

Enrollment No: _____ Exam Seat No: _____

C.U.SHAH UNIVERSITY

Winter Examination-2015

Subject Name : Cell & Molecular Biology

Subject Code : 4LS02BIT1

Branch :B.Sc. (Biotechnology)

Semester : 2 Date : 23/11/2015 Time : 10:30 To 1:30 Marks: 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
 - (2) Instructions written on main answer book are strictly to be obeyed.
 - (3) Draw neat diagrams and figures (if necessary) at right places.
 - (4) Assume suitable data if needed.
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- Q-1** Give answer in one or two sentences only **(14)**
- a) Name the first amino acid synthesized in translation.
 - b) Write any stop codon?
 - c)is the structural and functional unit of life.
 - d) ER stands for.....
 - e) What is known as power house of the cell?
 - f) DNA synthesis takes place in.....phase of interphase.
 - g) Polyploidy
 - h) In which stage of cell division chromosomes are most condensed?
 - i) Who discovered cells while looking at a thin slice of cork?
 - j) What is photosynthetic pigment of plants?
 - k) What is known as suicidal bags in the cell?
 - l) What is telomerase?
 - m) Okazaki fragments
 - n) Clover leaf model is associated with which RNA?

Attempt any four questions from Q-2 to Q-8

- Q-2**
- a) What is cell division? Briefly describe the process of mitosis. **7**
 - b) What is DNA repair? Briefly explain the process of excision repair. **7**

- Q-3** Write short notes on-
- a. Mitochondria **7**
 - b. Gogli Complex **7**



- Q-4** a. Why meiosis is known as reductional division? Explain its role in higher eukaryotes. 7
b. Explain the properties of Genetic codes. 7
- Q-5** **Briefly explain the following-**
a. Causes of cancer. 7
b. What is apoptosis? Explain how it is different from necrosis. 7
- Q-6** **Write short notes on-**
a. Cell theory 7
b. Structure of prokaryotic cell 7
- Q-7**
a. Explain the replication of DNA in bacteria. 7
b. What is transduction? Explain its process and role in bacterial genetics. 7
- Q-8** a. Explain the process of conjugation in bacteria. 7
b. Explain the structure of plasma membrane (PM). 7

