



**GDB-1209**

Seat No. \_\_\_\_\_

**B. Sc. (Sem. I) Examination**

**January - 2016**

**Biotechnology : CBT-1-I**

**(Introduction to Biotechnology &  
Cell Biology) (CCC-1)**

Time : 3 Hours]

[Total Marks : 70

- 1 Attempt all questions : 1×15=15
- 1.1 Cell wall of bacteria composed of
- (A) Phospholipids
  - (B) Peptidoglycan
  - (C) Bilayer lipids
  - (D) Lipidoglycan
- 1.2 Pilus is required
- (A) binary fission
  - (B) conjugation
  - (C) locomotion
  - (D) transduction
- 1.3 Biotechnology helps recently in India
- (A) Sustainable Energy
  - (B) Cleaning India
  - (C) Health Care
  - (D) All
- 1.4 Energy or powerhouse of cells
- (A) ribosome
  - (B) golgi bodies
  - (C) liposomes
  - (D) mitochondria

- 1.5 Magnification if 10 X ocular with 100 X objective lens
- (A) 100 X
  - (B) 1000 X
  - (C) 10 X
  - (D) 100
- 1.6 \_\_\_\_\_ and \_\_\_\_\_ is most popular products of green biotechnology.
- 1.7 \_\_\_\_\_ and \_\_\_\_\_ is domains biotechnology.
- 1.8 \_\_\_\_\_ called pili protein.
- 1.9 \_\_\_\_\_ Name bacteria, form endospore.
- 1.10 \_\_\_\_\_ and \_\_\_\_\_ types of DNA.

Q. 1.11 to 1.15 Match the followings :

- |                 |                     |
|-----------------|---------------------|
| 1.11 Resistance | A. Mice             |
| 1.12 Medical    | B. Dolly            |
| 1.13 Transgenic | C. Vaccines         |
| 1.14 Pharma     | D. Artificial blood |
| 1.15 Clone      | E. Bt-cotton        |

2 Attempt any five questions : 3×5=15

- 2.1 Explain term Biotechnology.
- 2.2 Define application in forensic science.
- 2.3 Draw diagram of eukaryotic cell (Animal OR Plant)
- 2.4 Explain shape and size of bacteria.
- 2.5 Define RNA and types.
- 2.6 Draw diagram of ER.

3 Attempt any four questions : 5×4=20

3.1 Describe Agriculture biotechnology with examples.

3.2 Explain dormant structure and function of bacteria.

3.3 Explain microscopy and types.

3.4 Describe Exocytosis.

3.5 Describe cell wall of bacteria.

4 Attempt any two questions : 10×2=20

4.1 Explain cell cycle and meiosis with diagram of all stages.

4.2 Describe double helix structure of DNA functions.

4.3 Explain recent scenario of biotechnology and helps to human society.

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