



**DG-3150**  
**B. Sc. (Sem. V) Examination**  
**March/April – 2016**  
**506 : Bioscience**  
*(Basic Biotechnology)*

Time : 2 Hours]

[Total Marks : 50

**Instructions :**

(1)

<p>नीचे दर्शावेक निशानीवाणी विगतो उत्तरवही पर अवश्य लपनी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : B. Sc. (Sem. V)</p> <p>Name of the Subject : 506 : BIOSCIENCE (BASIC BIOTECHNOLOGY)</p> <p>Subject Code No. : 3 1 5 0 Section No. (1, 2,...): Nil</p>	<p>Seat No. : □ □ □ □ □ □</p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center; width: 100%;">Student's Signature</div>
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- (2) Draw neat & labelled diagrams wherever necessary.  
(3) Figures to the right indicate full marks of the question.

**Q. 1 Answer as directed.**

**12**

1. Explain: Genetic engineering.
2. Describe in brief blot technique.
3. Enlist the various requirements for PCR
4. Give the full form of BAC, YAC.
5. What is Polycystronic m-RNA?
6. Define : Translation, Chimeric DNA

**Q. 2 Describe in detail the basic procedure of cloning**

**14**

**OR**

- Q. 2** 1) Describe in brief general application of rDNA technology.  
2) Write a note on enzymes for cloning.

**Q. 3** Answer any two of the followings. **14**

1. Describe in brief the basic procedure of DNA amplification.
2. Describe in brief elongation process of protein synthesis.
3. Write a note on Lac Operon.

**Q. 4** Write short notes: (any two) **10**

1. Termination of protein synthesis
  2. Formation of charged t-RNA.
  3. Western blot.
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