

Total No. of Questions : 8]

SEAT No. :

P2864

[6004]-562

[Total No. of Pages : 2

B.E. (E & TC)

NANO ELECTRONICS

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

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 right indicate full marks.
- 4) Assume suitable data if necessary.

Q1) a) Explain Metal nano particles? Classified Nano particles. Properties. [8]

b) Explain Properties of CNT & give its Applications. [8]

OR

Q2) a) What is Cluster? Explain Carbon nano tubes. [8]

b) Explain Nano material & Its Types. [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 Ph switch. [9]

b) Explain MEMS. [9]

OR

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Q6) a) Explain NEMS. [9]

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

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 Energy Capture? Explain Solar Cell. [9]

b) Explain Transformation. [9]

