

**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) Mendel's dihybrid phenotypic ratio is  
(a) 12:3:1  
(b) 9:3:4  
(c) 3:1  
(d) 9:3:3:1
- Q4) The flow of genetic information from DNA to RNA is known as  
(a) Replication  
(b) Transcription  
(c) Translation  
(d) Termination
- Q5) The chronic use of alcohol causes -----.  
(a) Ringworm  
(b) Liver Cirrosis  
(c) AIDS  
(d) Mental retardness

- Q6) Winter Sleep in animals is called  
(a) Hibernation  
(b) Migration  
(c) Diapause  
(d) Aestivation

**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*/Microsporium)
- 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)

**6X2=12**

**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) Microsporium
	(c) Wuchereria bancrofti

Q21)

Column I	Column II
Name of Drug	Source
(i) Opium	(a) Papaver somniferum
(ii) Cocaine	(b) cannabis sativa
	(c) Erythroxylen 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) Why lac operon is called inducible operon?

OR

Write three phases of Gametogenesis

Q25) Write down differences between monohybrid & dihybrid cross.

OR

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

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**