

**P840/2**  
**Computer Studies**  
**Practice Questions**  
**2<sup>1</sup>/<sub>4</sub> Hours**

**Question 1**

The information given below is on products, suppliers and orders for a departmental store.

**Table 1** (products table) contains four fields representing product ID, the name of the product, the retail price of a unit of the product and the number of units of the product in stock respectively. The unique identifier of a product is its “**product ID**”.

**Table 2** (suppliers table) contains five fields representing supplier ID, the name of the supplier, the supplier’s contact address, and town and telephone number respectively. The unique identifier of a supplier is the “**supplier ID**”.

**Table 3** (orders table) contains seven fields representing order ID, products ID, supplier ID, the wholesale price of a unit of the number of units of the product, the date the product was ordered from the supplier, the number of units of the product, the date the product was ordered and the date the ordered product was received respectively. The unique identifier of a product is its **order ID**.

Table 1 (Products table)

1	Kimbo 1 kg	100	300
2	Cowboy 1 kg	120	180
3	Batteries AAA	50	200
4	Salt 1 kg	25	45
5	Sprite 300 ml	20	87
6	Dasani 500 ml	30	65
7	Baking flour 2 kg	89	89
8	Batteries D	60	32
9	Layers mash 70 kg	10,50	54
10	Omo 200g	35	21

Table 2 (Suppliers table)

1001	Eveready	54839	Kitale	77777
1002	Unilever	2361	Thika	256782
1003	Bidco	3345	Nairobi	345671
1004	Coca cola	45621	Nairobi	456781
1005	Unga Ltd	52428	Nakuru	26314

1006	Kay salt	64365	Mombasa	332233
------	----------	-------	---------	--------

**Table 3 (Orders table)**

10001	1	1002	23	20	12/04/07	13/04
10002	5	1003	16	40	11/11/06	
10004	2	1002	25	400	08/08/06	23/09/06
10005	4	1002	18	45	04/04/07	
10006	8	1006	24	50	12/12/06	
10008	7	1005	56	100	02/02/06	
10010	6	1003	20	20	14/03/07	
10013	5	1002	16	100	04/05/07	06/05/07

- (a) Use the information to create a database named **Final Database** and enter the data in tables 1, 2 and 3. (30 Marks)
- (b) (i) Create the relationships between the tables. (4 Marks)
- (ii) Create a query to show the name of each product ordered the retail price, the number of units ordered and the wholesale price. The query should contain products whose retail price is below Kshs. 50. Save as CHEAP. (7 Marks)
- (c) Create a form to allow the entering of the product details and add an appropriate form title. Save as product form. (5 Marks)
- (d) Print the three tables and the query. (4 Marks)

## Question 2

The proprietor of *Crystalz Medical Centre* has a son who is a student of BIT at Makerere University. The son designed a simple database to help his mother manage data of employees and other resources of the Medical Centre. Below is are part of the database objects which he included in the Medical Center's Database

(i) Using the most available **DBMS** on your computer, create a database file and save it as *Crystalz Medical Centre*. (01 Mark)

(ii) Study table 3.1 and use the data to create a **table** in design view; save it as *Doc\_Personal Data*. (07Marks)

**Table 3.1**

Field Name	Field Size & Other Details	Description
Doc_No	e.g CMC090, (ii) Will be <u>unique</u> to each doctor	The Doctors Number [1]
Doc_Name	Maximum of 20 Characters	The Doctor's Name [1]
Specialty	Maximum of 20 Characters	The field in which the doctor specialized [1]
Shift	Use a data type which allows the user to choose from already existing options in a table	The Shift in which the Doctor' worked [1]
Residence	Use a data type which allows the user to choose from already existing options in a table	Whether Doctor resides in the Doctor's Hostel or out of the Hostel [1]
Hrs per month	Completely Numeric field	Hours of work offered by each doctor [1]
Unit Pay	Completely Numeric field	Unit payment per hour of work [1]
Monthly Pay	Completely numeric field	Total payment earned per month

(iii) Create a form for **Table 3.1** above and save it as *Personal\_Form*.

