

University Institute of Engineering & Technology, Kurukshetra University, Kurukshetra
(Recognised Under Section 2(f) and 12B of UGC)

Theory examination – JAN 2021		SEMESTER-III		
B.TECH-BIOTECH	Time – 3 hr 15 Min	M.M. - 56	SUBJECT– Microbiology	PAPER- BTE-203

INSTRUCTIONS TO BE FOLLOWED

- Allotted time for examination is 3 hours 15 minutes that includes time for downloading the question paper, writing answers, scanning of answer sheets and E-mailing the PDF files to the designated Email ID.
- For all B Tech. Biotechnology Students, the Email ID is:- btechbiotechuiet@kuk.ac.in
- The candidates will be required to attempt 75% of the question paper (maximum) by choosing to their any best questions accumulating 56 marks.
- The PDF files should be saved as Roll No. and Subject Code. Proper attention should be given while sending the email and in the subject line, the Roll Number and Subject Code should be mentioned.
- Maximum Page Limit should be 20 (Twenty) for attempting the question paper on A4 sheets which could be downloaded and printed from the sample sheets given in the Kurukshetra University Examination guidelines.
- Over-attemptation should be avoided.
- Handwriting should be neat and clean and diagrams should be clear and contrasted.
- The candidate should not write their Mobile No. otherwise Unfair Means Case will be made.
- While attempting the paper, the candidate will use blue/black pen only.
- Before attempting the paper, the candidate will ensure that he/she has downloaded the correct question paper. No complaint for attempting wrong question paper by the candidate will be entertained.
- Candidate must ensure that he/she has put his/her signature on each page of the answer sheet used by him/her. Answer sheet without the signature of the candidate will not be evaluated.

PART-A

Q. No. – 1 Answer the following questions.

(i)	Define term bioremediation	1.5
(ii)	Describe Koch postulates	1.5
(iii)	Define lithotrophs	1.5
(iv)	Define synchronous culture	1.5
(v)	Define anaerobic fermentation	1.5
(vi)	Define Hfr strain	1.5
(vii)	Define plasmid	1.5
(viii)	Define the Antiprotozoal drugs	1.5
(ix)	Describe the Antibacterial drugs	1.5
(x)	Describe the Antifungal drugs	1.5

PART-B (20 Marks)

2. Describe the properties of Bacillus and Clostridium- 5
3. Describe the pure culture technique- 5
4. Describe the Microbial fermentation- 5
5. Describe the major water born bacterial diseases- 5

PART-C (40 Marks)

6	Describe the various development and branches of microbiology	10
7	Describe the molecular approaches used in classification of bacteria.	10
8	Describe the morphology and cell structure of virus and fungi	10
9	Describe the methods of isolation of bacteria and fungi	10
10	Describe the different methods used in the measurement of microbial growth	10
11	Describe the conjugation process in bacteria	10
12	Describe the normal and contaminating microflora of soil	10
13	Describe the major air and soil borne bacterial diseases	10