

2020

BIOCHEMISTRY — HONOURS — PRACTICAL

Paper : DSE-A-1P

(Nutritional Biochemistry)

Full Marks : 30

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

1. Write down the determination of the concentration of Vit-C from the following format : 3+(1½×4)
 - (a) Principle
 - (b) Protocol
 - (c) Calculation
 - (d) Results
 - (e) Precaution.

 2. Write down the determination of the total phenolic content from black-Tea in the following format : 2+(1×4)
 - (a) Principle
 - (b) Protocol
 - (c) Calculation
 - (d) Results
 - (e) Precaution.

 3. Online tutorial document. 5

 4. Viva-voce. 10
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Please Turn Over

2020

BIOCHEMISTRY — HONOURS — PRACTICAL

Paper : DSE-A-2P

(Molecular Basis of Infectious Diseases)

Full Marks : 30

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

1. (a) Write down the principle of counting of colony forming unit (CFU).
(b) Schematically describe the process of serial dilution
(assume the stock to 10^{-5} fold diluted) till $\rightarrow 10^{-10}$
(c) Suppose you are supplied with an overnight E.coli culture. After serial dilution 100 μ L of the culture from 10^{-5} dil. is plated on an agar plate. Next day, you observe 100 colonies on the plate. Calculate the number of bacteria per mL originally supplied E.coli culture. 4+2+4
 2. (a) Write down the principle of PCR.
(b) What are the criteria of an ideal primer? 3+2
 3. Viva voce. 10
 4. Online tutorial document. 5
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