Include a header [CRYSTALZ MEDICAL CENTRE] and format it accordingly

(02 Marks)

(iv) Use the form you have created in (iii) above to enter the records in

**Table 3.2**

Doc_No	Doc_Name	Speciality	Shift	Residence	Hrs per Month	Unit Pay	Monthly Pay
CMC040	Hyuha Mark	Peadiatrician	Morning	Doctor's Hostel	27	15,000	
CMC015	Epelu Berna	ENT Specialist	Mid Morn	Non- Resident	54	25,000	
CMC016	Kityo Harry	Gyneacologist	Morning	Non- Resident	66	15,000	
CMC021	Kiwuwa Cate	Peadiatrician	Night	Doctor's Hostel	45	20,000	
CMC022	Male Henry	Gyneacologist	Night	Doctor's Hostel	52	21,000	
CMC023	Boona Ruth	Peadiatrician	Mid Morn	Non- Resident	15	22,000	

(03 Marks)

(v) In the form you have created in (iv) above, calculate the **Monthly Pay** earned by each doctor which is a product of **Hrs Per Month** and **Unit Pay** (02 Marks)

(vi) Study **Table 3.3** and use the data to create another **table** in design view; save it as **Doc\_Schedule**. (04 Marks)

(vii) Create a form for **Table 3.3** and use it to enter the records shown in the **Table 3.4**. (03 Marks)

Save it as **Schedule\_Form**.

(viii) Create a **one-to-one** relationship between the two tables in your database file. (02 Marks)

**Table 3.3**

Field Name	Field Size & Other Details	Description
Doc_No	(i) e.g CMC090, (ii) Will be <u>unique</u> to each doctor	The Doctors Number
Date	It will display the date when the doctor was on shift	The Day and date when he offered his services [1]
Room_No	There are only 3 rooms i.e [Rm1, Rm2 or Rm3] If other Room Numbers are entered, this message will appear on screen " <b>Wrong Room No</b> "	The room in which the doctor treated the patient [2]
Assisting Nurse	Maximum of 18 Characters	The Nurse who assists the doctor [1]
Patient's Name	Maximum of 20 Characters	Name of the patient who was treated [1]
Diagnosis	Must allow long lines of text	What the doctor diagnosed [1]

**Table 3.4**

Doc_No	Date	Room_No	Assisting Nurse	Patient's Name	Diagnosis
CMC016	06-Jun-06	Rm1	Betty Kaana	Alvin Kenyana	Malaria
CMC040	06-Jun-06	Rm3	Charles Odong	Ketra Musiime	Abdominal Infection
CMC021	05-Jun-06	Rm2	Cathy Nambi	Ian Bazibwe	Asthma Attack
CMC022	10-Jun-06	Rm3	Betty Kaana	Jolly Kazibwe	Malaria
CMC023	08-Jun-06	Rm2	Betty Kaana	Ian Bazibwe	Peptic Ulcer
CMC015	05-Jun-06	Rm2	Charles Odong	Jolly Kazibwe	Asthma Attack

(ix) Create a report for the table **Doc\_Schedule** and group records according to **Assisting Nurse** and save it as **Nurses**.

Include a report footer of your Name and Index No. (02 Marks)

(x) Create a query showing **Doc\_ID, Doc\_Name, Patient's Name, Hrs Per Month, Unit Pay** and **Monthly Pay** and in it calculate the Monthly Pay which is a product of Unit Pay and Hrs per Month.

(02 Marks)

(xi) Use a database object to extract only those patients who were diagnosed with **Malaria**; show the **Diagnosis, Name of Doctor** who treated them, **Nurse** and the **Date** when they reported to the Medical Centre.

Save as **Malaria Patients** and Print your output

(02 Marks)

(xii) Ian Bazibwe and Jolly Kazibwe visited the Medical Centre twice that week. Use an appropriate Database object to identify the **Doctors' Names** who treated them, what they were **diagnosed** with **Patient's Name** and which **room** they were treated from.

Save as **Frequent Patients** and Print your output

(02 Marks)