## JAWAHAR NAVODAYA VIDYALAYA UNIT TEST: I COMPUTER SCIENCE CLASS XII

Time: 1 h 30 m
F.M: 40

All questions are compulsory. Programming language is $\mathrm{C}++$.

1. Why $\mathrm{C}++$ is called middle level language? (1)
2. Is $\mathrm{C}++$ case sensitive? What do you mean by it? (1)
3. Write two advantages of OOP. (1)
4. Define encapsulation. (1)
5. What are the purpose of the following punctuators: Pound sign( \#),Semicollon( ;),comma(,). (1)
6. What can be said about the precedence of $*$, / and \% in $\mathrm{C}++$ ? (1)
7. What is the significance of null character ( $\backslash 0$ ) in programming? (1)
8. How are unary operators different from binary operators? (1)
9. What is an escape sequence? Give one example. (1)
10. What is ASCII. How many characters are represented by it? (1)
11. Convert into binary: (12345)8. (1)
12. Convert into octal: ACD56.CD) ${ }_{16}$ (1)
13. Write the 1's complement of : (01110111) 2 (1)
14. Convert into binary: (76)10. (1)
15. Write the following in exponent form: (1)
$25.252525,12542.0303,1452.0,0.25369$
16. Are the following valid identifiers: (1) My.name, 1st_char, _invalid, Goto
17. Differentiate between a keyword and an identifier. (2)
18. What is the difference between syntax and logical error? Give example. (2)
19. Point out the errors in the following code: (2)

Int main ()
\{
Chse
cout<<" Enter variabls";
cin >>var;
sqr = var * var;
cout<<" The squares is " << sqr;
20. How many types of integer constants are allowed in C++? How are they written? (2)
21. What is Unicode? What is its significance? (2)
22. Write the escape sequence for: (2)

New line, Question mark, Octal number, Backspace
23. Write a c++ program that inputs a students mark in 3 subjects (out of 100) and print the percentage mark.(3)
24. Assuming that there is 7.481 gallons in a cubic foot, write a program that asks the user to enter the number of gallons and then display the equiva,lent cubic feet. (4)
25. Write a program to calculate the area of a triangle if the three sides are given. (5)

Use Area $=$ Square root $\left(s^{*}(s-a)^{*}(s-b) *(s-c)\right.$, where $a, b, c$ are the three sides and $s 1 / 2(a+b+c)$.

