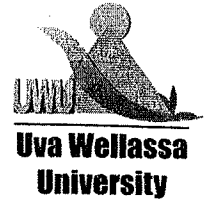


**Uva Wellassa University of Sri Lanka**  
**Faculty of Science and Technology**  
**Department of Science and Technology**  
**300 Level 1<sup>st</sup> Semester Examination –Sep./Oct. 2015**  
**MRT 316-1 Gemmology**



**Instructions to candidates**

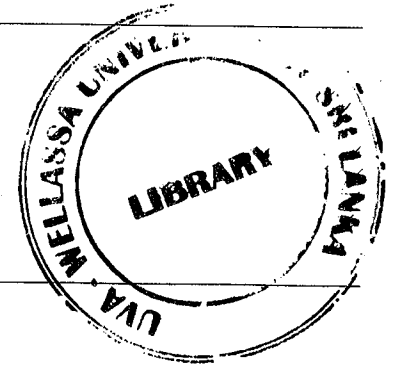
Duration: 01hour

Number of questions: Three (3) Easy questions

Answer any two questions

Mark allocation: 100 (All questions carry equal mark)

Illustrate your answers with sketches/diagrams where necessary



1. In instrumental gem identification, the refractometer, spectroscope and the microscope is considered as the most useful set of instruments.  
Explain why? (50 Mark)
  
2. With the aid of a diagram, describe the Verneuil process of gemstone synthesis. What are the features you would expect to see in synthetic corundum produced by this process? (50 Mark)
  
3. Most gem dealers identify gemstones by visual inspection without using any gemological instruments. What are the important crystallographic, optical and physical properties which you think is useful to facilitate identification? (50 Mark)