QUIZ BOWL TECH COMPETITION (QBTC)

Syllabus
Group 3

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1. Variables & Data Types

A variable contains data about anything we measure. Most modern computer languages recognize five basic categories of data types: Integral, Floating Point, Character, Character String, and composite types, with various specific subtypes defined within each broad category.

Example 1

Question - Which of the following is not a logical operator?

A) !
B) &&
C) ||
D) |

Answer – **D**

Explanation: && - Logical AND! - Logical NOT || - Logical OR | - Bitwise OR (used in bitwise manipulations)

Example 2

Question – What is the output of this program?

```
#include <stdio.h>
int main(){
    char num = '10';
        printf("%d", num);
        return 0;
}
```

A) 49
B) 48
C) 10
D) 08

Answer – **B**

It will print the ascii value of 0, i.e. it will print the ascii value of last character always

2. If else, Switch, and Loops

Decision making in programming is similar to decision making in real life. A programming language uses control statements to control the flow of execution of program based on certain conditions.

Example 1

Question – In order to exit from switch statement ___ is used.

A) Exit
B) Return
C) Switch
D) Break

Answer – **D**

Example 2

Question – What is the output of this program?

```
void main()
{
    if(!printf(""))
        printf("hello");
    else
        printf("world");
}
```

A) Hello
B) World
C) Compilation error
D) None of above

Answer – **A**

printf(") will return 0 and therefore !printf(") is equal to 1 so if part will execute.

3. Operators & Strings

Operators are used to perform operations on variables and values. Strings are used for storing text.

Example 1

Question – Given b=110 and c=20, what is the value of 'a' after execution of the expression a=b=c*=5?

A) 130
B) 10
C) 110
D) -110

Answer – **B**
As the expression is evaluated from right to left.

Example 2

Question – If the two strings are identical, then **strcmp**() function returns

A) -1
B) 1
C) 0
D) Null

Answer – **C**
The strcmp return an int value that is
if s1 < s2 returns a value < 0
if s1 == s2 returns 0
if s1 > s2 returns a value > 0

4. Classes & Objects

Class is a blueprint or template from which objects are created. Object is a real world entity such as pen, laptop, mobile, bed, keyboard, mouse, chair etc. Class is a group of similar objects.

Example 1

Question – Where does the object is created?

A) Class
B) Constructor
C) Memory
D) Destructor

Answer – **A**

In class, only all the listed items except class will be declared.

Example 2

Question – Instance of which type of class can't be created?

A) Anonymous class
B) Nested class
C) Parent class
D) Abstract class

Answer – **D**

Solution:

Instance of abstract class can't be created as it will not have any constructor of its own, hence while creating an instance of class, it can't initialize the object members. Actually the class inheriting the abstract class can have its instance because it will have implementation of all members.

5. Basics of HTML

HTML is the standard markup language for documents designed to be displayed in a web browser.

Example 1

Question – How to create a hyperlink in HTML?

A) google.com
B) <a url = "www.google.com" google.com /a>
C) google.com
D) <a> www.google.com < google.com /a>

Answer – **A**
The anchor tag and the href attribute is used to create the link in HTML.

Example 2

Question – Which of the following is the correct way to send mail in HTML?

A) <a href = "mailto: xy@y">
B) <a href = "xy@y">
C) <mail xy@y</mail>
D) None of the above

Answer – **A**
We can use the <a> (anchor tag) tag, and the href attribute to mail a person.

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Thank you!