[This question paper contains 2 printed pages.]

6003

Your Roll No.

B.Sc. (H) ELECTRONICS / III Sem.

B

Paper - ELHP-305

Electronics Practical - V

(Admissions of 2010 and onwards)

Time: 1 Hr.

Maximum Marks: 25

(Write your Roll No. on the top immediately , on receipt of this question paper.)

Attempt any five questions from Section - A. & any ten questions from Section - B.

SECTION - A

- 1. Convert the binary number (100010)₂ into its decimal value.
- 2. What combinational logic are OR-AND gates equivalent to?
- 3. What is the operation of a D Flip-Flop? What does D stand for?
- 4. Define the race around condition in a JK FF.
- 5. Why is C++ an extendible language?
- 6. What is a ternary operator in C++?
- 7. What does system ("pause") do in C++? (1×5)

P.T.O.

SECTION - B

- 1. If V_{ref} = 5 V what will be the analog output for (1010)₂ in a 4-bit D/A converter?
- 2. Which basic logic gate can be used as a two bit parity checker? Explain with the help of a truth table.
- 3. Draw a Mod-4 counter using T Flip Flops.
- 4. Using a 7446 IC show the output on a seven segment display for the binary number (1000)₂?
- 5. If data (100010)₂ is loaded parallel into a shift left ring counter, what will the contents of the register be after 3 clock periods?
- Use Full adder MSI blocks to add the following binary numbers: (100)₂ + (110)₂.
- 7. What is the difference between a local variable and a global variable? Give a suitable code in C++ to show the difference.
- 8. How does switch statement differ from nested if?
 - 9. Define 'function prototype' in C++.
 - 10. How is a pointer variable declared in C++?
 - 11. What does a manipulator function do?
 - 12. What is operator overloading?
 - 13. What is the syntax for multiple inheritance in C++? (2×10) (300)****