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COMPUTER STUDIES
Paper 3
(Project)
January 2026 to July 2026
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 (flash disk).*
(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 hardcopy 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.

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AZANI INTERNET SERVICE PROVIDER INFORMATION SYSTEM

Azani is a company that deals with provision of internet services and internet infrastructure to learning institutions. These institutions include primary, junior, senior schools and colleges.

Institutions interested in the services are required to pay a registration fee of KSh 8,500 to the company. The company then offers various internet services where the cost per month is based on the bandwidth as detailed in Table 1 below.

Table 1: Cost of Internet Services in KSh per Bandwidth per month

Bandwidth per month	Cost (KSh)
4 MBPS	1,200
10 MBPS	2,000
20 MBPS	3,500
25 MBPS	4,000
50 MBPS	7,000

When an institution requests for their services, the company visits the site to establish the readiness of the institution to have internet installed. The company finds out the number of users and infrastructure requirements such as computers and Local Area Network (LAN). An institution that has all the requirements and is ready for connectivity, pays an installation fee of KSh 10,000. If the institution has not met the requirements, they may purchase personal computers from Azani Company at KSh 40,000 each. They may also purchase LAN nodes as detailed in Table 2 below.

Table 2: Cost of Local Area Network (LAN) Nodes in KSh

Number of nodes	Cost (KSh)
2 - 10	10,000
11 - 20	20,000
21 - 40	30,000
41 - 100	40,000

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An institution that would like to upgrade to a higher bandwidth is offered a 10% discount of the cost of the bandwidth they are upgrading to.

All institutions using the internet services are required to pay by the end of the current month. An institution which fails to pay is surcharged a fine of 15% of the amount as an overdue fine. The internet services will be disconnected if the amount due and the fine will not have been paid by the 10th day of the subsequent month. Once an institution pays the monthly bill and the overdue fine, a fee of KSh 1,000 is surcharged for re-connection.

Develop a fully documented database management system for Azani company that would perform the following tasks.

1. Register institutions requiring the services together with personal details of the contact person.
2. Capture the following payments:
    (a) registration fees;
    (b) installation fees;
    (c) monthly payments.
3. Generate the following:
    (a) the registered institutions;
    (b) list of defaulters;
    (c) list of institutions with disconnection issues;
    (d) details of infrastructural requirements for each institution.
4. Perform the following computation:
    (a) total installation cost for each institution;
    (b) cost of personal computers and LAN services for institutions with assorted services;
    (c) total monthly charges for upgraded internet services;
    (d) total monthly charges for internet services, overdue fines and re-connection fees generated from each category of institution;
    (e) aggregate amount for each service sorted by an institution.
5. Generate appropriate reports.