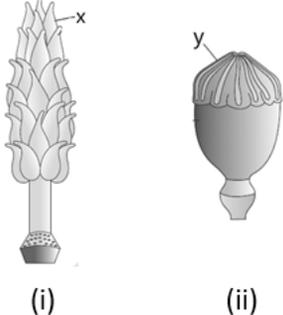




QUESTION BANK BIOLOGY – CLASS XII (2019 – 20)

S.NO	SECTION-A
1	How do drones develop in honey bees ? Name the process. OR Some flowers, selected for artificial hybridization, do not require emasculation but bagging is essential for them. Give a reason
2	Name the asexual spores produced by <i>Penicilium</i> ? How do you call those offsprings produced by these spores?
3	Supply an overall ecological term to define a set of conditions that an organism tolerates and utilizing resources in the ecosystem and playing a role in the system.
4	Who demonstrated that life comes only from pre-existing life?
5	What forms beads-on-structure in chromatin? OR State the law elucidated from a cross made between two pure breeding plants which differ in two characters.
SECTION-B	
6	An ecosystem with more species is said to be stable community. What does ‘stability’ mean in biological community?
7	Mention four significant services that a healthy forest ecosystem provide. OR Substantiate with the help of one example that in an ecosystem mutualists (i) tend to coevolve and (ii) are also one of the major causes of biodiversity loss.
8	Cite two examples of homologous organs one each from plants and animals. OR Why is Evolution considered as stochastic process and not a directed process towards a sense of determinism?
9	Write any two ways by which apomictic seeds may be developed in angiosperms.
10	Describe what will happen if innermost layer of the microsporangium is damaged?
11	How does use of cervical caps prevent pregnancy? Mention its advantage over other mechanical contraceptive devices.
12	How will you justify that <i>Drosophila melanogaster</i> is the ideal organism for genetics experiments?
SECTION- C	
13	Explain giving reasons that pyramid of energy is always upright.
14	Explain the logistic growth pattern of a population. Why do population growth patterns of all organisms ultimately follow it?
15	Explain the impact of human activities on carbon cycle in nature and list its harmful effects. OR Explain the cause and effect of biomagnification in an aquatic food chain
16	Explain with the help of an example each any three ways the ecologists use to measure population density of different organisms rather than by calculating their absolute number.
17	List six advantages of “ex-situ” approach to conservation of biodiversity.
18	A doctor after conducting certain tests on a pregnant woman advised her to undergo M.T.P., as the foetus

	<p>she was carrying showed trisomy of 21st chromosome. (a) State the cause of trisomy of the 21st chromosome. (b) Why was the pregnant woman advised to undergo M.T.P. and not to complete the full term of her pregnancy? Explain</p> <p style="text-align: center;">OR</p> <p>How is polygenic inheritance different from pleiotropy? Give one example of each.</p>
19	<p>What is adaptive radiation? How did Darwin explain it? OR Explain the Hardy-Weinberg principle with the help of an algebraic equation.</p>
20	<p>Explain the role of regulatory gene in a <i>lac</i> operon. Why is regulation of lac operon called as negative regulation?</p>
21	<p>Draw a diagram of a male gametophyte of an angiosperm. Label any four parts. Why sporopollenin is considered the most resistant organic material. OR Draw a diagram of L.S. of an embryo of grass and label any six parts.</p>
22	<div style="display: flex; align-items: center;"> <div style="flex: 1;">  <p style="text-align: center;">(i) (ii)</p> </div> <div style="flex: 2; padding-left: 20px;"> <p>Label the parts 'x' and 'y'. State and define the type of pistils shown in the diagram.</p> </div> </div>
23	<p>Define Gametogenesis. How do you classify the types of gametes base on their morphology? Name the type of gametes formed in staminate and pistillate flowers.</p>
24	<p>From the list given below, select the sexually transmitted infections. Suggest the ways to avoid from getting such infections. Typhoid, Chlamydiasis, Cholera, trichomoniasis, hepatitis-B</p>
25	<p>Compare the processes of DNA replication and transcription in prokaryotes. Compare the processes of DNA replication and transcription in prokaryotes.</p>
26	<p>(a) Explain Griffith's 'transforming principle' experiment. (b) In the above experiment, "heat which killed one type of bacteria, did not destroy the properties of genetic material." Justify</p>
27	<p>While studying pollution of water, a group of students observed mortality of fish in the river flowing through the city and also in the pond which was away from the city but was adjacent to the crop fields. They further found that drains of the city discharged sewage into the river and the water from farms flowed into the pond. Explain how these could be the cause of fish mortality.</p>
28	<p>(a) What is "population" according to you as a biology student ?</p>

	(b) "The size of a population for any species is not a static parameter." Justify the statement with specific reference to fluctuations in the population density of a region in a given period of time.
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	End of the Question Paper
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