| SE Sem III (BIOTECH)<br>Sub: CB | 08 DEC 2014        |
|---------------------------------|--------------------|
| cell Biology                    | QP Code :14662     |
| (3 Hours) 22                    | [ Total Marks : 80 |

N.B.: (1) Question No. 1 is compulsory.

- (2) Attempt any 3 questions out of remaining 5 questions.
- (3) Each question is of 20 marks.
- (4) Figures on right side indicate maximum marks.

|    |             |   | ,  |
|----|-------------|---|----|
| 1  | . (a)       | Explain life cycle ofbacteriophage virus.   | 05 |
|    | (b)         | What are components of a plant cell wall?   | 05 |
|    | (c)         | Write a short note on osmosis.  | 05 |
|    | (d)         | What are different types of tumors?   | 05 |
| 2  | . (a)       | Explain mitotic cell division with the help of neat labeled diagrams.                           | 10 |
|    | (b)         | Explain receptor mediated endocytosis with the help of neat labeled diagrams.                   | 10 |
| 3. | . (a)       | Write a note on microtubule structure and synthesis at centrosome.                              | 10 |
|    | (p).        | Explain how blood glucose level increases in response to glucagon and epinephrine.              | 10 |
| 4. | <u>(</u> a) | What are integrins? Explain their role in formation of focal adhesions and hemi-<br>desmosomes. | 12 |
|    | (b)         | Explain structure and function of lysosome.   | 08 |
| 5. | (a)         | Write a note on role of oncogenes in causing Cancer.  | 12 |
|    | (b)         | Distinguish between Prokaryctic cell and Eukaryctic cell.                                       | 08 |
| 5. | (a)         | Explain different types oflon Channels.   | 05 |
|    | (b)         | Write a note on structure of Mitochondrion.   | 05 |
|    | (c)         | Write a note on Collagen.   | 05 |
|    | (d)         | Distinguish between Necrosis and Apoptosis.   | 05 |

GN-Con.:10201-14.

05