KKD-7109

KKD-7109 Seat No._____

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

November / December – 2014

CBT-111 : Introduction to Biotechnology & Cell Biology

Time : 3 Hours] [Total Marks : 70

1. Answer all questions. Each question carries. 1 mark (10x1=10)

1.1 Oldest product of Biotechnology

(A) Bt-cotton (C) Beer

(B) Vaccines (D) Antibiotics

1.2 International Biotechnological industry

(A) L&T (C) Intas life sciences

(B) Dr. Reddy (D) Eilly-lilly

1.3 45 X lens is generally known as

(A) Ocular lens (C) Oil immersion

(B) Objective lens (D) Nose piece

1.4 Pili composed by

(A) Lipoproteins (C) Pilin Proteins

(B) Pilus proteins (D) Peptidoglycan

1.5 Golden Rice is

(A) Resistant plant (C) Transgenic plant

(B) GM plant (D) Hybrid plant

1.6 ..... and..... are parts of microscope

1.7 ..... and ..... are recombinant products

1.8-1.10 Match following

(A) Blue Biotechnology	1. Pharmaceutical
(B) Green Biotechnology	2. Marine
(C) White Biotechnology	3. Agriculture

2. Answer any five questions each carries 2 marks (2x5=10)

2.1 Draw a neat and clean diagram of mitochondria
2.2 Explain the term Biotechnology
2.3 Define oil immersion in microscope
2.4 Write two functions of power house of cell
2.5 Define chromosomes
2.6 List out fermentation technological products
2.7 Write two applications of medical biotechnology

3. Answer any five questions each carries 6 marks (6x5=30)

3.1 Explain Morphology of bacteria
3.2 Describe Structure and functions of ER (Endoplasmic reticulum)
3.3 Explain fili structure of bacterial cell
3.4 Describe biotechnology sectors and applied fields
3.5 Explain structure and functions of cell membrane
3.6 Describe difference of gram-positive and gram-negative bacteria
3.7 Explain the structure of bacterial spore

4. Answer any two questions each carries 10 marks (10x2=20)

4.1 Describe stages of mitosis in eukaryotic cell with the help of diagrams.
4.2 Explain Applications of Red and White Biotechnology.
4.3 Describe chromosome, explain their size, shape, types and structure.