

Q1- [20 Marks] Give two examples for the following:

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| 1- Pre-processor directive statement. | 6- Compound assignation statement. |
| 2- Comment line statement format in C++. | 7- Header Files. |
| 3- Low level programming language. | 8- Relational operator statement. |
| 4- Scope of a variable in C++. | 9- Logical Comparison Operation statement. |
| 5- Assignation statement. | 10- Conditional comparison statement. |

Q2- [20 Marks] what will be the output of the following statements? Note: if you see variables without declarations, this means that it is declared before and it's not shown here.

- 1- `x= 2; y=27; z=20; x= 2* (y % 3)+ z/y; cout<<" The result is "<<x;`
- 2- `x= 10; y=5; t=x; x=y; y=t; cout<<"t"<<t; cout<<"y"<<y;`
- 3- `x=5; y=6; (x++) -- ; z=x%y; cout<<"Z"<<z;`
- 4- `z=true==false; cout<<z;`
- 5- `x=2; y=3; z= (x<y && y<3) || x==y; cout<<"z";`

Q3- [20 Marks]

A) Write a C++ program to increase the value of a variable by (2) using C++ compound assignation operators?

B) Write a C++ program to read any variable, then print whether n is an even or is an odd number using conditional structures?

Q4- [20 Marks] Write a C++ program to solve the equation given below? Where β and \emptyset are in degrees.

$$A = \frac{\sqrt[5]{200 \times \sin(\beta)}}{2 + \tan^{-1}(\emptyset)}$$

Q5- [20 Marks] Write a C++ program to distinguish between integer and floating point numbers?

Good Luck