Total No. of Questions :8]   [Total No. of Printed Pages :2

Roll No ....

CS-8304
B.E. VIII Semester
Examination, June 2017
Quantum Computing

Time : Three Hours

Maximum Marks : 70

Note: i) Answer any five questions.
  ii) All questions carry equal marks.

1. Describe the action of a quantum controlled- Not gate.

2. Explain single and multiple Qubit gates.

3. Explain Partial Trace and Reduced Density Operator.

4. Explain positive operator valued measures.

5. Explain optical cavity Quantum electrodynamics.

6. Discuss the applications of entanglement in teleportation and super dense coding.

7. Explain Graver's search algorithm?

8. Answer any four of the following:

    a) Are Quantum gates Reversible or Irreversible? Explain.

    b) Discuss the properties of Density Operator.

    c) Discuss the conditions of Quantum Computation.

    d) How serial and parallel operations are represented.

    e) What is Stabilizer Code? Explain.

    f) What are the requirements of Fault Tolerance?

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