

B.Sc. SEMESTER III EXAMINATION, 2020 (CBCS)

BOTANY – GENERAL

PRACTICAL

**CC3/GE3 – CELL BIOLOGY, GENETICS AND
MICROBIOLOGY**

Full Marks – 30

Time: 1 Hour 30 Minutes

INSTRUCTIONS FOR PRACTICAL EXAMINATIONS

1. The examination and answer script submission will be only by online mode. No offline submissions will be accepted.
2. Write the answers on A4 sheets on one side only. Number your pages.
3. Use black pen to write the examination.
4. **Answers may be written in English or Bengali.**
5. Write the following on the first page of your answer script:

SARSUNA COLLEGE (563)

B.Sc. SEMESTER III EXAMINATION, 2020 (CBCS)

BOTANY – GENERAL (PRACTICAL)

CORE COURSE 3/GENERIC ELECTIVE 3 (CC3/GE3) – CELL
BIOLOGY, GENETICS AND MICROBIOLOGY

NAME:

UNIVERSITY ROLL NO.:

REGISTRATION NO.:

PHONE NO.:

6. If available, attach a scanned copy of your Admit Card with your answer script.
7. After completing your answers, scan all the pages and save as a single PDF file and name it by your paper and University Roll No. e.g. BOTG-CC3/GE3(P)-193563-.....
8. Upload your PDF file in the Google form link <https://forms.gle/UrjZz8Ue4qsP2EA36> given in Google Classroom within the given time limit.
9. You will be given 30 minutes to scan and upload the answer scripts. Answer scripts sent after the stipulated time limit will not be accepted.

Answer the following questions:

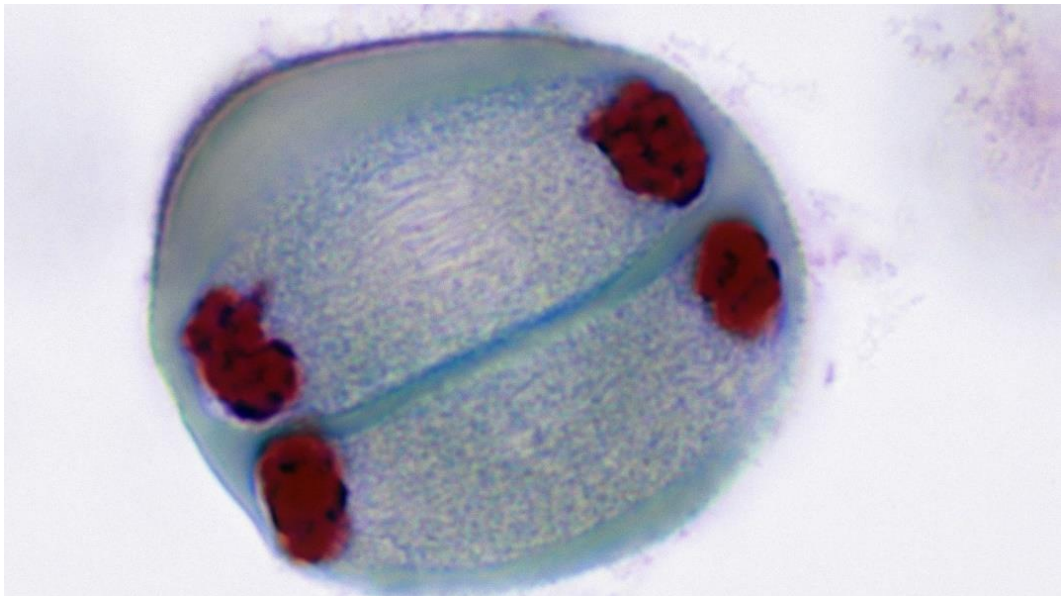
10 × 3=30

1. What is fixative? Name a fixative used in cytological preparation. Why is 1(N) HCl used with orcein stain? Draw a labelled sketch of a mitotic metaphase plate in *Allium cepa*. What is mitotic index? 2+1+2+4+1=10

