

SEM	SET	PAPER CODE	TITLE OF THE PAPER
II	2014	14PBC2108 / 14PBT2107	RECOMBINANT DNA TECHNOLOGY

**SECTION – B****Answer all the questions:****5 x 5 = 25**

31. a. Enumerate the steps involved in rDNA technology and add a note on its applications.

**OR**

- b. Give a brief account on the use of R.E as molecular scalpels in genetic engineering.
32. a. Write a short note on yeast cloning vectors.

**OR**

- b. What is an expression Cassette? Comment on the role of promoters used in expression vectors.
33. a. Discuss the various chemical methods of DNA transfer.

**OR**

- b. Explain briefly the expression systems in prokaryotes and eukaryotes.
34. a. Explain the primary screening methods used in the identification and purification of recombinant DNA molecule.

**OR**

- b. Comment on the different types of blotting techniques which uses specific labelled probes.

35. a. Explain briefly on Bioethics and Biosafety in genetic engineering.

**OR**

b. Explain the molecular technique of RFLP. Add a note on its advantages and disadvantages.

**SECTION – C**

**Answer any THREE questions:**

**3 x 15 = 45**

36. Write an essay on PCR and its applications.

37. Describe the role of vectors used in gene cloning.

38. Elaborate on the different physical methods of gene transfer you have studied.

39. Give a detailed account on the screening and selection methods used in the identification of recombinant clones.

40. Discuss in detail about the various libraries involved in genetic engineering.

\*\*\*\*\*