**1. Use a program design language to produce the design for the validation routines. Perform all validation as required for the design. Any assumptions you make about the design must be documented.**

**Answer:**

Numeric

**Validate Membership Number**

**Structure Chart**

Is Numeric

**Not Numeric**

6 Digits

Modules 11

Is Modules 11

Error Code

Error Code

Error Code

**Validate Modules 11**

**Display Error Message**

**Display Error Message**

Membership Number

**Not Modules 11**

**Display Error Message**

**Member Form**

**Validate 6 Digits**

Is 6 Digits

**Not 6 Digits**

Is Date of Birth

Date of Birth

Error Code

**Display Error Message**

**Date of Birth**

**Validate Membership**

**Type**

**Validate Date of Birth**

Error Code

F, S, T or B

**Display Error Message**

**Membership**

**Type**

Error Code

Is Sex

Sex

**Validate Sex**

**Display Error Message**

**Sex**

Is F, S, T or B

**Validate Join Date**

Join Date

Is Join Date

**Join Date**

Error Code

**Display Error Message**

**Validate File**

Open File

Can’t Open File

**File Open**

Error Code

**Display Error Message**

**Validate Subscription Month**

Subscription Month

Is Subscription Month

**Subscription Month**

**Display Error Message**

Error Code