

INDIAN SCHOOL MUSCAT SECOND PERIODIC TEST

BIOLOGY

CLASS: XII

13.09.2018

Sub. Code: 044

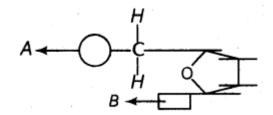
Time Allotted: 50 mts

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Max. Marks: 20

GENERAL INSTRUCTIONS:

- All Questions are compulsory.
- Draw diagrams if necessary.
- 1. Name the components "a" and "b" in the nucleotide with a purine given below.



What is Cistron? 2. 1 Who broughtforth the idea of mutations that causes evolution? 3. 1 4. What is recombinant DNA? 1 How do S-strain and R-strain of Streptococcus Ineumonia bacteria differ from one another? 2 5. 2 6. What are UTRs? Where are they located on Mrna? 7. Are flippers of Penguin and Dolphin homologous or analogous? What type of evolution has 2 brought such a similarity in them? OR List the two main propositions of Oparin and Haldane Theory. Name and describe the two main types of restriction enzymes. 2 8. 9. What are cloning vectors? Name the wo commonly used vectors. 2 10. Write down the structural genes in Lac operon. What do they code for?

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OR

State the structural and functional differences between Mrna and Trna.

11. How and why is the bacterium *Thermus aquaticus* employed in Rdna Technology? Explain

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OR

List the three features of Cloning vector and explain each one of them.

End of the Question Paper