

2 Answer any two from the following :

- (1) Discuss future scope of Nanotechnology in detail.
- (2) Enlist and explain process limitations of NF.
- (3) What is the basic principle of MF? Discuss its Mechanism of transport in detail.

3 Answer the following :

- (1) Explain Emulsion Liquid Membrane in detail.
- (2) Discuss the phenomenon of Reverse osmosis with diagram.

OR

3 Answer the following :

- (1) Explain bulk liquid membrane in membrane.
- (2) Discuss factors affecting membrane fouling.

4 Answer any two from the following :

- (1) Give an account of :
 - (a) Cross flow MF
 - (b) Dead end MF
- (2) Explain the various methods used for the preparation of nano particle synthesis.
- (3) Explain desalination of brackish water with the help of R.O. process.

5 Answer any two from the following :

- (1) Explain external and internal fouling in MF.
- (2) Discuss applications of liquid membranes,
- (3) Explain classification of nano particles in detail.
- (4) Write a note on design and operating parameters of RO.