1. Design a Windows application named Wallpaper App to calculate the number of single rolls of wallpaper required to cover a room.
2. Create an interface as shown in Figure 1. There are four combo boxes having a drop down style. Display the range of values for the room's length, width and height from 10 to 35 in the combo boxes while the value in the combo box for the roll coverage should range from 40 to 50 with an increment of 0.5.
3. The calculate button's click event procedure should calculate and display the number of single rolls of wallpaper required to cover a room. Use a Sub procedure to make the calculation. The number of the single roll should be displayed as an integer. (i.e the number of single roll having a decimal point should be rounded off to the next highest integer).
4. The number of roll should be cleared when changes are made on any of the combo boxes.
5. Save and test the application. (For example, if the roll coverage is 45.5 sqrFt and the length, width and height of the room are 15, 18 and 20 respectively, the number of single roll will be 30).

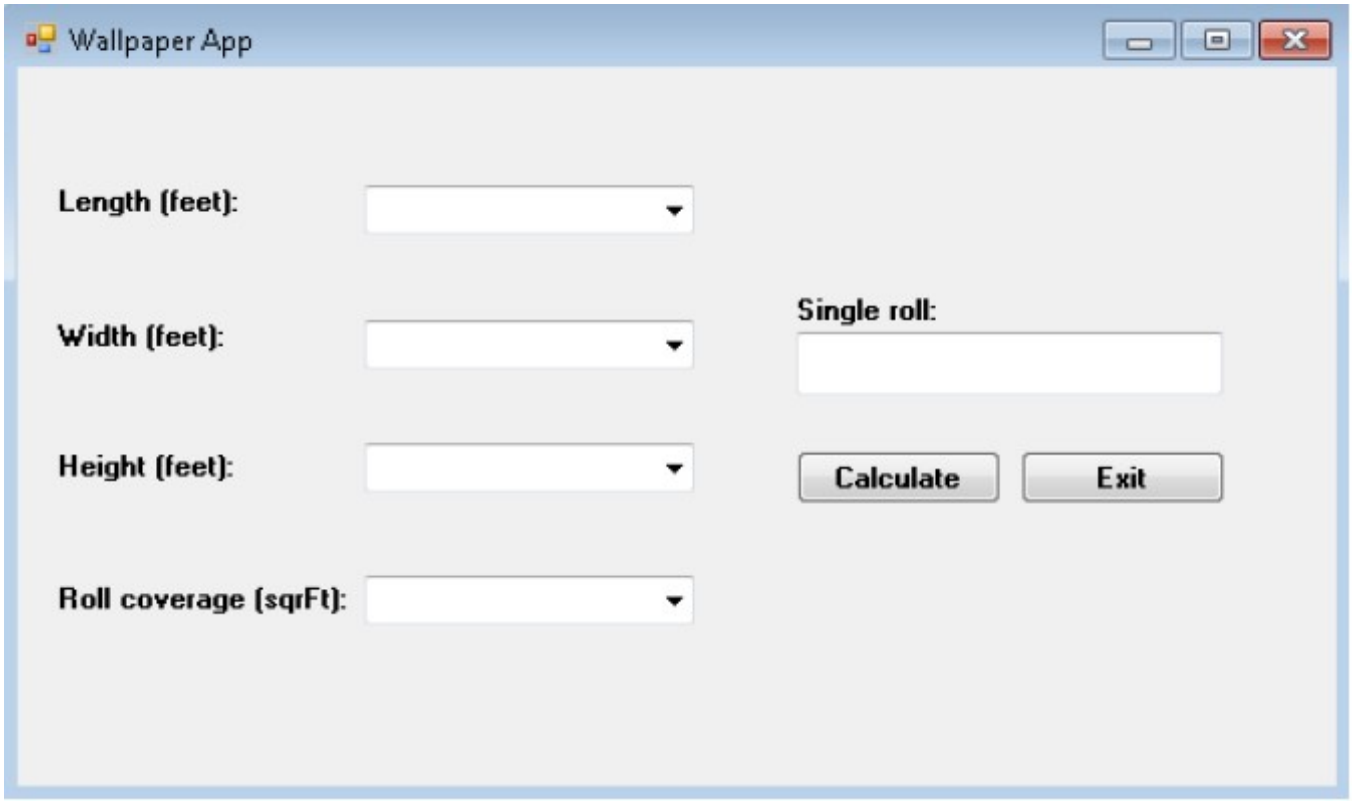

Figure 1: Wallpaper App interface

QUESTION TWO (30 MARKS)

The Financial officer at RGIT wants you to develop an application that will evaluate the company's asset's annual depreciation using the double-declining balance and sum-of-the years' digit method. The Financial officer will enter the asset's cost, useful life (in years), and salvage value (which is the value of the asset at the end of its useful life). The sample of the application can be seen in Figure 2. The interface provides text boxes for entering the asset cost and salvage value. It also provides a list box for selecting the useful life, which ranges from 3 to 20 years. The depreciation amounts are displayed in

the list boxes. (You can use the DDB and SYD functions in Microsoft Excel to verify the amounts shown in Figure 2 are correct). Create a windows form application using the name RGIT annual asset depreciation App. You can use the visual basic's

