BACHELOR OF SCIENCE (CBCS-2018 COURSE)
T. Y. B. Sc. Sem-VI : WINTER- 2022
SUBJECT : MICROBIOLOGY : CHEMOTHERAPY & BIOMEDICAL INSTRUMENTATION

Day : Monday | Time : 10:00 AM-01:00 PM
Date : 5/12/2022 | **W-18486-2022** | Max. Marks : 60

N.B.
1) All questions are **COMPULSORY.**
2) Figures to the right indicate **FULL** marks.
3) Draw neat and labelled diagrams **WHEREVER** necessary.

Q.1 Attempt any **TWO** of the following; **(12)**
a) Write symptoms, risk factors and gene therapy of Alzheimer Disease.
b) Explain in detail mode of action and mechanism of resistance to Acyclovir.
c) With the help of well labelled diagram, describe the principle and use of dark field type blood cell coulter.

Q.2 Attempt any **TWO** of the following: **(12)**
a) Why gene therapy is a preferred treatment for SCID?
b) What is the mode of action of sulfonamide?
c) Explain mechanism of drug resistance in *Staphylococcus aureus.*

Q.3 Attempt any **TWO** of the following: **(12)**
a) What are the characteristics of chemotherapeutic agents?
b) Justify the statement – "Drug response in human beings is variable and unpredictable".
c) Explain principle and uses of EEG transducer.

Q.4 Attempt any **THREE** of the following: **(12)**
a) Discuss the mechanism of action of Nystatin
b) What are the uses of Sphygmomanometer?
c) Describe the multidrug resistant tuberculosis.
d) Comment on – Griseofulvin as an antifungal antibiotic

Q.5 Write short notes on any **FOUR** of the following: **(12)**
a) Penicillin
b) *Treponema pallidum*
c) Electrocardiogram
d) Sulphated polysaccharides
e) Tetracycline resistance

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