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|  | **Entrance Examination**  **March 2022** |
| **BIOLOGY 2: Organisms to Ecosystems**  Time allowed: 1.5 hours (90 minutes)  **Answer THREE questions** | |

1. Write an essay on any biological aspect of Covid-19.
2. The term ‘micro-organisms’ can include both fungi and bacteria. What are the differences between them?
3. Do you think statistical methods are useful in biology, and can you give any examples?
4. Discuss courtship displays in (non-human) animals.
5. Write an essay on energy transfer in ecosystems.
6. Discuss the nature and biological importance of soil.
7. Write about a famous biologist of your choice.
8. Write an essay on any group(s) of organisms that live in water.
9. Everyone knows the term ‘biodiversity’, but can it be measured?
10. Write a biological essay on any aspect of the food industry.
11. Review some organisms that cause human or animal disease, and discuss methods to combat them.
12. By what processes do new species evolve?
13. What contributions do you expect genetics to make to human health in the future?
14. By now over 4800 exoplanets have been identified. Do you think we will obtain evidence for life on any of them, and if so how?

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1. What are the differences between ‘parasitism’ and ‘symbiosis’?
2. Explain the concepts of ‘ecosystems’, ‘habitats’ and ‘communities’.
3. Discuss how you would conduct an ecological survey.
4. Describe any conservation site or organisation with which you are familiar.

**END**