Financial.DDB method to calculate the double-declining balance depreciation and use its Financial.SYD method to calculate the sum-of-the-years' digit depreciation. The Financial.DDB method syntax is Financial.DDB (cost, salvage, life, period). The Financial.SYD method syntax is Financial.SYD (cost, salvage, life, period). In both syntaxes, the cost, salvage and life arguments are the asset's cost, salvage value and useful life respectively. The period argument is the period for which you want the depreciation amount calculated. Both methods return the depreciation amount as double number. Code the application, save the solution and run the application

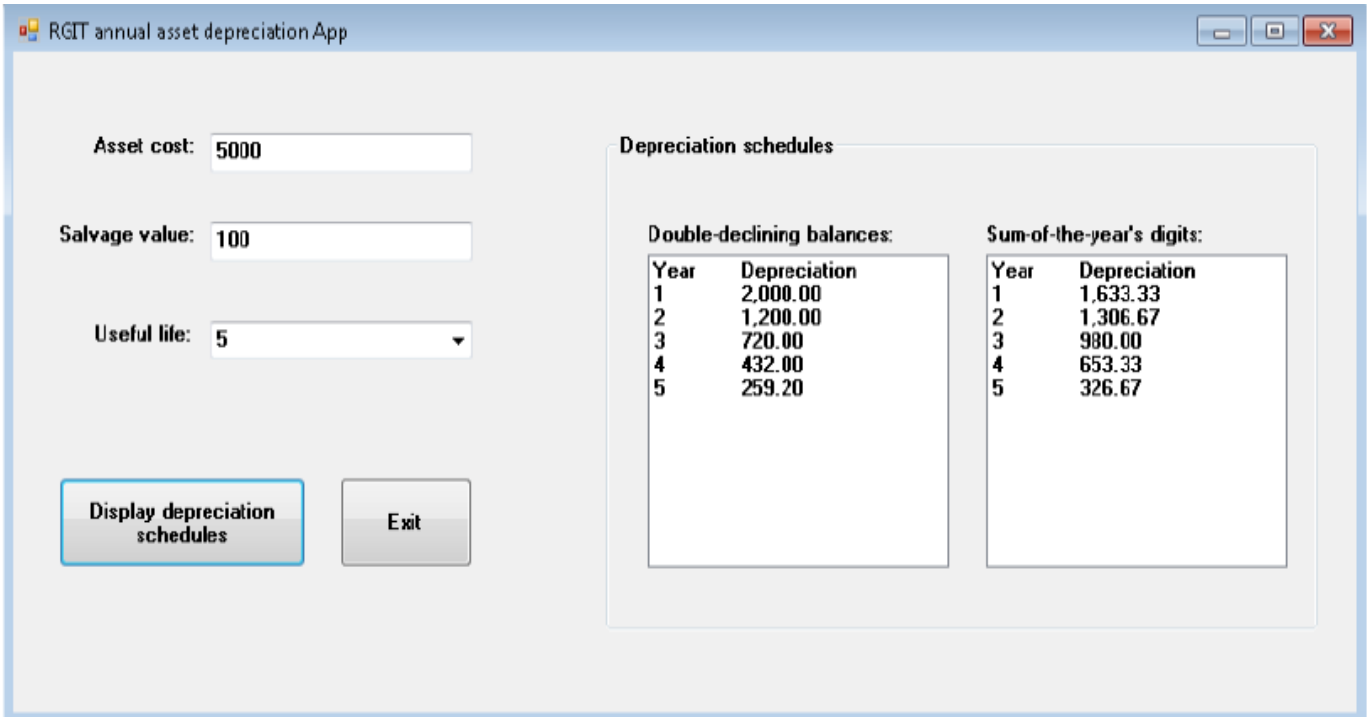

Figure 2: Interface for RGIT annual asset depreciation App

QUESTION THREE (30 MARKS)

The sales manager at ITI Hub has asked you to design and implement a Windows application that will display the total sales made in there three regions in South Africa: Kwazulu-Natal, Gauteng and Western cape. The application should display the total sales of the company as well as the percentage that each region contributed to the total sales. Display the sales amounts with a Rand sign and no decimal places. Display the percentages with a percent symbol with no decimal places. The sales amounts for six months are shown in Figure 3. Create a windows application form for this project using the name ITI Hub regional sales. Store the sales amount in a two-dimensional array. Create a suitable interface with an image for the project and run the application.

Month	Kwazulu-Natal sales (R)	Gauteng sales (R)	Western cape sales (R)
1	120,000	90,000	65,000
2	190,000	85,000	64,000
3	175,000	80,000	71,000
4	188,000	83,000	67,000
5	125,000	87,000	65,000
6	163,000	80,000	64,000

Figure 3: ITI Hub sales amount