Assignment (AEM)

SHORT QUESTIONS

- What are nanomaterials?
- What are the unique properties of nanomaterials?
- What are the different approaches used to prepare nanomaterials
- What is the difference between 0 D and 1 D nanostructures?
- Give any two examples each of metal based and carbon-based nanomaterials?
- What are the characteristics of nanomaterials?
- What are the applications of metal nanoparticles?
- Briefly explain top-down approach for nanoparticle synthesis.
- What are quantum dots ?
- Describe the structure of graphite and diamond?
- Give examples of four natural polymers?
- How polymers are classified on the basis of structure?
- What are free radical initiators?
- What does PVC stand for?
- What do you mean by copolymerisation
- What is the Degree of Polymerisation of PVC having molecular weight 6250000gm/mol?
- The process of heating natural rubber in presence of sulphur is known as_____

LONG QUESTIONS

- What are nanomaterials explain their classification and applications briefly?
- Describe the structure, synthesis, properties and applications of fullerenes.
- What are the different approaches used to prepare nanomaterials explain them briefly with examples
- Explain how CNT'S are prepared by CVD method and explain few applications and properties of CNT'S
- Explain the classification of nanomaterials based on dimension? Write about the size dependent properties of nanomaterials.
- Describe the synthesis method of ZnOnanomaterials by chemical precipitation method.
- Briefly explain the structure and properties of fullerene, and graphene
- What are CNT'S and explain how they are synthesized**?**
- Differentiate between thermosetting and thermoplastic polymers
- Write the difference between addition and condensation polymerization process.

SHORT NOTES

- ✓ Graphene
- ✓ Synthesis of ZnO nanomaterial
- ✓ Bottom-up approach
- ✓ Size dependent properties of Nanomaterials
- ✓ Reduction method of synthesis of nanomaterials
- ✓ Applications of nanomaterials
- ✓ Solgel method
- ✓ Quantum dots
- ✓ Vulcanization
- ✓ Nylon66