.**

**Note: The information in numbers 1-4 above must be computer generated.**

**At the end of the examination duration, you should hand in to the invigilator(s):**

- (a) The flash disk containing your work.**
- (b) All printed work.**
- (c) All unused printing paper(s).**

**QUESTION ONE**

Create a word processor document named "Question One".

Use "Question One" document to key in solutions to questions one (a) to (e) below:

- (a) Explain the following spreadsheet concepts:
  - (i) Array formula. (2 marks)
  - (ii) Base address. (2 marks)
  - (iii) Moving border. (2 marks)
- (b) Describe "goal seek" as used in spreadsheets. (2 marks)
- (c) Outline the procedure of selecting a range of non-adjacent cells in a worksheet. (2 marks)
- (d) Explain the term "weak entity" in context of database application. (2 marks)
- (e) Explain the following terms as used in database application:
  - (i) Composite key. (1 mark)
  - (ii) Memo. (1 mark)
  - (iii) Foreign key. (1 mark)

**(Total: 15 marks)**

**QUESTION TWO**

Using a word processor program, create a document named "Question Two".

Use "Question Two" document to save solutions to questions two (a) to (e) below:

- (a) Explain the term "database engine". (1 mark)
- (b) Differentiate between a "report footer" and a "page footer" as used in database applications. (4 marks)

- (c) Describe the functions of each of the following desktop publishing tools:
- (i) Constrained tool. (1 mark)
  - (ii) Eclipse frame. (1 mark)
- (d) Explain the following desktop publishing concepts:
- (i) Callout. (2 marks)
  - (ii) Deck. (2 marks)
  - (iii) Sidebar. (2 marks)
- (e) Differentiate between “colour gradient” and “tint” in context of desktop publishing application. (2 marks)
- (Total: 15 marks)**

**QUESTION THREE**

- (a) Use a desktop publishing application to create a 2.5” by 2” business card formatted as shown in the document below:

**XYZ LABORATORIES &  
GENERAL CONTRACTORS LTD**

**METHOD  
&  
HYCHEM**

**LABORATORY EQUIPMENT FOR  
SCHOOLS, HOSPITALS, COLLEGES  
STOCKISTS OF:-**

1. LABORATORY SINKS
2. EMERGENCY EYE WASH
3. TRAPPED FLOOR GULLYS
4. DILUTION TAYS
5. FUME CUPBOARDS

6. LABORATORY TABLES
7. SPUT AIR CONDITIONERS
8. RAISED FLOORS
9. FLACKTWOODS
10. DYNNAIR FANS

**XYZ Laboratories & General Contractors Limited**  
**Contact Person:** «Name»  
 «Position»  
**Telephone office:** «Office Line» **Mobile:** «Mobile»  
**Email:** «Email»  
**Company Email:** info.xyz.com

(13 marks)

- (b) Using mail merge tool, use the data below to create six business cards from the one created in (a) above:

Name	Position	Office line	Mobile	Email
Charles Maxwell	Operations manager	02938333/4	+542-837321	maxwel@xyz.com
Steve Cameron	Contracts officer	02938333/5	+542-557712	cameron@xyz.com
Esther Olive	Marketing manager	02938333/4	+542-623321	olive@xyz.com
Leah Samuel	Sales representative	02938333/3	+542-221099	samuel@xyz.com
Paula Barnes	General Manager	02938333	+542-011011	barnes@xyz.com
Kline Nester	Secretary	02938332	+542-989892	nester@xyz.com

Save the publication as laboratories and print.

