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COMPUTER STUDIES
Paper 3
(Project)
April 2022 to October 2022
7 months



THE KENYA NATIONAL EXAMINATIONS COUNCIL
Kenya Certificate of Secondary Education
Computer Studies
Paper 3
(Project)
7 months

Instructions to candidates

- (a) *Candidates are expected to use a Database Management System when developing their projects.*
- (b) *A soft copy of the system and documentation must be stored in a removable storage medium (CD-R/CD-RW/DVD-R/DVD-RW).*
- (c) *Candidate's name and index number should appear on the cover page of the documentation and on the storage medium.*
- (d) *Each candidate should hand in a hard copy and a soft copy of the project documentation.*
- (e) ***Candidates should answer the questions in English.***

This paper consists of 3 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

NEKTA MANAGEMENT SYSTEM

Nekta is a company that deals with beekeeping and selling of honey. The company offers the following services:

- selling of beehives and associated accessories to bee farmers;
- setting up of the beehives for the bee farmers;
- offering of training on beekeeping;
- buying of honey-related products from farmers for resale.

The company sells beekeeping accessories in three packages namely: single hive, mini package and full package as per the following descriptions:

- A single hive is one beehive and its associated accessories for setting up.
- A mini package consists of six beehives, harvesting accessories, beehive setting up and training for one person for one day.
- A full package consists of twelve beehives and a honey extractor. It also includes training for two people for one day and honey harvesting kit for two people.

The cost of each of the packages is as shown in **Table 1**:

Table 1: Cost of the Packages

Package	Cost per package (KSh)
Single hive	15,000
Mini package	120,000
Full package	190,000

Other services offered by the company are:

- training at a cost of KSh 7,000 per person;
- sale of accessories at KSh 2,500 per unit;
- sale of honey harvesting kits at KSh 600 per unit;
- sale of honey extractors at KSh 13,000 per unit.

The company also buys honey from farmers at KSh 900 per kg and bee products at KSh 1,200 per kg, for further processing and subsequent sales to consumers. A farmer whose sales is below KSh 20,000 is paid in cash, while sales between KSh 20,000 and KSh 80,000 are paid by mobile money transfer. Any sales exceeding KSh 80,000 are paid via Electronic Funds Transfer (EFT).

A farmer seeking services from the company is required to provide personal details. The details are captured and the farmer is required to make full payments for the services sought. Once the payment has been verified, services are approved and offered. If the payment is for training services, the trainee is then provided with the training schedule.

The company also provides transport services to farmers and are charged based on the destination and the quantity of the items as shown in **Table 2:**

Table 2: Cost of Transport Services

Transport services	Cost (KSh)
Single	2,000 per package
Mini package	20 per km
Full package	25 per km
Accessories	30 per item
Harvesting kit	30 per item
Honey extractor	100 per item

The company intends to use a database to manage their operations. Develop a well-documented computerised database system for the company that would:

1. maintain records of bee farmers;
2. maintain records of trainee farmers;
3. maintain records of services rendered and products sold by the company;
4. capture payments for each package;
5. capture income from various sales and training services;
6. capture details of purchases from farmers;
7. compute each of the following:
 - (a) payments for the services to farmers;
 - (b) payments made to farmers for honey deliveries;
 - (c) total sales to clients;
 - (d) transport earnings;
 - (e) income from training;
 - (f) total income for the company;
8. generate appropriate reports.