8 (d)	Wagons come in two different categories: open wagons (without a roof) and closed wagons (with a roof). Closed wagons can be either refrigerated or non-refrigerated. In an object-oriented programming language, five classes are to be created,		
	named Wagon , OpenWagon , ClosedWagon , RefrigeratedWagon and NonRefrigeratedWagon .		
	Draw an inheritance diagram for the five classes.	[3 marks]	



8 (e) The Wagon class has data fields OwnerName, Weight and NumberOfWheels.

The class definition for Wagon is:

The **ClosedWagon** class has the following additional data fields:

- Height: The height of the wagon in metres, which could be a non-integer number
- NumberOfDoors: The number of doors that can be used to access the wagon

You should include the necessary data fields and any additional procedures or

• **SuitableForFoodstuffs**: A true or false value that indicates if it is safe to carry food in the wagon or not.

Write the class definition for **ClosedWagon**.

4 marks]

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