

Total No. of Questions : 8]

SEAT No. :

PB2305

[6263]-144

[Total No. of Pages :2

B.E. (E & TC)

NANO ELECTRONICS

(2019 Pattern) (Semester-VIII) (Elective - VI) (404192B)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.
- 2) Neat diagram must be drawn wherever necessary.
- 3) Figures to the right indicates full marks.
- 4) Assume suitable data, if necessary.

Q1) a) What is cluster? Explain Carbon nano tubes. [8]

b) Explain Nano material and its types. [8]

OR

Q2) a) Explain properties of CNT. [8]

b) Explain Semiconductor Nano particles. [8]

Q3) a) Explain Photolithography process in detail. [9]

b) Explain Electron Beam Lithography with neat Diagram. [9]

OR

Q4) a) Explain Nano electronics for communication. [9]

b) Explain Atomic Lithography with neat Diagram. [9]

Q5) a) What are molecular switch? Explain Redox switch. [9]

b) Explain MEMS. [9]

OR

Q6) a) Define Nano Machine? Explain Nano Tubes Actuators. [9]

b) Explain types of Super Molecular Switches. [9]

P.T.O.

Q7) a) What are Nano Sensor? Explain Optical Sensor. [9]

b) Which are types of Nano Sensor? Explain Nano Biosensor. [9]

OR

Q8) a) What is use of Nano Technology in Electronics? [9]

b) Explain Transformation. [9]

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