



(Following Paper ID and Roll No. to be filled in your Answer Book)

**PAPER ID : 992104**

Roll No.

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## B. Tech.

(SEM. I) (ODD SEM.) THEORY  
EXAMINATION, 2014-15  
**BIO-SCIENCE**

Time : 3 Hours]

[Total Marks : 80

Note : The Question paper contains three sections, Section A, Section B & C with weightage of 16, 24, 40 marks respectively. Follow the instruction as given in each sections.

### SECTION - A

1. This section contains eight questions. 2×8=16  
Attempt all questions :
- Discuss the term of Tuectomy.
  - What is the various process of embryogenesis?
  - What is the role of MTP?
  - What are the purienes and pyrimidines?
  - Differentiate the term of Androgenesis and gynogenesis.
  - Discuss the function and structure of Ribosome.
  - What are chloroplast and plastids?
  - Specify the circumstances in which mitosis occur.

## SECTION - B

2. Attempt any THREE of the following : 8×3=24
- (a) (i) What is gemetogenesis ? Draw its.
  - (ii) What is menstrual cycle? Which hormones regulate menstrual Cycle.
  - (b) Discuss the male and female reproductive system in short.
  - (c) (i) What is the method of birth control ?
  - (ii) Discuss the various method of contraception.
  - (d) (i) What is asexual reproduction? Give its stages and diagram.
  - (ii) What is the term of chromosome? Give its various types and structure.

## SECTION - C

3. Attempt any five of the following : 8×5=40
- a) Define Golgi apparatus, Lysosomes and its function.
  - b) Discuss the structure, function and mechanism of DNA Replication.
  - c) Discuss the different type of RNA and various properties and table of Genetic code.
  - d) Brief note on the function of ETS and differentiate between plant and animal cell.
  - e) Discuss the structure of nucleoside and nucleotide with the help of diagram and what are stem cells? Discuss the embryonic and adult stem cells.
  - f) With the help of suitable diagram, discuss the process of protein synthesis.
  - g) Elaborate the various steps of molecular cloning and mention some of the applications of Human Genome project.