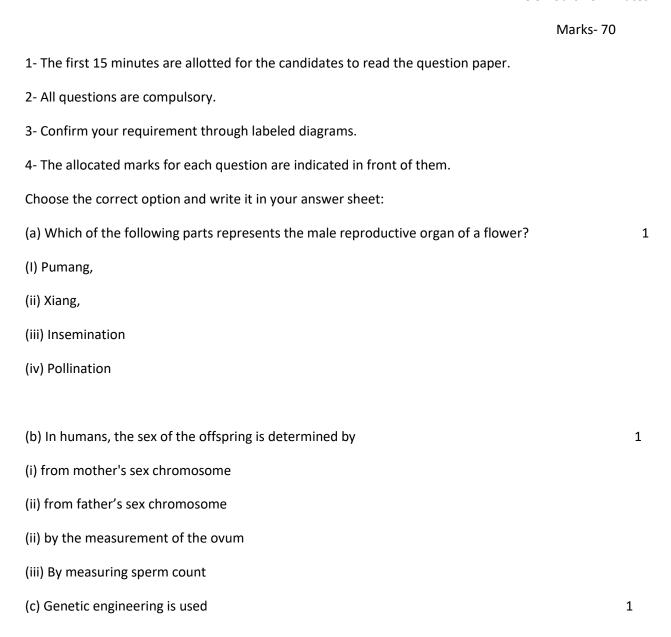
Sample Question Paper

Session-2024-25

Biology

Class-12

Time 3 hours 15 minutes



(i) In medicine	
(ii)In agriculture	
(iii) In both of these,	
(iv) not in any	
(d) Which of the following is considered a hot spot of biodiversity in India	1
(i) Aravalli Mountains	
(ii) Indogangetic Plain	
(iii) Western Ghats	
(iv) Eastern Ghats	
2-Very short answer question-	
(a) Write the number of chromosomes in Klein Felter and Turner syndrome.	1
(b) By which division do male germ cells produce sperms?	1
(c) What is the number of chromosomes in the pollen mother cell?	1
(d) Name the enzyme which breaks the DNA molecule into fragments.	1
(e) What type of pyramids are there in the universe?	1
3- Short Answer Question-	
(a) Explain sex determination in birds.	2
(b) Draw a neat labelled diagram of the double helical model of DNA presented by Watson and Crick.	2
(c) What is immunity?	2
(d) Orchid plant is growing on the branch of mango tree. How would you explain the interaction between?	2
(e) Draw a diagrammatic representation of the decomposition cycle in a terrestrial ecosystem.	2
4- Short Answer Questions-II	

(a) Explain any three differences between microsporangium and megasporangium.	3
(b) In our society, only women are blamed when girls are born? Explain why this is not right?	3
(c) Explain Mendel's law of dominance taking the example of a hybrid cross.	1+2
(d) Which feature of the DNA helix helped Watson and Crick to imagine the semi-conservative DNA replication? Explain it.	form of 3
5-(a) Make a neat and labeled diagram of the life cycle of malaria parasite.	3
(b) How has the study of biology helped us in controlling infectious diseases?	3
(c) How do biofertilizers increase the fertility of the soil?	3
(d) What is baculovirus?	3
6- (a) Write a comment on the following	
(i) PCR	1+1/2
(ii) Restriction enzyme	1+1/2
(b) What is the use of biotechnology in agriculture sector?	3
(c) What do you understand by parasitic animals? Give one example.	2+1
(d) Differentiate between the following:	
1-Production and decomposition	1+1/2
2-Parasitism and commensalism	1+1/2
Long answer question-	
7- Describe the male reproductive system of humans with a diagram. Where are the sperms st	tored in it? 2+2+1
Or	
Describe microsporogenesis in flowering plants with diagram	2+3

8-What is the genetic code? Describe its main features.	2+3
Or	
What is biological evolution? the evolution of plants through geological periods Describe pictorially.	2+3
9- The species diversity of plants (22 percent) is much less than that of animals (72 percent): What is reason that more diversity is found in animals?	the 5
Or	
What are the main causes of species loss in a geographical area?	5