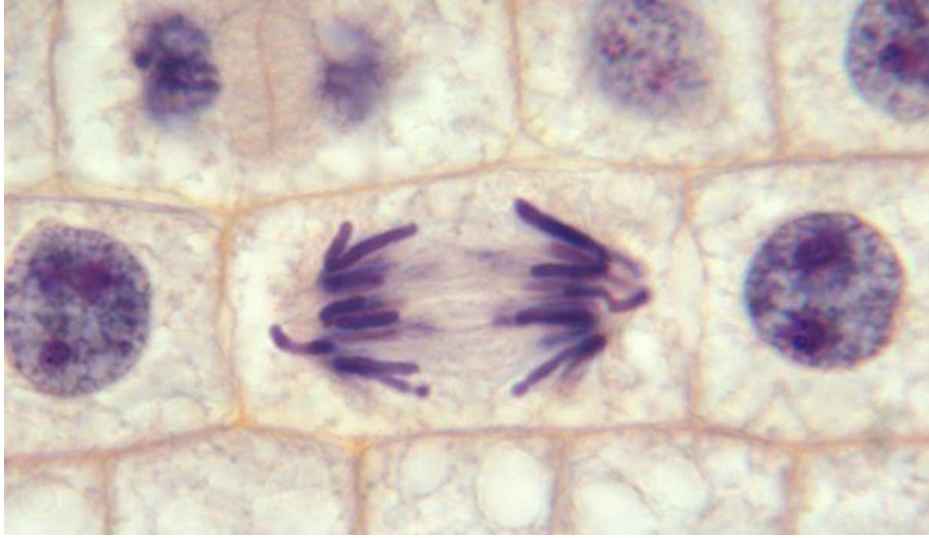
2. Write the principle of Gram's staining. Name the mordant used in this staining procedure. Describe the Gram's staining procedure with labelled diagram.

4+1+5=10

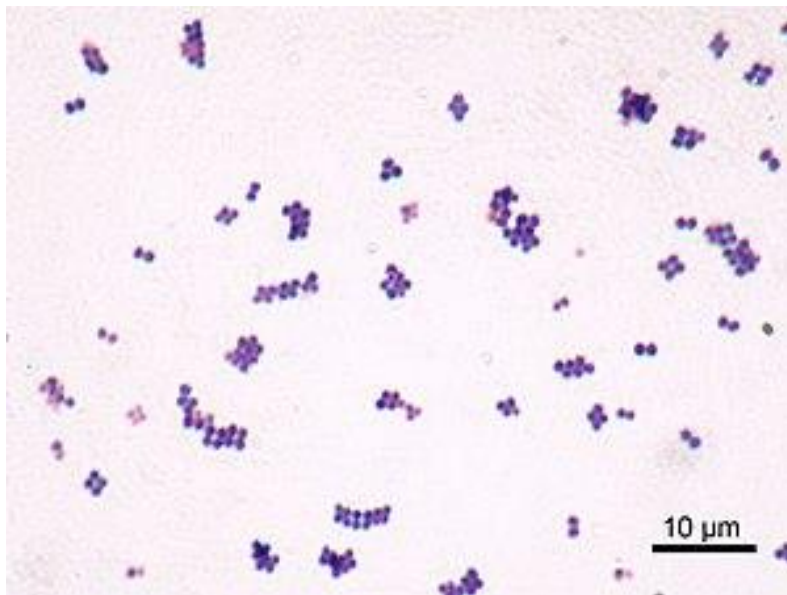
3. Identify the following specimens with reasons. For Specimen-C mention only Gram nature and morphology. $3\frac{1}{2} + 3\frac{1}{2} + 3 = 10$



SPECIMEN – A



SPECIMEN – B



SPECIMEN – C

(Mention only Gram nature and Morphology)