J.H. P.G. Govt. College, Betul (MP)

B.sc. I Year (Major) Computer Science Practical List

- 1. To study basic gates(AND,OR,NOT) and verify their truth table.
- 2. To convert a given binary number to Gray code using IC 7486.
- 3. To study and verify NAND as Universal gate using IC 7400.
- 4. To study half adder using basic gates and verify its truth table.
- 5. To study Full adder using basic gates and verify its truth table.
- 6. To realize basic gates (AND,OR,NOT) from Universal gate (NAND and NOR).
- 7. To design and construct RS flip flop using gates and verify the truth table.
- 8. To design and construct JK flip flop using gates and verify the truth table.
- 9. To verify De-Morgan's Theorem.

B.sc. I Year (Minor) Computer Science Practical List

- 1. Write a C++ program to reverse a given number.
- 2. Write a C++ program to add two numbers using class.
- 3. Write a C++ program to check whether a given number is prime.
- 4. Write a C++ program to check whether a given year is leap year or not.
- 5. Write a C++ program to add two numbers using functions.
- 6. Write a C++ program to accept and display the details of an employee using aclass
- 7. Write a C++ program to compare two strings using string functions.
- 8. Write a C++ program to calculate the area of rectangle, square using function overloading.
- 9. Write a C++ program to add two numbers using pointers.
- 10. Write a C++ program to find the factorial of a given number.
- 11. Write a C++ program to search for an element using binary search.
- 12. Write a C++ program to sort an array in ascending order.
- 13. Write a C++ program to find the factorial of a given number using recursion.
- 14. Write a C++ program to check whether a given number is even or odd.
- 15. Write a C++ program to demonstrate the usage of Inline function. 16. Write a C++ program to demonstrate parameter passing mechanism using pass by value method.
- 16. Write a C++ program to demonstrate the usage of a constructor and destructor in a class.
- 17. Write a C++ program to demonstrate simple inheritance.
- 18. Write a C++ program to calculate volume of cube, cylinder and rectangle using function overloading.