ASLAM ACADE

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SHORT QUESTIONS:-

Q1: What is algorithm? Write down three qualities of algorithm?

Q2: Difference between algorithm and flowchart?

Q3: Difference between stack and queue shortly?

Q4: Write down difference between tree and graph?

Q5: list five common high level languages and describe on of them?

Q6: write shortly difference between high level and low level language?

Q7: Define errors and its types?

Q8: Differentiate between variable and constant?

Q9: what are comments statement in C++? **OR** Define reserved words in C++?

Q10: Explain input and output function in C++?

Q11: Differentiate between relational and logical operators in C++?

Q12: Differentiate between for and while loop? **OR** Difference between while and dowhile loop?

Q13: what are jump statements? Write their names? **OR** What do you understand by function passing arguments or parameters?

Q14: Differentiate between function call and function definition? What are the different types of functions? List any three types of IDE?

Q15: Differentiate between user define function and pre define function?

Q16: Define local variable and global variable? Differentiate between universal and basic gates?





Q17: Simplify the following Expressions by using Boolean rules.

```
1. A + A.B = A??
```

Q18: Differentiate between NAND and NOR Gate?

Q19: What is scratch? Give some of its advantages and what do you know about sprite and script?

Q20: Write an algorithm to calculate the multiplication and division of any two numbers.

Q21: Write down the purpose and syntax do-while,

break, cout, switch.

Q22: Remove the error(s) from the following statements; (if any)

1) cout << I read in class X) 2) if (<10); 3) cin<< abc;

Q23: Write down the output of the following program.

#include using namespace std;

```
int main ()
{
int b
for (b=0; bc-10, b++)
(cout << "\n" << b;
}
return 0;
```

Q24: What are the advantages of developing algorithm?



}

- Q25: What is the need of index in an array?
- Q26: Use '\a' and '\r' both escape sequence in a program.
- Q27: Difference between arithmetic operator and relational operator.
- Q28: Difference between increment and decrement operator.
- Q29: What is the basic difference between '\n' and '\t'?
- Q30: Draw the following diagrams:
 - * Enqueue and dequeue process *Tree with its nodes *Graph with its nodes
 - *push and pop process in stack
- Q31: Difference between push and pop.
- Q32: Difference between machine language and Assembly language.
- Q33: Define linear data structure.
- Q34: Define data types used in C++.

LONG QUESTIONS:-

- Q1: Describe the steps involve in problem solving?
- Q2: What is data Structure? Explain Array, Stack, Queue, and Graph in detail?
- Q3: Explain the classification of programming languages? Define language translator and its types?
- Q4: What is an IDE? Explain the components of IDE?
- Q5: Describe different types of operators used in C++ with examples?
- Q6: What do you know about loop? Explain for loop, while loop, and do-while loop in detail?
- Q7: Briefly explain function and its types? Explain how user-defined function works?
- Q8: Define basic logic gates and their operator in details?
- Q9: Write a program to calculate the area of triangle (A=1/2 b x h). Also draw a flow chart?

Q10: Write a program in C++ using Arithmetic Assignment Operators?

Q11: Draw the logic circuit of the given Boolean expression.

1)
$$Y = ABC(A + D)$$
 2) $X = AB(C+D)$

Q11: Describe Linear Data Structure and its types?

Q12: State the function declaration or function prototype?

Q13: Write the use of the following codes of Scratch Editor:

(i) Forever (ii) wait (iii) play (iv) sound (v) goto x, y

Q14: What is meant by function declaration? Explain its different parts in detail?

