

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2022
(First Semester)

Branch – **BIOCHEMISTRY**

GENERAL BIOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

- 1 Taeniasis is a type of infectious disease caused by
(i) *Taenia solium* (ii) Fungi
(iii) Liver fluke (iv) Bacteria
- 2 A human female with Turner's syndrome-
(i) has one additional X chromosome (ii) has 45 chromosomes with XO
(iii) is able to produce children with a normal husband (iv) exhibits male characters
- 3 In the context of the ABO blood group, a transfusion of AB blood may be given to a person who has blood type
(i) A (ii) O
(iii) B (iv) AB
- 4 Hardy-Weinberg equilibrium operates in the absence of
(i) Gene flow (ii) Mutation
(iii) Natural selection (iv) All of these
- 5 When is the world wild life week?
(i) First week of September (ii) Last week of September
(iii) First week of October (iv) Last week of October

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 6 a Explain the structure of *Taenia solium*.
OR
b Comment on endoskeleton of Shark.
- 7 a Enumerate about the Down's syndrome.
OR
b Summarize the Barr-body.
- 8 a Comment on Rh factor.
OR
b Write about Hemophilia in man.
- 9 a Explain sickle cell anemia.
OR
b Explain outbreeding with examples.

Cont...

- 10 a Explain about wildlife conservation.
OR
b List out the national parks in India.

SECTION -C (30 Marks)

Answer ALL questions
ALL questions carry EQUAL Marks (5 x 6 = 30)

- 11 a Describe the mouthparts of Cockroach with neat labelled diagram.
OR
b Explain the digestive system of shark with neat labelled diagram.
- 12 a Describe about sex determination in Man.
OR
b Summarize the structure of chromosome and its types.
- 13 a Describe about ABO blood grouping.
OR
b Explain the extra-chromosomal inheritance with one suitable example.
- 14 a Differentiate Eugenics and Euthenics.
OR
b Explain Hardy-Weinberg law with an example.
- 15 a Describe about pond ecosystem with suitable example.
OR
b Explain any three effects of water pollution in man.

Z-Z-Z

END