

UG Sem 6 ,CC13

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Multiple Choice Questions

1 Choose the correct answer

- i. Molecular scissor used in genetic engineering is
 - a. DNA ligase
 - b. DNA polymerase
 - c. Helicase
 - d. Restriction endonuclease
- ii. Construction of a recombinant involves
 - a. Cleaving and rejoining DNA segments with ligase alone
 - b. Cleaving DNA segments with ligase and joining them with endonuclease
 - c. Cleaving DNA segments with endonuclease and joining them with ligase
 - d. Cleaving and rejoining DNA segments with endonuclease alone
- iii. Which is used extensively for genetic engineering in plants
 - a. Agrobacterium tumefaciens
 - b. Xanthomonas citri
 - c. Bacillus coagulens
 - d. Clostridium septicum
- iv. Restriction endonucleases
 - a. Cut or join DNA fragments
 - b. Cleave DNA at specific sites
 - c. Produce complementary strands
 - d. Cause direct vectorless gene transfer
- v. Restriction endonuclease cut
 - a. Single stranded DNA
 - b. Single stranded RNA
 - c. Double stranded DNA
 - d. Double stranded RNA

- vi. Restriction endonucleases
- a. Break DNA at specific sites
 - b. Create sticky ends
 - c. Produce cross overs
 - d. Both A& B
- vii. The enzymes which are commonly used in genetic engineering are
- a. Restriction endonuclease and polymerase
 - b. Endonuclease and ligase
 - c. Restriction endonuclease and ligase
 - d. Ligase and polymerase
- viii. Identify the plasmid
- a. EcoRI
 - b. *pBR322*
 - c. AluI
 - d. Hind II
- ix. T₁ Plasmid is obtained from
- a. Azotobacter
 - b. Agrobacterium
 - c. Yeast
 - d. Rhizobium
- x. PCR is required for
- a. DNA synthesis
 - b. DNA amplification
 - c. Protein synthesis
 - d. Amino acid synthesis
- xi. The most common bacterium used in genetic engineering is
- a. Escherichia
 - b. Clostridium
 - c. Salmonella
 - d. Bacillus
- xii. DNA fragments are joined by
- a. Ligase
 - b. Polymerase
 - c. Helicase
 - d. Gyrase
- xiii. Restriction endonucleases used in RDT are obtained from
- a. Plasmids
 - b. Bacterial cells
 - c. Bacteriophages
 - d. All prokaryotic cells

Answer Key

Question No.	Answer
1	d
2	c
3	a
4	b
5	c
6	d
7	c
8	b
9	b
10	b
11	a
12	a
13	b