

GX 2271

Exam Code(s)	2BS1
Exam(s)	2 nd Year Science Examination
Module Code(s)	MI212
Module(s)	Microbiology – Microbes And The Environment
Paper No.	1
Repeat Paper	Special Paper
External Examiner(s)	Professor C.M. Brown
Internal Examiner(s)	Professor E. Colleran
	Dr. C. O’Byrne

Answer Question 1 and 4 other questions

Duration	3 hrs
No. of Answer books	1

Handout	_____
MCQ	_____
Statistical Tables	_____
Graph Paper	_____
Log Graph Paper	_____
Other Material	_____

No. of Pages 2
Department(s)

- Q1. Describe two species belonging to the phylum Proteobacteria, including details of their phenotypic characteristics.
- Q2. Write an essay on "The use of ribosomal RNA sequences for phylogenetic analysis".
- Q3. Write an essay on "Micro-organisms and hydrothermal vents". Where would you find the micro-organisms, what are they doing and what is the importance of their activities to the vent ecosystem?
- Q4. Write an essay on "Viroid and prion diseases of plants, animals and humans".
- Q5. Describe the microbiology of anaerobic digestion. In your answer briefly describe how this process is different from aerobic wastewater treatment.
- Q6. Discuss the key microbiological steps of the Nitrogen Cycle. In your answer, briefly describe the main features of the Nitrogenase enzyme complex.
- Q7. The human body has effective protective systems that help to prevent microorganisms from establishing infections. Discuss this statement with the aid of clear well-labelled diagrams.