(7 marks)  
**(Total: 20 marks)**

**QUESTION FOUR**

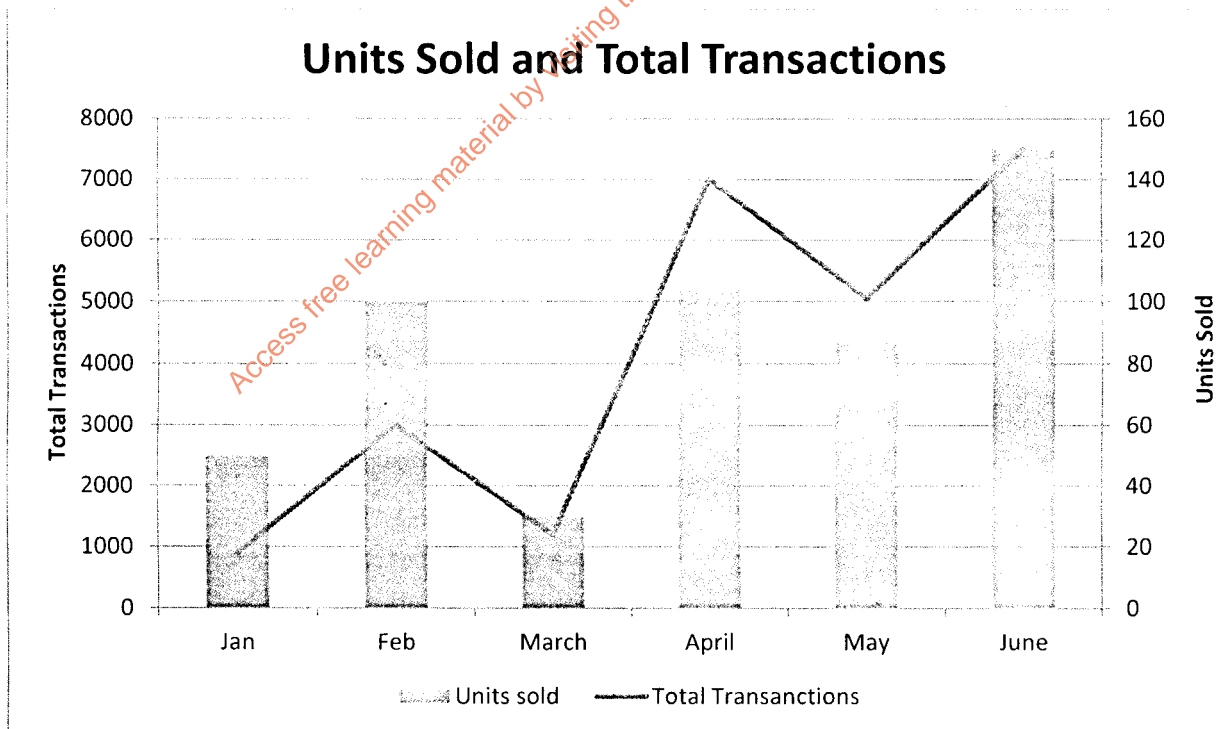
Create a workbook named "Large print".

- (a) On sheet 1 of the "large print" workbook, perform the following tasks:
    - (i) Type the words "FIRST CELL" on Cell A1.
    - (ii) Type the words "LAST CELL" on Cell AJ94.
    - (iii) Format "FIRST CELL" and "LAST CELL" to font size 48.
    - (iv) Print Sheet 1 on one A4 sized paper such that gridlines are shown, the worksheet is centred horizontally and vertically and row and column numbers of the worksheet are indicated.
- (5 marks)

(b) On Sheet 2 of "large print" workbook use table 1 to generate a chart shown below the table:

**Table 1:**

	<b>A</b>	<b>B</b>	<b>C</b>
<b>1</b>	<b>Month</b>	<b>Units Sold</b>	<b>Total Transaction</b>
<b>2</b>	Jan	50	900
<b>3</b>	Feb	100	3000
<b>4</b>	March	30	1200
<b>5</b>	April	104	7000
<b>6</b>	May	87	5050
<b>7</b>	June	150	7500



(8 marks)

