HILLVIEW COLLEGE SBA 2025/2026

Sports Day IT SBA

Introduction:

Your school is preparing for its annual **Sports Day**, which will feature four sports houses: **Alpha**, **Beta**, **Delta**, and **Gamma**. Each house needs to raise funds to cover the registration fees for their students and the event's expenses (tent rentals, food, drinks, etc.).

As sports administrator, you are in charge of managing the fundraising activities for each sports house, you will use **digital tools** to organize and track funds, communicate with parents and students, and promote the event. This assignment will involve the creation of several components, including a **spreadsheet**, **database**, **word processing**, a **website** and a **program** to help facilitate and promote the event.

Spreadsheet Section

1. Spreadsheet: Sports Day Event & fund-raising Tracker

Create **spreadsheets** to track and organize the registration & funds raised for Each student in EACH sports house. This spreadsheet should include:

- **Sports House name**

- **Student Id**

- **Student First & Last Name** – List all the students who will be participating in each sports house.

- **Gender** – Male or Female

- **Registration Type** – Track or Field Event per student. A student could ONLY compete in one type of event.

- **Event Registered:** Each student could take part in ONE event: ***Track: 100m, 200m, 400m, 800m* OR** Field events: ***Discuss, Javelin, Shot Putt and Long Jump***.

- **Registration Fee Paid (USD)** – Amount paid by each student for registration. Track Event Registration is $50 USD each & Field Event Registration is $40 USD. Use an *IF Statement* based on the Registration Type to calculate the appropriate registration fee. The registration fee must be in USD.

- **Registration Fee (TTD)** – Conversion of the USD registration fee to TTD (then converted to Trinidad and Tobago Dollars; 1 USD = 8 TTD)

- **Total Raised (TTD)** – The total EACH house has raised (sum of registration in TTD).

- **Count of students registered per house**.

On separate sheet(s), execute the following:

- **House Expenses sheet** – Amount allocated for each house's expenses on a separate sheet. The following are the expenses for all houses (in TTD): tent rental: $400 per house, food: $25 per student, drinks: $7 per student, chairs: $9 per student, security: $500 per house. Show the total expenses for EACH house in a table.

- **Income vs Expenditure sheet** – A table on a new sheet should show each house's total income and total expenditure

The following should be delivered in the spreadsheet on separate sheets:

- **A simple filter** showing all the FEMALE students for Delta House.
- **An advanced filter** for filtering MALE, FIELD event students for Beta House.
- **Create a pivot table** showing EACH house and the number persons taking part in the Track & Field events.
- **Create a Pie Chart** showing each house's total registration funds collected in TTD.
- **Create a bar graph** showing the Income vs Expenditure per house

2. Database: Student and Donor Information

You should use a suitable application to manage data on athletes who have registered to participate for each house. Data on each *Athlete, such as Student ID, First name, Last name, gender, age, registration type (Field/Track) and event registered* must be stored. *Athletes' payment data* must also be stored ie *House Code, Student ID and Payment (TTD).*

In addition, the **house** must note which student is assigned to each student. There are four (4) houses, *EACH house has a specific four-digit section code and a house name.* Your database should contain at least three tables.

Populate your database with at least twelve but not more than fifteen athletes in each house. You should test your database by performing queries to show:

1.   The last name, age and gender of all athletes registered to run Track. Name this query **Event Track**.

2.   The Student ID, first name, last name and age of all female campers between thirteen and fifteen years old. Name this query **Teen Athletes**.

3.   The Student ID, Last Name, House Name and payment of all athletes are taking part in Field events. The data supplied should be sorted in ascending order by Last name. Name this query **House Field**.

4.   Uniforms for the long jump event would not be ready in time for the sports day; therefore, all long jump athletes would be getting back 25% rebate of their payment. Calculate this rebate and show it along with the Student ID, full name, house name and payment of all campers. Name this query **Rebate**.

5.   ONE parent has asked to be refunded their payment, as they were forced to travel prior to the date of sports day. Delete the record that pertains to this athlete's student ID. Name this query **Delete Athlete**.

6.   Generate a report that shows the Student Ids, full names, age, registration type, event registered and total payments for all athletes who are taking part in sports day. The report should be grouped by Houses and sorted in descending order by Event Registered. The report should calculate and show the total amount of funds paid per house by the athletes & an overall total. This report should be given a suitable title utilizing two lines.

7.   Create a form and sub form showing the Athletes and the payments sub form.

3. Word Processing Section

- **Mail Merge: Fundraising Letter**

Using **word processing software**, create a **mail merge** to send a personalized letter to the parents of the students in your house. The letter should include:

- **Introduction**: A brief explanation of the upcoming Sports Day event. Indicate the student's name, the registration type and the event registered for.

- **Event Details Table**: Date, time and location of the Sports Day event placed into a table.

- **Deadline**: The date by which funds need to be submitted.

- **Contact Information**: A way for parents to get in touch with you or the fundraising coordinator.

Use your **database** to personalize the letter by inserting the student's name and the amount raised from their activities.

- **Fillable Form – Athletes Registration**

Create a Fillable Form to allow the students to register for the Sports Day. Prompt the student to enter his/her information (Use Applicant Table from the Database). Utilize the Text Boxes, Date Picker and Check Boxes/ Drop Down Lists options of the Fillable form design.
Also, Margins should be 1 inch all around and appropriate heading and footers. Utilize formatting features (Bold, Italics and Underline etc.) to emphasize key data to the persons signing up. Form should have a letterhead and a footer.

5. Website: Promoting Sports Day

You are tasked with creating a **simple website** using MS Word to promote the Sports Day. The website should include at least **3 webpages**:

- **Page 1: Sports Day Home Page**

    o Overview of the Sports Day event.

    o All sports day information.

    o Should include a link to the school's official website

- **Page 2: Houses Page**

    o All information on each house: name, logo, colour, motto

- **Page 3: Contact Page**

    o Contact information for school: telephone number and email addresses (hyperlink)

Make sure the website is easy to navigate, visually appealing, and includes all the necessary details to encourage people to participate.

Problem Solving Section

1. Develop an algorithm or write pseudocode that accepts:

    a) the student id numbers, full names and houses of 12 athletes.

    b) the registration type (track/field).

    c) The algorithm should determine the amount paid by each athlete is based on the registration type entered. It should also determine the number of athletes who have registered in each house. The names of athletes and the house should be printed.

    d) A listing of each sports house and the total number of athletes registered to play in each house should also be printed, along with the total amount of money paid in each house.

2. Using data from your database, make a random listing of athletes, their houses, registration and event. **No more than six athletes should be selected to test.** Using this listing, design a **trace table** that traces the algorithm designed above in part 1.

3. Using the algorithm designed above, create a PASCAL program to represent the design