

- 3** Answer the following : (7 marks each) **14**
- (a) Comment on protein stability in hyper-extermophilies.
 - (b) Regulation of gene expression in thermophiles.

OR

- 3** Answer the following : (7 marks each) **14**
- (a) Archaeal genome organization.
 - (b) Describe biotechnological potential of Halophiles.
- 4** Answer the following : (7 marks each) **14**
- (a) Psychrophiles and their habitats.
 - (b) Write short note on bacteriorhodopsin.
- 5** Answer Any **Two** of the followings : (7 marks each) **14**
- (a) Discuss Extremozymes and its Industrial aspects.
 - (b) Life at acidic and alkaline environment.
 - (c) Discuss adaptation strategies of halophiles in hyper saline environment.
 - (d) Describe Methanogens.
