C 80145	(Pages : 2)	Name
---------	---------------------	------

Reg.	No
1102.	1 1 U

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH/APRIL 2015

(UG-CCSS)

Core Course—Biotechnology

Core Course	—Biotechnology	
BT 6B 02—ANIM	AL BIOTECHNOLOGY	
Time : Three Hours	Maximum: 30 Weighting	
I. Objective type questions. Answer all quest	ions:	
1 Serum can sterilized by:		
(a) Autoclave.	(b) Boiling at 60° C.	
(c) Filteration.	(d) Hot air oven.	
2 Characteristic of cancerous cells :		
(a) High contact inhibition.	(b) Loose contact inhibition.	
(c) Definite life span.	(d) None of these.	
3 Which one is a feeder layer ?		
(a) Mouse fibroblast.	(b) HeLa cells.	
(c) Kidney cells.	(d) Epidermal cells.	
4 Monoclonal antibody is developed by	:	
(a) rDNA technology.	(b) Hybridoma technology.	
(c) Immunoblotting.	(d) Immuna electrophoresis.	
5 Which among is a natural medium?		
(a) HEPES.	(b) Egle's medium.	
(c) Whites medium.	(d) Plasma clot.	
6 Which one is a normal cell line?		
(a) MRC-5.	(b) HeP-G2.	
(c) CaCO-2.	(d) MCF-7.	
State True or False:		
7 Tryphan Blue is a vital stain.		
8 Dead calls absorb Evan's blue		

9 Primary cells are anchorage dependent.

Turn over

- 10 Interleukins are produced by nestcells.
- 11 CMV is an animal virus vector.
- 12 CaCl, is a chemical used for somatic cell fusion.

 $(_{1}2_{X},$

II. Short Answer Type Questions. Answer all nine questions:

- 13 Inverted microscope. 14 CO₂ incubator.
- 15 Tryphan blue exclusion. 16 SV-40 virus.
- 17 Amniotic fluid. 18 Established cell line.
- 19 Hollow-fiber reactor. 20 HEPES.
- 21 Pleuripotent.

 $(9 \times 1 = 9 \text{ we})$

III. Short Essay. Answer any five questions:

- 22 Give brief account on natural media.
- 23 Explain role of serum in the medium.
- 24 Discuss different animal viral vectors.
- 25 Discuss about cell line r:hruckerization.
- 26 What is cell cloning ? Explain different cell cloning methods.
- 27 List out essential equipments in an animal cell culture lab.
- 28 Explain the principle and method of MIII based cytotexicity assay.

 $(5 \times 2 = 10 \text{ weighting})$

IV. Essay Questions. Answer any two questions:

- 29 Explain the protocol for isolation and preparation of primary cell culture of mouse embryo.
- 30 Discuss the characterization and maintenance of cell lines.
- 31 Describe media components of animal cell culture.

 $(2 \times 4 = 8 \text{ weightage})$