| Registration No.: | | | | | | |
|---|----------|---------|-------|--|--|-----------|
| Total number of prin | nted pac | ies – 2 | ? | | | B. Tech |
| . • • • • • • • • • • • • • • • • • • • | , , | | | | | PCBT 4401 |

Seventh Semester Examination – 2011 MEDICAL AND PHARMACEUTICAL BIOTECHNOLOGY

Full Marks - 70

Time: 3 - Hours

Answer Question No. 1 which is compulsory and any five from the rest.

The figures in the right-hand margin indicate marks.

Answer the following questions :

2×10

- (a) What is hormone? Give examples of two human hormones.
- (b) What is semi-synthetic antibiotic? Example two of them.
- (c) Define drug. What is CADD?
- (d) Write four sentences on genomics.
- (e) What is a steroid? Give one example with structure.
- (f) Write the use of antibiotics.
- (g) Define antigen and antibody.
- (h) What is virology?
- (i) What is Hybridoma?
- (i) What is Electrophoresis?
- 2. Give details of "interferon" production by genetically engineered cells.

10

| 3. | Micr | licrobial transformation for the production of semi-synthetic antibiotic. | | | | | | |
|----|------|---|-----|--|--|--|--|--|
| 4. | Writ | e uses of biosensors for rapid clinical analyses. | 10 | | | | | |
| 5. | Writ | e on DNA vaccines. | 10 | | | | | |
| 6. | Writ | e briefly on separation and identification techniques for protein analysis. | 10 | | | | | |
| 7. | Writ | e notes on the followings: | 2×5 | | | | | |
| | (a) | Gene Therapy | | | | | | |
| | (b) | Toxico-genomics | | | | | | |
| 8. | Writ | e notes on the followings : | 2×5 | | | | | |
| | (a) | Proteomics in drug development | | | | | | |
| | (b) | Diagnosis of diseases by proteomics | | | | | | |