



AB-3150
B. Sc. (Sem. V) Examination
March/April – 2014
Bioscience : Paper - VI
(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. 5)</p> <p>Name of the Subject : Bioscience : Paper - 6</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) Figures to the **right** indicate full marks of the question.

(3) Draw neat and labelled diagram wherever **necessary**.

1 Answer as directed : 12

- (1) Explain - cosmid.
- (2) What is BAC and YAC ?
- (3) Give any two examples of blot technique.
- (4) Enlist the various method for insertion of rDNA into host.
- (5) What is EcoRI ?
- (6) Define :
 - (a) Restriction endonuclease
 - (b) Transfection.

2 Answer any **two** of the following : 14

- (1) Describe in detail promoter, operator and regulatory genes of lac operon.
- (2) Enlist the basic steps of translation. Explain activation and termination process of protein synthesis.
- (3) Describe in brief basic procedure of DNA amplification.

- 3** Answer any **two** of the following : **14**
- (1) Describe in brief how cloning is done.
 - (2) Enlist the characteristics of cloning vector. Explain in detail plasmid.
 - (3) Write a note on genetically modified organisms.
- 4** Write short notes : (any **two**) **10**
- (1) Importance of PCR
 - (2) Blot technique
 - (3) Blue-white screening.
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