

Question 1 - Databases

1. a). A hospital uses a database to maintain data about its employees. Create a database file named **A:\EMPLOYEE**. (1mark)

b). Create a table called **A:\EMPLOYEE1** with the following fields and hence enter data into it as shown in fig 1 below. NB: Choose an appropriate primary key. (14marks)

- EMP NO
- NAME
- DATE OF BIRTH
- DEPARTMENT
- BASIC PAY

Fig 1

Emp no	Name	Date of birth	Department	Gross Pay
01	John Kirui	16/2/1972	Computer	28000
02	Margaret Wairimu	2/2/1960	Medical	30000
03	Jane Cheronno	2/5/1970	management	15000
04	Victor Oduor	8/12/1981	Accounts	25000
05	Harry Wanyama	23/6/1983	Medical	30000
06	Jacob Kiprono	19/4/1973	Management	45000
07	Ali Mohammed	1/1/1969	Medical	30000
08	Daniel Omondi	3/5/1983	Accounts	25000
09	Everlyne Kitune	11/3/1971	Medical	20000
10	Nancy Kerubo	22/9/1980	Medical	20000

c) (i). Insert **TWO** new fields to hold the employee's Profession and Deductions. (4marks)

(ii). Data for included fields is as follows;

Profession

Mohammed, Wanyama and Wairimu are Doctors. Oduor and Omondi are accountants. Kiprono is an Administartor, Kirui is a systems analyst and Cheronno is a secretary.

Deductions

<u>Emp no</u>	<u>Amount</u>
07, 05, 02	8,000
04, 08	7,500
06	10,000
01	12,000
03	3,500
09, 10	4,000

Enter the above data into the respective fields. (6marks)

- (iii). Sort the records in ascending order based on the name field and save as **A:\EMPLOYEE2** (3marks)
- d) (i). From **A:\EMPLOYEE2**, extract a list of employees who were born between 1960 and 1972 both years inclusive and are accountants, nurses or doctors. Write down on paper provided the query expression you used to extract the data. Save the extracted list as **A:\LIST1**. (8marks)
- (ii). Remove the date and occupation criteria on **LIST1**. Add a calculated field to calculate the Netpay of all employees as GrossPay – Deductions. Save as **A:\LIST2**. (7marks)
- e). Generate a columnar report based on **LIST2** with the following fields; Emp no, Name, Department and NetPay. Sum up the NetPay for all employees in the report. Save your report as **A:\REPORT**. (8½marks)
- f). Print EMPLOYEE1, EMPLOYEE2, LIST1, LIST2 and REPORT. (2½ marks)