

Government Degree College, Ganderbal.

Botany Internal Assessment, B.Sc 5th Semester , June 2020

Email id for assignment submission: gdc5thsem@gmail.com

Note: Candidates are required to attempt any four questions (*Each question carries 15 marks*). **Read the below mentioned instructions carefully before working on the assignment.**

Q1. a) How do prokaryotes and eukaryotes reproduce? Draw well labelled diagrams.

b) Explain diagrammatically the formation of phospholipid bilayer.

c) Explain Fluid Mosaic Model and enumerate the functions of membrane proteins and membrane lipids. Support your answer with well labelled diagrams.

(5×3= 15)

Q2. a) How do Golgi bodies and lysosomes work together? Explain.

b) Describe the semi conservative nature of mitochondria or chloroplast.

c) Explain in detail how protein enters the endoplasmic reticulum?

(5×3= 15)

Q3. a) Give detailed account of Griffith's and Avery's transformation experiments.

b) Explain mitosis and its stages. Draw well labelled diagrams in support of your answer.

c) Write in detail the structure and function of DNA Polymerase III found in prokaryotes and draw well labelled diagrams.

(5×3= 15)

Q4. a) Explain in detail the process of transcription in prokaryotes. Also draw suitable diagrams

b) Give detailed account of structure of transfer RNA with a well labelled diagram.

c) Explain the structural and functional details of bacterial RNA polymerase.

(5×3= 15)

Q5. a) What is the composition of membrane lipids? How do they differ in prokaryotes and eukaryotes?

b) Which organelles are specific only to a plant cell? Explain diagrammatically.

c) Give a general account of Watson and Crick's model of DNA.

(5×3= 15)

Instructions:

1. Write following details clearly on the top of your assignment:

Name

Semester

Batch

Contact No:

Email. Id

Class Roll No.

Registration no.

Category: Annual or Back log:

2. Use ruled pages to write your assignments. Only hand written assignments will be accepted. Properly label the questions in accordance with the question paper and do proper page numbering.

3. Once you are done with all the questions put your signature at the last page of your assignment.

4. Scan it properly in a pdf format (You can also use CamScanner).

5. Send it on the email id: gdc5thsem@gmail.com

6. No copy paste of the content will be accepted. Any assignments found similar among students will be rejected.

7. Once you submit check your mail frequently as deficiencies, if any, will be communicated to you via the email id provided by you.

8. The last date for assignment submission is 26-06-20. No assignment will be accepted after the due date.