

**PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)**

**BSc DEGREE EXAMINATION DECEMBER 2018  
(First Semester)**

Branch - **BIOCHEMISTRY**

**GENERAL BIOLOGY**

Time: Three Hours

Maximum: 75 Marks

**SECTION-A (10 Marks)**

Answer **ALL** questions

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

- 1 State the animal which invadas human intestinal tissues and causes amoebic dysentery.
 

(i) Fasciola hepatica	(ii) Entamoeba histolytica
(iii) Toenia solium	(iv) Lineus longissimus
- 2 Mention the common name of periplaneta Americana is
 

(i) Honey bee	(ii) Termites
(iii) Silk Worm	(iv) Cockroach
- 3 Choose the karyotype of Turner's syndrome
 

(i) 45, XY	(ii) 45, XX
(iii) 45, XO	(iv) 45, XXY
- 4 Mention the number of barr body present in a normal female with XX chromosomes.
 

(i) 4	(ii) 2
(iii) 1	(iv) 3
- 5 If a man with blodd group AB is married to a woman with blood group AB, their children will be the following blood group.
 

(i) A, B, AB	(ii) A, B, 0
(iii) A, AB, 0	(iv) A, B
- 6 Who discovered the Rh factor?
 

(i) Landsteiner and Wiener	(ii) Von Decastello
(iii) Bernstein	(iv) Sturli
- 7 The term inborn errors of metabolism was first coined by
 

(i) Darwin	(ii) Francis Galton
(iii) A. E. Garrod	(iv) Mendel
- 8 Identify the best practice of the positive euthenics among the following:
  - (i) The improvement of already existing human beings can be achieved by improving the environmental conditions
  - (ii) Undesirable hereditary traits must not be allowed to migrate from one place to another
  - (iii) The sterilization method is based on surgical operation of sperm duct or vas deferens in males and oviducts or fallopian tubes in females
  - (iv) Sexual separation of the defective persons may have various sex-linked diseases
- 9 Nicotine produced by smoking cigarettes which causes
 

(i) Air pollution	(ii) Water pollution
(iii) Land pollution	(iv) Industrial pollution

**SECTION - B (35 Marks)**

Answer **ALL** Questions

**ALL** Questions Carry **EQUAL** Marks ( 5 x 7 = 35)

- 11 a Describe the morphology of Entamoeba Histolytica.  
OR  
b Explain the structure of male reproductive system of cockroach.
- 12 a Summarize account on heterochromatin and euchromatin.  
OR  
b Compare and contrast the Klinefelter's syndrome and Down's syndrome.
- 13 a Analyze the term colour blindness in man.  
OR  
b Bring out your idea about skin colour in Man.
- 14 a State any two amino acid metabolic errors in man.  
OR  
b Narrate the term sickle cell anemia.
- 15 a Pond is an ideal ecosystem - How?  
OR  
b Outline various effects of water pollution.

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

**ALL** Questions Carry **EQUAL** Marks ( 3 x 10 = 30)

- 16 Elucidate the external morphology of shark with diagram.
- 17 Discuss about chromosomal aberrations with example.
- 18 Examine ABO blood groups inheritance in man.
- 19 Trace out different measures of positive eugenics.
- 20 Enumerate possible methods of wild life conservation.

Z-Z-Z

END