

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2022  
(Sixth Semester)

Branch – BIOTECHNOLOGY

**BIOPHARMACEUTICALS**

Time: Three Hours

Maximum: 75 Marks

**SECTION-A (10 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(10 x 1 = 10)

- 1 Who introduced the Ayurveda?  
(i) Dhanvantari (ii) Panchavarna  
(iii) Dhananjayan (iv) None of the above
- 2 Who is the founder of Siddha?  
(i) Alauddin Khalji (ii) Dhanvantari  
(iii) Charak (iv) Agastyar
- 3 What is the concept of pharmacodynamics?  
(i) Molecular (ii) biochemical  
(iii) physiologic effects or actions (iv) All of the above
- 4 Define ADMET  
(i) Absorption, distribution, metabolism, excretion, and toxicity  
(ii) Adenine, chemical absorption, distribution, metabolism  
(iii) Adenine, metabolism, excretion, and toxicity  
(iv) None of the above
- 5 Which organ is responsible for detoxification?  
(i) Brain (ii) Liver  
(iii) Kidney (iv) Nephron
- 6 Abbreviation of GCMS  
(i) Gas Chroma therapy Mass Spectrometer  
(ii) Gas Chromatography Mass Spectrometry  
(iii) Gas Chroma Mass spectrums  
(iv) None of the above
- 7 Which plants have curcumin?  
(i) *Catharanthus roseus* (ii) *Curcuma longa*  
(iii) *Zingiber officinale* (iv) *Piper nigrum*
- 8 Which food has omega-3?  
(i) Fish and other seafood (ii) Nuts and seeds  
(iii) Plant oils (iv) All of the above
- 9 Which of the following is not an essential oil?  
(i) Clove oil (ii) sandalwood oil  
(iii) Eucalyptus oil (iv) Groundnut oil
- 10 The vitamin essential for blood clotting is \_\_\_\_\_  
(i) vitamin A (ii) vitamin B  
(iii) vitamin C (iv) vitamin K

Cont...

**SECTION - B (25 Marks)**

Answer ALL questions

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

- 11 a What is allopathy?  
OR  
b Write the short notes on siddha.
- 12 a Give some points about Pharmacodynamics.  
OR  
b Give the short notes on drug receptors.
- 13 a Write the short notes on drug development cycle.  
OR  
b What are the different methods of plant extraction?
- 14 a Write the short notes on pharmaceutical products of recombinant dna.  
OR  
b Write the importance of good manufacturing practices.
- 15 a Explain production therapeutic hormones insulin.  
OR  
b Explain tumor necrosis factor.

**SECTION - C (40 Marks)**

Answer ALL questions

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

- 16 a Give brief report on Siddha medicine.  
OR  
b Write the classification of drug based on ATC system.
- 17 a Write an essay on ADMET.  
OR  
b Elucidate liver detoxification process.
- 18 a Give detailed account on capsule preparation.  
OR  
b Write enumerate the FDA's Drug Review Process.
- 19 a Explain the therapeutic vaccine manufacturing Process.  
OR  
b Explain biopharmaceuticals derived from genetically modified plants.
- 20 a Write down the Uses and Benefits of biopharmaceuticals in treatment of health disorders.  
OR  
b Briefly explain oils used in aromatherapy.

Z-Z-Z

END