

Exam Seat Number	
PRN Number	
Full Name of Student	
WhatsApp Mobile Number	

**SHIVAJI UNIVERSITY, KOLHAPUR**

**M.Sc. Part II (Semester IV) CBCS-R Examination, October 2020**

**MICROBIOLOGY**

**MOCK TEST**

Day and Date: -

Total Marks: - 50

Time: -

Instructions:

1. Question paper and the answer book is one and the same.
2. Attempt ANY 25 Questions.
3. Each question carries 2 marks.
4. **Write the correct option** from amongst a, b, c, d given below each question in the
5. box  provided besides each question.

1) Ti plasmid type of gene transfer methods works with \_\_\_\_\_.

- a) fungi      b) dicots only      c) animals      d) bacteria

2) Tobacco osmotin is an \_\_\_\_\_ which has been expressed in transgenic potato, providing resistance to *Phytophthora infestans*.

- a) antiviral protein      b) antibacterial protein  
c) antifungal protein      d) antiprotozoal protein

3) YEps are \_\_\_\_\_

- a) Mutated yeast plasmids  
b) Hybrid of yeast and bacteria  
c) Yeast episomal plasmids  
d) Transformed cells

4) Hydrogen is commonly used by chemolithotrophic bacteria as \_\_\_\_\_.

- a) a protonic reactant      c) an electron donor  
b) reducing power      d) a pH reducer

5) Enrichment of magnetotactic bacteria is usually done by magnetic \_\_\_\_\_ technique.

- a) trapping      b) collection  
c) filtration      d) movement

6) Predominant form of sulphur in coal is \_\_\_\_\_.

- a) sulphide
- b) thiophenes
- c) thiosulphate
- d) pyrite

7) Heinen & Heinen have introduced the new term \_\_\_\_\_ to describe extremely thermophilic bacteria.

- a) thermo active
- b) thermo tolerant
- c) caldoactive
- d) thermoduric

8) 5' AMP can be converted to 5'IMP by using enzyme -----

- a. Adenylate decarboxylase
- b. Adenylate cyclase
- c. Inositol carboxylase
- d. Adenylate deaminase

9) The relaxed plasmids are \_\_\_\_\_

- a) the ones having copy numbers above 50 per cell
- b) the ones that can't be digested by endonucleases
- c) the ones that can't be isolated
- d) the ones present in more than one strains of the same host

10) What is the approximate copy number of Yeast Episomal plasmids?

- a) 20-200
- b) 2-5
- c) 100-200
- d) 500

11) What is the CEN4 region in the YAC vector?

- a) DNA from centromere
- b) DNA from telomere
- c) DNA from origin
- d) Bacterial DNA

12) What is pharming?

- a) Protein engineering
- b) Plant manipulation
- c) Genetic engineering of pharm animals
- d) Genetic engineering of cows

13) Boiler fine gas is mainly used for neutralization of \_\_\_\_\_ waste.

- a) fertilizer
- b) textile
- c) dairy
- d) distillery

14) High rate trickling filters are used to remove \_\_\_\_\_% of BOD.

- a) 65-85
- b) 75-95
- c) 35-65
- d) 95-100

15) Bioaugmentation with parachlorophenol degrading bacteria decomposed \_\_\_\_\_% of parachlorophenol within 1 hr.

- a) 90            b) 96            c) 80            d) 86

16) Munox is patented strain of lyophilized \_\_\_\_\_

- a) *Bacillus* spp.            b) *Thiobacillus* spp  
c) *Pseudomonas* spp   d) *Clostridium* spp.

17) ----- and ----- are most common microbial species used for treatment of RNA hydrolyzing enzymes during nucleotides and nucleosides synthesis.

- a. *Salmonella and Candida*  
b. *Penicillium and Streptomyces*  
c. *Staphylococcus and Salmonella*  
d. *Penicillium and Actinomyces*

18) 5' AMP can be converted to 5'IMP by using enzyme -----

- a. Adenylate decarboxylase  
b. Adenylate cyclase  
c. Inositol carboxylase  
d. Adenylate deaminase

19) Industrially 5'IMP and 5'GMP are recovered by treatment of enzymatic hydrolysate with----- and charcoal.

- a. column chromatography  
b. Ion exchange resins  
c. electromagnetic field treatment  
d. Electrophoretic mobility

20) Microbial transformation antibiotics is

- a. modified antibiotics  
b. Transformed antibiotics  
c. Genetically engineered medicine  
d. Artificial antibiotics

21) ----- is the principle intermediate in the preparation and manufacture of semisynthetic penicillins

- a. 6-Diamino palmitic acid  
b. phenoxyacetic acid  
c. 4 aminopenicillanic acid

d. 6 aminopenicillanic acid

22) N-acylation and o-phosphorylation are the methods ----- of antibiotics by microbial transformation.

a. Activation

b. Inactivation

c. Steroid transformation

d. acidifications

23) *Alcaligenes faecalis* is microorganisms used for fermentative transformation of cholic acid to -----

a. Ketocolic acid

b. Acetocholic acid

c. carboxylic acid

d. aldocolic acid

24) -----microorganisms is used for transformation of progesterone

a. *fusarium soloni*

b. *Rhizopus nigricans*

c. *Streptomyces argentiolus*

d. *curvalaria lunata*

25) Penicillin G  $\longleftrightarrow$  6 – aminopenicillanic acid + side chain

The above reaction is carried out by ----- enzyme at pH 8, 35-40 ° C

a.. Fungal acylase

b. yeast acylase

c. Bacterial acylase

d. None

26) In case of  $\beta$  carotene production to suppress the sexual .....the Trisporic acid is added to the fermentation medium.

a) Dependence

b) Independence

c) Interdependence

d) None of these

27) Lactic starter culture used as additives to modify and intensify the .....of food.

a) Texture

b) Color

c) Taste

d) Flavor

28) Some of the carotenoids present in food & act as precursors of .....

a) Vitamin E

b) Vitamin A

c) Vitamin K

d) Vitamin D

29) The streptomycin blocking the ability of ..... ribosomal subunits to make proteins which results in bacterial death.

a) 50'S

b) 80'S

c) 30'S

d) 40'S

30) .....used as substrate by *Candida utilis* in Single Cell Protein productions.

a) Black Strap Molasses

b) Proteins

c) Sulphite Waste Liquor

d) Corn Steep Liquor