B. Sc. (Honours) Semester-VI Examination-2021 (CBCS) Subject- MICROBIOLOGY

PAPER- DSE-3 (Advances in Microbiology)

TIME-2 HRS FM-40

Answer *any eight* questions from the following:

 $5 \times 8 = 40$

- (a). What are pan genomes and core genomes? Who proposed these terms?
- (b). Define metagenome. Why metagenomics approach was needed by the microbiologists?
- (c). Write a short note on hypersensitive reaction of host plants.
- (d). Define metaproteomics and metabolomics. Write down their significance.
- (e). What are MDR bacteria? Write their clinical significance.
- (f). Define system biology. Mention its significance.
- (g). Write a short note on future implications of synthetic biology.
- (h). Name three processes by which HGT happens in bacteria. Briefly explain any one of them.
- (i). What is Quorum sensing? Write its significance giving suitable examples.
- (j). What are nanoparticles and liposomes? Write merits and demerits of nanoparticles.