

Total No. of Questions : 8]

SEAT No. :

PE-2230

[Total No. of Pages : 2

[6584]-131

B.E. (E & TC)

NANO ELECTRONICS

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

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 diagrams must be drawn wherever necessary.
- 3) Figures to the right side indicate full marks.
- 4) Assume suitable data, if necessary.

Q1) a) Explain Structure of CNT & Carbon nano tubes [8]

b) Explain Nano material and its types [8]

OR

Q2) a) Explain properties of CNT [8]

b) Explain Method to Stabilize Nano particles [8]

Q3) a) Explain Optical lithography 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 Ph switch. [9]

b) Explain MEMS. [9]

OR

Q6) a) Explain Nano tubes Actuators [9]

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

P.T.O.

- Q7) a) Explain Piezo-Electric Biosensor [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]

