

# **GURUDAS COLLEGE**

**B. Sc. SEMESTER III (General) Examination, 2020**

**Online Internal Assessment, 2020**

**Subject: BOTG**

**Subject Category: General**

**Course: BOT-G-CC-3-3**

**Course Name: CELL BIOLOGY, GENETICS AND MICROBIOLOGY**

**Date of Examination: 2<sup>nd</sup> March, 2021**

**Full Marks – 10**

**Time – 30 minutes**

All questions carry equal marks

**Answer any five questions**

**2×5=10**

1. Which of the following are synthesised in the nucleolus?

(a) tRNA (b) rRNA (c) DNA (d) all of the above

2. The protein Network that lines the inner side of nuclear membrane is called

a) Nucleolus b) Nuclear matrix c) Nuclear lamina d) Nuclear proteins

3. \_\_\_\_\_ are proteins used to pack DNA.

a) Nucleosomes b) Chromatins c) Telomerases d) Histones

4. Chromosome with a very short arm and a very long arm is referred to as

(a) Metacentric (b) Telocentric (c) Acrocentric (d) Sub-metacentric

5. Highest level of chromatin condensation occurs at  
(a) anaphase (b) prophase (c) interphase (d) metaphase
6. Phage virus mediated bacterial genetic recombination is called as  
a) Transformation b) transduction C) conjugation d) translation
7. Which of the Following is about 30 nm thick?  
a) DNA b) Nucleosome structure c) Solenoid structure d) Scaffolded DNA
8. Consider this sequence A—O—B —C—D—E—F, as a DNA sequence where O is the centromere. Which of the following will be a pericentric inversion?  
a) A—O—E—D—B—F  
b) D—B—O—A—E—F  
c) A—O—B—D—E—F  
d) B—O—A—D—E—F

### **Instructions for submission of answer scripts**

1. Write the front page/top sheet as per instruction.
2. Scan the pages in sequence and make a single PDF file.
3. Rename file as per instruction.
4. Email the PDF file within the stipulated time to the following

Email IDs :

**1) sem2botg2000GDC@gmail.com**

**2) genbotg@gmail.com**

**3) gcbotgen@gmail.com**