



- Q. 4 A** What is Biomedical engineering? Discuss the interdisciplinary applications in three specialty areas. **04**
- OR**  
Write about the approaches used in nanotechnology and mention any two applications in the medical field.
- B Attempt any two from the following. 06**
- i) Describe the principles in developing diverse body plans.
  - ii) Elaborate on the functions of body fluids.
  - iii) What is MRI? Mention the principle of MRI and explain any two applications.
- Q. 5 A** Explain the utility of bioinformatics with suitable examples. **04**
- OR**  
What are cell lines? Mention its principle and state the use of embryonic stem cells in cell lines.
- B Write notes on any two of the following 06**
- i) Biochemical engineering
  - ii) Gap Junction
  - iii) Secondary database