MARKING SCHEME BIOTECHNOLOGY -045 SESSION 2021-22 TERM 1	
Q. No.	**SECTION - A**
1.	C. Nick translation
2.	A. Collagen
3.	A. W.Arber, H.Smith and D.Nathans
4.	B. Microinjection
5.	A. MCS
6.	C. Multiple Sclerosis
7.	B. Duodenum
8.	A. Ser 221, His 64 and Asp 32
9.	B. Type II restriction enzymes
10.	B. 2^n
11.	D. Lambda
12.	D. Alkaline Phosphatase
13.	A. have to be obtained from food
14.	D. Adenosine deaminase
15.	C. Slower, less safer and less specific
16.	C. BAC
17.	A .Glutathione
18.	A. size
19.	A. proteolytic enzyme
20.	C.Primer is double stranded
21.	B. paper electrophoresis is followed by paper chromatography
22.	B. Max Perutz
23.	C. Browning,
24.	C. Silver stain
SECTION - B	
25.	C. Machinery for removal of introns is not there in the prokaryotes
26.	A. Isolation of DNA, Digestion with Restriction enzyme, Agarose gel electrophoresis
27.	A. Biolistics
28.	A. Functional proteomics
29.	B. 3'-OH group is absent
30.	B. 2001; 2501; 3334; 5001 and 10001

31.	C. Restriction enzymes
32.	C.Mass Spectrometry
33.	A. Transfection
34.	B. Blue colonies represent non-recombinant bacteria
35.	B. OKT-3
36.	B. pBR 322
37.	A. Create gas phase ions from polar charged molecules
38.	C. Site directed Mutagenesis
39.	A. Negatively charged Asp COO^- residue pulls the Ser–OH proton through His
40.	A. Cheese and Beverage industries
41.	A. Cystic Fibrosis
42.	Ans. D.
43.	Ans. A.
44.	Ans. A.
45.	B. chromosome 22
46.	A. SNPs
47.	A. elevation of a tripeptide glutathione in cells
48.	A. the amount of protein nitrogen that is retained by the body from a given amount of protein nitrogen that has been consumed
SECTION - C	
49.	D. Both “a” and “b”.
50.	A. *Escherichia coli*
51.	A. Repeated Sequence
52.	C. No relationship (instead of A. Direct)
53.	A. In – silico Gene prediction
54.	A. No simple correlation (instead of B. Simple correlation)
55.	A. DNA ligase
56.	A. Primers
57.	B. 5’ CATCGCTAGT 3’
58.	A. hydrogen
59.	A. Cathode and Anode respectively
60.	B. Sticky ends

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Marking Scheme in lieu of diagram based questions for VI candidates	
Section - B	
36.	B. pBR 322
Section - C	
55.	A. DNA ligase
56.	A. Primers
57.	B. 5’ CATCGCTAGT 3’
58.	A. hydrogen
59.	A. Cathode to Anode
60.	B. Sticky ends

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