(c) On “large print” workbook create a worksheet called “Diploma Results” containing the data below:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	<b>XYZ COLLEGE</b>													
	<b>FIRST NAME</b>	<b>EXCEL</b>	<b>ACCESS</b>	<b>HIV</b>	<b>MIS</b>	<b>WORD</b>	<b>CALCULUS</b>	<b>STATISTICS</b>	<b>DESIGN</b>	<b>RESEARCH</b>	<b>WEB</b>	<b>AVERAGE POINT MARK</b>	<b>OVERALL MEAN GRADE</b>	<b>RANK</b>
1														
2	Joseph	B+	B	A	B-	A	B	B-	A-					
3	Alice	C-	B+	A	A-	A	C	A-		A				
4	Morris	B+	B	A	B+	A	B+	B	A					
5	George	A-	B	B+	D+	A-	B	B	B-		A			
6	Ken	C+	B+	B	B	A	A	B+	D+					
7	Martin	B+	A	C+	A	B-	B	A		A				
8	Oliver	B	B+	A	A-	C	B+	A		A-				
9	Judy	B+	B	B	A	A	A	C+			A			
10	Lucy	B+	B+	A	A-	A	A	A-	C+					
11	Marion	A	A	A	B	A	A	A-			B-			
12	Julius	B+	A	A	C-	A	A-	C+			B+			
13	MEAN													

(4 marks)

(d) The following grading system is used to score students:

Grade	A	A-	B+	B	B-	C+	C	C-	D+
Point	12	11	10	9	8	7	6	5	4

Calculate the following:

- The average point mark for every student on column L. (2 marks)
- Overall mean grade on column M. (2 marks)
- Rank each student on column N by the “average point mark”. (2 marks)

(e) Calculate the mean grade for every subject on row 13. (2 marks)

Save “large print” workbook and print “sheet 2” and “Diploma Results”.

(Total: 25 marks)

### QUESTION FIVE

Jijenge Sacco is operating on a manual system. The management has contracted you to develop an automated system based on a database application.

The data below is an extract of members details, beneficiaries and contribution from the current manual system:

#### Member Details

Member No	Full Name	Mobile Number	Location	Gender	Passport
1	David Ouma	0720123456	Mombasa	Male	Choose a photo of your choice
2	Evalyne Muthui	0721123456	Kakamega	Female	Choose a photo of your choice

### Beneficiaries

#### David Ouma

Beneficiary No	Full Name	Relationship
1	Veronica Ouma	Daughter
2	Simon Ouma	Son

#### Evalyne Muthui

Beneficiary No	Full Name	Relationship
1	Allan Muthui	Son
2	Amani Muthui	Daughter

### Contribution

#### David Ouma

Contribution No	Monthly Contribution	Additional Contribution	Date Paid
1	15,000	0	15 October, 2018
2	15,000	0	21 November, 2018

#### Evalyne Muthui

Contribution No	Monthly Contribution	Additional Contribution	Date Paid
1	20,000	0	22 October, 2018
2		5,000	21 November, 2018

#### **Required:**

Analyse the members data given above and perform the following tasks:

- (a) Create a database called "Jijenge Sacco" with appropriate tables and relationships.

(4 marks)

(b) Create a form called "Member Details" containing beneficiary(s) and contribution tabs as shown below:

Member Details

**Member No:** 1

**Full name:** David Ouma


**Mobile:** 0720123456

**Location:** Mombasa

**Gender:**

Male  Female

**Passport**



**Beneficiary(s) Contribution**

Beneficiary No	Beneficiary Name	Relationship
1	Veronica Ouma	Daughter
2	Simon Ouma	Son

\*

Son  
Daughter  
Wife  
Husband

Member Details

**Member No:** 2

**Full name:** Evalyne Muthui


**Mobile:** 0721123456

**Location:** Kakamega

**Gender:**

Male  Female

**Passport**



**Beneficiary(s) Contribution**

Contribution No	Monthly Contribution	Additional Contribution	Date Paid
1	Sh20,000.00		10/22/2018
2		Sh5,000.00	11/21/2018

\*

(12 marks)

(c) Use the "Member Details", "Beneficiaries" and "Contribution" data given at the beginning of question five to populate the database using "Member Details" form. (5 marks)

(d) Create a report to display the fields: Member No., Full Name, Monthly Contribution, Additional Contribution and Date Paid.

Save the report as statement. (4 marks)

Save "Jijenge Sacco" database and print "Statement" report.

(Total: 25 marks)