

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2023
(Sixth Semester)

Branch – BIOTECHNOLOGY

APPLIED BIOTECHNOLOGY AND IPR BIOETHICS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 = 10)

- 1 Who is the father of floriculture?
(i) M.H.Harigowda (ii) M.S.Swaminathan
(iii) M.H.Marigowda (iv) Gurcharan Singh Kalkat
- 2 Grade number 1 is associated with -----colour
(i) Brown (ii) Green
(iii) Yellow (iv) Blue
- 3 Which among is not an artificial sweeters?
(i) Aspartame (ii) Sacchrine
(iii) Honey (iv) Sucralose
- 4 Which food contain modified food starch?
(i) Candy (ii)Greens
(iii) Rice (iv) Sugarcane
- 5 A material derived from or produced by biological system
(i) Biomaterial (ii) Nano particles
(iii) Bioreactors (iv) Biopolymers
- 6 ECMO stands for
(i) Extra cellular membrane organisation
(ii)Extra corporeal membrane organisation
(iii)Extra cell membrane organization
(iv)Extra cytoplasmic membrane organisation
- 7 What is the highest biosafety level?
(i) BSL- 4 (ii) BSL- 2
(iii) BSL- 1 (iv) BSL- 3
- 8 The core principles of Bioethics are the following except _____.
(i) Maleficence (ii) Justice
(iii) Autonomy (iv) Beneficence
- 9 Which is used to identify agricultural ,natural or manufactured goods produced and processed?
(i) GI (ii) Copyright
(iii) Patent (iv) Trademark
- 10 IPR protects the use of information and ideas that are of
(i) Social value (ii) Commercial value
(iii) Ethical value (iv) Moral value

Cont...

SECTION - B (25 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 5 = 25)

- 11 a State the fundamentals of Agribusiness management.
OR
b How Floriculture industry is developing in India.
- 12 a Give the economic uses of Marine algae.
OR
b Explain the biotechnological aspect of saccharide processing.
- 13 a Write in detail about the Bone tissue engineering.
OR
b Discuss on the bioreactors used for culturing hepatocytes.
- 14 a Explain the social and ethical issues in Biotechnology.
OR
b Outline the types of Biosafety levels.
- 15 a Describe in detail about plants right and Farmers right.
OR
b Write short notes on TRIPS and WTO.

SECTION -C (40 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks (5 x 8 = 40)

- 16 a Highlight the principle methods of post harvesting process.
OR
B Define floriculture and types of floriculture practiced in India.
- 17 a Discuss about the genetically modified food product.
OR
b Give the commercial importance of marine pharmaceutical products.
- 18 a Enumerate on stem cell types and its applications.
OR
b How skin replacement is done by tissue engineering?
- 19 a Compare Bioethics and Business ethics.
OR
b Explain about the assessment of biological hazards.
- 20 a Give in detail about the Intellectual property rights.
OR
b What are the challenges and concerns on GMO's?

Z-Z-Z END