



12. (a) Discuss in a detailed manner about the properties and uses of nanoclusters and nanowires.

Or

- (b) Discuss in a detailed manner about the chemical vapour deposition and electro spinning.

13. (a) Elaborate in systematic manner about the construction of a simple eutectic phase diagram.

Or

- (b) Elaborate in a stepwise manner about the construction of metal matrix and polymer matrix.

14. (a) Summarize the manufacture of metallurgical coke by the Otto Hoffmann method.

Or

- (b) Summarize in a specific manner on the Orsat method for the flue gas analysis.

15. (a) Elaborate in a suitable way about the recent developments in solar cell materials.

Or

- (b) Explain in a specific manner on the light water nuclear power plant.