

Dr. Babasaheb Ambedkar Marathwada University
Faculty of Science
B.Sc.I Year Practical Examination
MICROBIOLOGY
PAPER III (NEW)

Time : 10 : 00 am to 1 : 00 pm (on both days)

Max. Marks – 100

Centre : _____

Date : _____

Batch No. _____

Duration – Two days

- Note : i) Students absent on first day will not be permitted for practicals on second day.
ii) Wearing laboratory coat is mandatory.

Q. 1 & 2	Major Practicals	- each carrying 15 Marks	(30 Marks)
Q. 3 & 4	Minor Practicals	- each carrying 10 Marks	(20 Marks)
Q.5	Spotting (5 Spots)	- each carrying 05 Marks	(25 Marks)
Q. 6	Viva-Voce	-	(15 Marks)
Q.7	Record –Book	-	(10 Marks)

Questions to be asked in Major Practicals

- Gram staining.
- Hanging drop technique to demonstrate bacterial motility.
- Micrometry.
- Demonstration of presence of bacteria from – soil / water / air / milk.

Questions to be asked in Minor Practicals

- Monochrome staining.
- Negative staining.
- Qualitative test for :
Carbohydrate – Benedict’s test / Protein – Biuret test / DNA – Diphenyl amine test / RNA – Orcinol test.

Spotting : -

- Microscopy.
- Construction, operation and utility of laboratory equipments.
- Demonstration of Yeast, Fungi, Actinomycetes, Algae and Protozoa.

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PAPER IV (NEW)

Time : 2 : 00 pm to 5 : 00 pm (on both days)

Max. Marks – 100

Centre : _____

Date : _____

Batch No. _____

Duration – Two days

- Note : i) Students absent on first day will not be permitted for practicals on second day.
ii) Wearing laboratory coat is mandatory

Q. 1 & 2	Major Practicals	- each carrying 15 Marks	(30 Marks)
Q. 3 & 4	Minor Practicals	- each carrying 10 Marks	(20 Marks)
Q.5	Spotting (5 Spots)	- each carrying 05 Marks	(25 Marks)
Q. 6	Viva-Voce	-	(15 Marks)
Q.7	Record –Book	-	(10 Marks)

Questions to be asked in Major Practicals

- Isolation of bacteria from mixed cultures (streak plate method).
- Isolation of microorganisms from : air / water / soil / milk.
- Effect of physical and chemical agents on growth of bacteria : pH / Temperature / Heavy metal ions / UV rays / Antibiotics
- Cultivation of anaerobes.
- Sterility checks for autoclaving.

Questions to be asked in Minor Practicals

- Structural staining : Flagella / Capsule / Cell wall / Spore / PHB / Metachromatic granules.
- Preparation of culture media : Nutrient broth and agar / MacConkey's broth and agar / Sugar media / PDA / Blood agar / Photosynthetic bacterial growth medium.

Spotting : -

Spots should include questions or pre-performed practical material based on the practical performed by students but not covered during examination.

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