Data types

Two marks

1. **What are Modifiers? Write any two**
   Modifiers are used to alter the meaning of the basic data types.
   short int represents small integer value and it requires two byte of memory location to store the value. It can store the value ranging from -32768 to 32767.
   The **long int** represent longer than int. long int requires 4 bytes of memory to store the value.
   The **unsigned int** unsigned integer are always represent positive number ranging from 0 to 65535. Two store these value we require two byte.
2. **What is a variable? Give its declaration syntax**
   A variable is an object or element and it is allowed change during the execution of the program.

   Syntax: **Data-type variablename1, variablename2;**

3. **Write the syntax and example for variable declaration**
   Syntax: **Data-type variablename1, variablename2;**
   Example: int m, n;
4. **Explain RValue and Lvalue**
   The lvalue is the location value. It holds the memory address location at which the data value is stored.
   rvalue is the data value. It holds the assigned to the variable by the programmer
   Example: a=10;
5. **What is enumerated type give an example**
   This is user defined data type we can use this when we know in advance the finite number of values a variable can take in a program. To declare this type of data type we require the key word enum. These data types are internally related as integers. The first member will get the value 0 and next 1 and so on. The changes can be done by assigning the values to member at the declaration time.
   Example: enum days { sun, mon, tue, wed, thu ,fry, sat};

6. **Mention the different data types in C++**
   int, float, char, double
7. **What are the fundamental data types used in c++**
   int, float, char, double
8. **Write a note on integer data type**
   int: The data type int are whole number without any fractional value with the range of value lies between -32768 to 32767. The **int** data type requires 2 bytes of memory location to store the value**. Ex: 6,8**

Three marks

1. **What is data type? Explain the different types**
   The term Data type defines as the type of value that a variable can store

int: The data type int are whole number without any fractional value with the range of value lies between -32768 to 32767. The **int** data type requires 2 bytes of memory location to store the value**. Ex: 6,8**

float :These are numbers with fractional part. The real number ranges from -3.4e-38 to 3.4e38 where e represent exponent. It requires 4 bytes of memory location **Ex: 2.6, -9.7**

char: This is used to store the single letter. The character value is always represented within side of single quote. To occupy this value we require one byte of memory

Ex: 'A' , 'd'

double: This is float with double precision The range of we can store from -1.7e-308 to 1.7e308. To store this type of value we require eight byte of memory location.

Ex: 3.142e10

2. **Mention the rules for naming variables**

   The variable name should start with alphabet and it may contain anything

   Variable name should not contain any special character except underscore

   Variable name can not start with digit

   The upper case and lower case are separate

   Reserved word can not be used as variable name