Total No. of Questions : 8]

SEAT No. : [ ]

P-6627

[Total No. of Pages : 2

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B.E. (Electronics & Telecommunication)

NANO ELECTRONICS

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

Time : 2½ Hours] ***[Max. Marks : 70***

Instructions to the candidates:

1) ***Attempt Q1 or Q2, Q3 or Q4, Q5 or Q6, Q7 or Q8.***
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 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]**

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