MASTER OF SCIENCE (BIOTECHNOLOGY) (CBCS-2018 COURSE)
M.Sc (Biotechnology) Sem - II : WINTER :- 2021
SUBJECT: ANIMAL TISSUE CULTURE

Day : Wednesday | Time : 10:00 AM-11:30 AM
Date 9/2/2022 | **W-19750-2021** | Max. Marks: 30

N.B

1) All questions are **COMPULSORY**.
2) Figure to the right indicate **FULL** marks.
3) Attempt **Section I** and **Section II** in **SAME** answer book.

SECTION-I

Q.1 Answer any **FIVE** of the following. **(05)**

a) Define primary culture.
b) What are HEPA filters?
c) What is meant by a confluent culture?
d) State name of the scientist who developed ATC.
e) Define cell strain.
f) What is the use of stirrer flask in ATC?

Q.2 Attempt any **TWO** of the following. **(10)**

a) What is the importance of serum in tissue culture growth medium?
b) Define continuous cell line. Describe its typical growth characteristics.
c) Why cell cultures are incubated in 5% CO_2 atmosphere?

SECTION-II

Q.3 Answer any **FIVE** of the following. **(05)**

a) Give the names of International and National cell bank.
b) State the important feature and use of RPMI 1640 medium.
c) Name the agents which contaminate cultures.
d) Give name of bioreactor achieving steady state of cells
e) Enlist the enzymes used for disaggregation of cells.
f) What is passage number?

Q.4 Attempt any **TWO** of the following **(10)**

a) Explain dye exclusion and dye uptake assays.
b) Describe any one method for preparation of primary culture.
c) What are microcarriers? Explain their use in scale up.

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