

Code No: R194103N

R19

Set No. 1

IV B.Tech I Semester Advance Supplementary Examinations, March - 2023

NANO TECHNOLOGY

(Open Elective)

Time: 3 hours

Max. Marks: 75

*Answer any FIVE Questions
ONE Question from Each unit
All Questions Carry Equal Marks*

UNIT I

- 1 Explain basics of quantum mechanics in detail. [15]
(OR)
2 Analyze optical phenomena bonding in solids? [15]

UNIT II

- 3 Illustrate the sintering of Silicon Carbide(SiC) and applications of Silicon carbide? [15]
(OR)
4 Explain the nano particles preparation of alumina in detail. [15]

UNIT III

- 5 Analyze preparation for strength measurements of Silicon Carbide (SiC)? [15]
(OR)
6 List out the advantages and applications of mechanical properties for Silicon Carbide (SiC) in detail? [15]

UNIT IV

- 7 Compare electrical and electronic properties of nano materials? [15]
(OR)
8 Distinguish between optical properties and special properties of nano materials? [15]

UNIT V

- 9 Justify important nanomaterials for investigating and manipulating materials in the nanoscale with examples? [15]
(OR)
10 Explain the working of electron microscopy for nanoscience and technology. [15]

