

1. Fill in the blanks:

- A variable name must start with _____.
- The length of a variable name may be ___ to ___ characters.
- _____ of QBASIC are not allowed to use as a variable name.
- A variable can be declared _____ and _____.
- Explicit declaration of variables is done with _____ statements.
- A _____ represents one and only one value during the execution of the program.
- Data types of QBASIC are: _____ and _____.
- Different types of QBASIC are _____, _____, _____ and _____.

2. State true or false:

- A keyword can be used as a variable name.
- One variable can store only one value at a time.
- The string can not be used in arithmetic calculations.
- It is good practice to declare variables at the beginning of a program.
- The legal range for integer data type is from -32,767 to 32,768.
- 25,000 is a valid numeric constant.

3. Indicate valid or invalid variables, give reasons, if invalid.

<u>Variables</u>	<u>Reasons</u>
1N\$	
N\$	
N%1	
LET	
FIRST NAME	
FNAME	

- Find out whether the following assignments are valid or invalid. Give reasons if invalid.

<u>Variables</u>	<u>Reasons</u>
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N\$=Kathmandu	
N=Rs. 2000	
%N=2000	
N1=2000	
SAL= "2000"	
N\$= "NEPAL"	
1N=200	

5. Answer the following questions:

- Define variables and constants with examples.
- Write any three rules of writing a variable name.
- What are the different types of data supported by QBASIC? Explain in short with their declaration symbols and memory consumption.
- What is a numeric constant? Write the name of different types of numeric variables with examples.
- What is a variable declaration? Explain the ways of declaring variables with examples.
- Why is explicit declaration of a variable better than implicit declaration of it?

6. Write down the QBASIC programs for the following:

- To store three different numbers under the three different variables then find their sum and average
- To store the name, address and telephone number of a person.print them on the screen.
- To find out the sum of squares of two different numbers.
- To find the volume of a cylinder where $Vol=PL*rh$ (use $PL=3.14$ as symbolic constant)
- To store different numbers;then find sum,difference and product of the number.
- To find area of four walls . $A=2H(L+B)$
- To find the area of the triangle. $A=\frac{1}{2}*B*H$

- h. To find the volume of the box. $V=L*B*H$
- i. To find the sum of cube of two numbers
- j. To find simple interest where $SI=(P*T*R)/100$.

*******End of Chapter-13*******