

# Hemchandracharya North Gujarat University

Bachelor of Vocation

Pharmaceutical Chemistry

Sem III End Term Examination, February, 2016

Subject: Cell Biology PC-131 313

Time: 2 hrs

03/02/2016

Maximum marks: 50

**Q.1 Answer all questions. Each question carries 1 mark. (9\*1=9 Marks)**

1. Enlist the various methods of nutrient transport in cell.
2. Give functions of Cell Wall.
3. Which of the following is necessary in order for osmosis to occur?
  - a. a permeable membrane
  - b. a semi-permeable membrane
  - c. an isotonic solution
  - d. ATP
4. Most organelles in a eukaryotic cell are found in the
  - A) cell wall
  - B) cytoplasm
  - C) nucleus
  - D) capsule
5. Who was the first person to see cells under the microscope and give them a name?
  - a. Anton van Leeuwenhoek
  - b. Robert Hooke
  - c. Theodor Schwann
  - d. Matthias Schleiden
6. The process of RNA formation on DNA template is
  - a. Translation
  - b. Transcription
  - c. Replication
  - d. Transformation
7. Translation is
  - a. DNA from mRNA
  - b. Protein from mRNA
  - c. RNA from mRNA
  - d. RNA from DNA
8. Which of the enzyme required to joining DNA bits?
  - a. DNA Ligase
  - b. DNA polymerase
  - c. Endonuclease
  - d. None of these
9. Enlist the Types of RNA
10. Differentiate Apoptosis and Necrosis

**Q. 2 Answer any 4 questions. Each question carries 5 marks. (4\*5=20 Marks)**

1. Write a note on Chloroplast
2. Write a note on Active Transport mechanism
3. Draw the labeled diagram of Prokaryotic cell
4. Describe Transcription Process.
5. Describe the Apoptosis as cell death event
6. Describe the RNA polymerase enzyme and its activity

**Q.3 Answer any 1 question. Each question carries 10 marks. (3\*7=21 Marks)**

1. Describe the Cell wall as cellular organelle in Details
2. Describe the Meiosis
3. Explain The DNA Replication
4. Write a note on cell theory.