

**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 : .....

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### 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