

**M.Sc. BIOTECHNOLOGY
THIRD SEMESTER
PHARMACOLOGY (MDC)
MBT-306**

[PART-A : Objective]

Choose the correct answer from the following:

1×20=20

1. Branch of pharmacology which refers to application of drugs in prevention, control and treatment of disease:
 - a. Pharmacotherapeutics
 - b. Pharmacogenomics
 - c. Pharmacodynamics
 - d. Pharmacometrics
2. PCR stands for:
 - a. Primer Chain Reaction.
 - b. Peptide Chain Reaction.
 - c. Polypeptide Chain Reaction.
 - d. Polymerase Chain Reaction.
3. Western blotting is used for:
 - a. DNA-DNA interaction.
 - b. RNA-DNA interaction.
 - c. Protein-Protein Interaction.
 - d. DNA-Protein interaction.
4. Branch of pharmacology which deals with the natural drugs and their constituents:
 - a. Pharmacognosy
 - b. Pharmacodynamics
 - c. Pharmacogenomics
 - d. Immunopharmacology
5. Compound introduced by Ehrlich to treat syphilis:
 - a. Paracetamol
 - b. Acetylcholine
 - c. Arsphenamine
 - d. Insulin
6. Gerhardt Domagk is related to:
 - a. Prontosil
 - b. Penicillin
 - c. Streptomycin
 - d. Crocin
7. Penicillin was discovered by:
 - a. Alexander Fleming
 - b. Winston Churchill
 - c. Ronald Ross
 - d. Louis Pasteur
8. Who introduced antiseptics in surgical procedures?
 - a. Lister
 - b. Fleming
 - c. Darwin
 - d. Einstein
9. PCR is used for:
 - a. Quantifying DNA.
 - b. Amplifying DNA.
 - c. Preserve DNA.
 - d. None of the above.
10. Rotary evaporator is used for:
 - a. Drying of extract.
 - b. Concentration of extract.
 - c. Extraction of components.
 - d. None of the above.
11. Soxhlet is used to:
 - a. Extract
 - b. Boil
 - c. Dry
 - d. Cool
12. Lyophilizer is used for:
 - a. Drying of extract.
 - b. Concentration of extract.
 - c. Extraction of components.
 - d. None of the above.
13. The oldest method of blotting, developed in the year 1973, which is the basis of all the blotting methods available today is:
 - a. Northern Blotting
 - b. Western Blotting
 - c. Southern Blotting
 - d. Northwestern Blotting
14. LD50 stands for:
 - a. Low Dose.
 - b. Levelling Dose.
 - c. Lethal Dose.
 - d. None of the above.

15. How many rules are there in the Lipinski's rule of 5?

- a. 3
- b. 4
- c. 5
- d. 6

16. Short pieces of single stranded DNA which are complementary to the 3' ends of the sense and anti-sense strands of the target sequence in PCR are:

- a. DNA template.
- b. Oligonucleotide primers.
- c. Deoxynucleotide phosphates.
- d. None of the above.

17. The blotting technique used to detect molecules of protein stuck to other proteins is:

- a. Northwestern blotting
- b. Southwestern blotting
- c. Far-western blotting
- d. Western blotting

18. The stage in PCR that allows the primers to bind to their complementary sequence in the template DNA is:

- a. Initialization
- b. Annealing
- c. Denaturation
- d. Extension

19. In Northern blotting, to ensure linear conformation, RNA fragments are treated with:

- a. Alkaline solution
- b. Formaldehyde
- c. Acid solution
- d. Heavy metals

20. Temperature requirement during extension period of PCR is:

- a. 94-96 °C
- b. 98 °C
- c. 72-74 °C
- d. 50-70 °C

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UNIVERSITY OF SCIENCE & TECHNOLOGY, MEGHALAYA



[PART (A) : OBJECTIVE]

Duration : 20 Minutes

Serial no. of the
main Answer sheet

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Course :

Semester : Roll No :

Enrollment No : Course code :

Course Title :

Session : 2017-18 Date :

Instructions / Guidelines

- The paper contains twenty (20) / ten (10) questions.
- Students shall tick (✓) the correct answer.
- No marks shall be given for overwrite / erasing.
- Students have to submit the Objective Part (Part-A) to the invigilator just after completion of the allotted time from the starting of examination.

Full Marks	Marks Obtained
20	

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Scrutinizer's Signature

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Examiner's Signature

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Invigilator's Signature