United International **University**

School of Science and Engineering

Class Test 3; Year 2021; Semester: Fall

Course: BIO 3105; Title: Biology for Engineers, Section: B

Class Serial: ; Name: ; ID:

1.	Suppose you have a primer sequence GCAT. In PCR you have a fragment of DNA with 25 spaces for bases which will repeat itself after every six sequences. If the above-mentioned primer fits on the right hand side of your desired DNA strand (upper), show the whole DNA strand before and show the whole picture after elongation process.	6	CO3

2.	Suppose you have a restriction enzyme that has a recognition sequence CATTAG. How you would complete the rDNA for a given sequence of one strand as below show in a pictorial view (You need to complete the DNA with a complementary strand before starting the process). ATAACGATAGCCGTATTATGCAATGCATTACGATTAGCCGTATAAT	4	CO3

3.	Mention the significance of using agarose gel in gel electrophoresis.	2	CO1
4.	Give the name of 5 products we should protect against biopiracy in Bangladesh.	2	CO1

5.	Do you think you can design and contribute in a project in the area of molecular diagnosis from your own background?	6	CO3