

451/3
COMPUTER STUDIES
PAPER 3
(Project)
MARCH TO SEPTEMBER 2014
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 database management systems in developing their projects.*
- (b) *A soft copy of the work done must be stored in a removable storage medium.*
- (c) *Your name and index number should appear on the cover page of your 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.

KABUMBU FOOTBALL LEAGUE MANAGEMENT INFORMATION SYSTEM

Kabumbu Football League (KFL) is a secondary school organisation charged with managing all the inter-school football competitions in a county. There are a total of 14 schools which have enrolled their teams and new schools are required to register in order to present their teams. Registration fee for a team is Ksh.50,000 per year. Each school can only register one team.

A team presented comprises of 18 student players and a coach who is a teacher in the school where the team belongs. At the beginning of every football game season, each school is required to furnish KFL management with the team's details.

All football matches between schools in the county are scheduled for term one of every year. The game is played in a league basis, where each team is paired with every other team. Each pair of teams plays two matches; home and away (one match in each of the schools in the pair). The season's fixtures are determined before the beginning of the season.

Referees who will be officiating the matches are teachers from the participating schools. Schools presenting referees are required to provide their details to KFL. Referees are prohibited from officiating matches involving their schools.

In a match, the goals scored by each team and the goal scorers are recorded. A win in a game earns a team 3 points, a draw 1 point and a loss 0. A player who violates a football rule during a match earns a penalty card. The penalty card earned is recorded against the player. A team whose opponent fails to honour a fixture is awarded a win of 2 points while the opponent does not earn any point. After every game, a league table is updated based on the results of the match.

At the end of the season, 30% of the amount collected as registration fee is awarded to the best three teams in the ratio 3:2:1 respectively. The best team carries the county's trophy for the season.

The team that earns the lowest number of penalty cards by the end of the season is considered most disciplined. The three most disciplined teams are each awarded a certificate. A team that fails to honour a fixture during the season is not eligible for this award. The three least disciplined teams are reprimanded.

Develop a well-documented system that will:

- (a) register the:
 - (i) schools;
 - (ii) referees;
 - (iii) coaches;
 - (iv) players in each team.
- (b) keep a record of payments by each school.
- (c) keep a schedule of fixtures for matches involving schools including their officiating referees.
- (d) capture a list of match results for every team over the season;
- (e) generate a league table in order of merit.
- (f) display a list of the:
 - (i) players in each team;
 - (ii) coaches;
 - (iii) schools and the amount of money collected from each;
 - (iv) top ten scorers in descending order of scores;
 - (v) teams qualifying for the awards and the amount that each gets;
 - (vi) teams qualifying for certificates;
 - (vii) teams reprimanded.