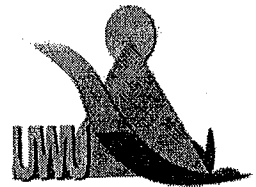
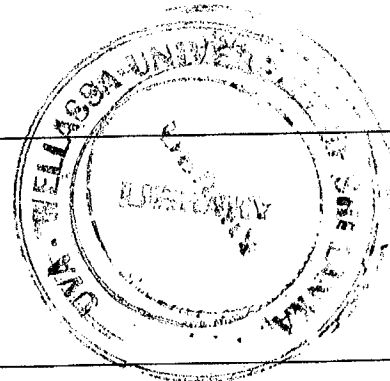


Uva Wellassa University, Sri Lanka
End Semester Examination – February/ March 2011
MRT 305-3 Mathematical and Statistical Methods
in Mineral Science



Part B
Time: One (01) hour



Total 05 Questions
Answer all questions
Answer Part B in a separate answer book

- 01) Critically analyze the statement "Geostatistics changes the entire methodology of sampling".
(20 marks)
- 02) Briefly discuss
(i) The functions for summarizing spatial continuity
(ii) The differences between ordinary and block kriging
(iii) Why transformation of data is sometimes necessary
(iv) The meaning behind detrending
(20 marks)
- 03) What are the geological features which account for anisotropy?
(20 marks)
- 04) With properly labeled diagrams and relevant equations, describe the differences of Linear, Exponential, Spherical and Gaussian distributions with respect to γ .
(20 marks)
- 05) Briefly describe what each of the following variograms represents (20)

