

Model Test paper

Biology(DA Code)

Class 10+2

Max marks 70

Time 3 Hours

Section A

Multiple Choice questions

Each question carries 2 marks

- Q1) In man, the sperms are produced in:
- (a) Seminiferous tubules
 - (b) Vasa efferentia
 - (c) Rete testis
 - (d) Vas deferens
- Q2) The type of pollination, involving transfer of pollen grains from anther to the stigma of the same flower is known as:
- (a) Geitonogamy
 - (b) Xenogamy
 - (c) Autogamy
 - (d) Apogamy
- Q3) The flow of genetic information from DNA to RNA is known as
- (a) Replication
 - (b) Transcription
 - (c) Translation
 - (d) Termination
- Q4) Darwin's theory of evolution is also called
- (a) Theory of Natural selection
 - (b) Theory of special Creation
 - (c) Inheritance of Acquired characters
 - (d) None of the above
- Q5) The term 'Totipotency' refers to the capacity of —————
- (a) Seed to germinate
 - (b) Cell to generate whole plant
 - (c) Cell to enlarge in size
 - (d) None of these

Q6) Which one of the following has the largest population in a food chain?

- (a) Producers
- (b) Primary Consumers
- (c) Secondary consumers
- (d) Decomposers

6X2=12

Write true or false

Each question carries 2 marks

- Q7) Tubectomy is related to women.
- Q8) Mendel studied total 9 characters of garden pea.
- Q9) AUG and GUG are start codons
- Q10) Biogas plant provides energy source as well as manure.
- Q11) Plasmid is linear DNA molecule present in cell.
- Q12) Species diversity is uniformly distributed on earth

6X2=12

Fill in the blanks

Each question carries 2 marks

- Q13) Pollination by animals is called ————. (Hydrophily/Zoophily)
- Q14) Zygote is ————. (diploid/haploid)
- Q15) ————has the shape of clover leaf. (t-RNA, m-RNA)
- Q16) ———— is the baker's yeast. (Saccharomyces cerevisiae/Microsporum)
- Q17) Bt toxin is coded by a gene named... .. (Cry/Try)
- Q18) is the number of deaths in the population during a given period. (Natality/Mortality)

Match the column I with Column II*Each question carries 2 marks*

Q19)

Column I	Column II
(i) Skin colour in Man	a) Multiple alleles
(ii) ABO blood group	b) Dihybrid cross
	c) Polygenic inheritance

Q20)

Column I	Column II
Name of disease	Causative Agents
(i) Malaria	(a) Plasmodium
(ii) Filariasis	(b) Microsporum
	(c) Wuchereria bancrofti

Q21)

Column I	Column II
Name of Drug	Source
(i) Opium	(a) Papaver somniferum
(ii) Cocaine	(b) cannabis sativa
	(c) Erythroxylem coca

Q22)

Column I	Column II
(i) The Earth Summit	(a) Indo-Burma
(ii) Biodiversity Hotspot	(b) Rio de Janeiro
	(c) Aravali Hills

Q23)

Column I	Column II
(i) Immigration	(a) Increase population
(ii) Emigration	(b) Birth rate
	(c) Decrease population

5X2=10

Section B

Short answer type questions

Each question carries 3 marks

Q24) Name the three germ layers which give rise to all the tissues and organs

OR

Why lac operon is called inducible operon?

Q25) Write three phases of Gametogenesis

OR

What are homologous organs? Give an example.

Q26) How was insulin obtained before advent of r DNA technology?

OR

Define Mutualism. Give one example

Q27) Explain gene gun method for introduction of alien DNA into host.

OR

Write a short note on behavioral adaptations in animals.

4X3=12

Section C

Short answer type questions

Each question carries 4 marks

Q28) Suggest any two methods to assist infertile couples to have children.

OR

What are characters of flowers pollinated by insects?

Q29) List the harmful effects of alcohol or drug abuse.

OR

What are biofertilizers? What are the main source of biofertilizers?

Q30) Discuss the causes of loss of biodiversity

OR

What are sacred groves? What is their role in conservation?

3X4=12