

SUBJECT REVIEW REPORT

DEPARTMENT OF GEOLOGY



**FACULTY OF SCIENCE
UNIVERSITY OF PERADENIYA**

21st to 23rd May 2012

Review Team :

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1. SUBJECT REVIEW PROCESS

The national committee on quality assurance in higher education, the Quality Assurance and Accreditation Council (QAAC) of the University Grants Commission (UGC) has agreed that the two major aspects of each higher education institute, recognized as components of national quality assurance system of higher education should be reviewed periodically on the guidelines published in the quality assurance hand book for Sri Lankan universities. The major objectives of this exercise is to safeguard the standards of awards and the quality of delivery of academic programmes and to encourage and standardize good management practices in universities of Sri Lanka. Two major reviews have been recommended by the quality assurance handbook of Sri Lankan universities.

1. Institutional Review which analyzes and tests the effectiveness of an institution's processes for managing and assuring the quality of academic activities undertaken by the institution.
2. Subject Review which evaluates the quality of education, i.e. quality of student's learning experience and student's achievement within a specific subject or discipline at programme level. Subject review evaluates the quality of both undergraduate and postgraduate programmes.
3. On an invitation made by the Quality Assurance Consultant of HETC project of the Ministry of Higher Education, a review of the subject (study programme) Geology in the Faculty of Science of University of Peradeniya was conducted from 21st – 23rd May 2012, at the Department of Geology.

The review team appointed by the HETC project consisted of the following;

- Professor Mahinda Rupasinghe, Sabaragamuwa University of Sri Lanka
- Dr. W.K.B.N. Prame, Geological Survey and Mines Bureau.
- Dr. A.M.A.N.B. Attanayake, Uva Wellassa University
- Prof. S. Widanapathirana, University of Kelaniya (Chair)

The specific aspects examined in this review were as follows;

1. Curriculum design, content and review
2. Teaching, learning and assessment methods
3. Quality of students including student progress and achievement
4. Extent of student feedback, Qualitative and Quantitative
5. Postgraduate studies
6. Peer observation
7. Skill development
8. Academic Guidance and counseling

The review team was provided with the Self Evaluation Report (SER) prepared by the Department, before the review visit. The primary source of documentary information for the subject review came from this report. In addition an audio visual presentation of the content of this document was presented by the Head of the Department of Geology.

In addition, the review team was provided with a variety of relevant documents; which substantiated the claims made in the self evaluation report. These included a publication of the Faculty of Science containing details of the course unit system. Syllabi of courses (Faculty Handbook), samples of student work, question papers, answer scripts, marking

schemes, practical handouts, feedback from undergraduate students, Senate meeting reports, peer observation reports, minutes of Departmental meetings and Postgraduate and Undergraduate project reports, and other documents pertaining to the contributions made to National Projects by the Department were available for scrutiny by the review team.

The review team on the first day met the Vice-Chancellor and the Deputy Vice-chancellor, Dean of the Faculty of Science in the VC office and also had fruitful discussions with members of academic staff, undergraduate students, postgraduate students, student counselors and proctors, other non-academic staff during the course of the review. The team also visited laboratories, lecture theatres, geological museum and other facilities. The review team was provided with opportunities for observing lectures in progress, practical classes and students' presentations.

On the last day, the review team had a final meeting with the entire academic staff of the Department to discuss and verify the observations and judgments made by the team.

2. BRIEF HISTORY OF THE UNIVERSITY, THE FACULTY AND THE DEPARTMENT OF GEOLOGY

The establishment of the University of Peradeniya, originally named as the University of Ceylon, was legal, sanctioned by the ordinance No. 20 of 1942. However, due to various reasons, the opening of the University at Peradeniya was delayed. The seat of this University was in Colombo. The date of transfer of Faculties from Colombo was postponed from 1948 to 1950 and then to 1952. On the 6th of October 1952, the University of Ceylon was officially declared open at Peradeniya. With this event, the faculties of Arts and Oriental studies and the Departments of Law, Agriculture and Veterinary Science started functioning at Peradeniya, while Faculties of Science, Medicine and Engineering continued to be in Colombo pending the completion of the 2nd and 3rd phases of building programmes at Peradeniya. With these phases of development completed, the rest of the Faculties were established at Peradeniya and the University of Peradeniya started functioning as a unitary University.

With the enactment of the University act No. 1 of 1972; all universities in existence in Sri Lanka at that time became campuses of one single University namely the University of Sri Lanka. Thus the University of Peradeniya became the Peradeniya Campus of the University of Sri Lanka with effect from 15th February 1972. In 1978, when the University Act No. 16 of 1978 was enacted, the Peradeniya campus became the University of Peradeniya and again started functioning as an autonomous University.

Today, the University of Peradeniya is the largest University in Sri Lanka, located in an area of 700 ha of land with a picturesque landscape and consists of eight Faculties, namely Faculties of Agriculture, Allied Health Science, Arts, Dental Sciences, Engineering, Medicine, Science, Veterinary Medicine and Animal Science and provides the most complete range of undergraduate education in Sri Lanka. In addition, the University has two postgraduate institutes affiliated to it, the Postgraduate Institute of Agriculture and the Postgraduate Institute of Science. The University currently has 731 academic staff, 9605 undergraduate students, 1440 post graduate students and 2973 non- academic staff.

The Faculty of Science was established at Peradeniya in July 1961. At present, the Faculty of Science has eight academic Departments namely, Botany, Chemistry, Geology, Mathematics, Molecular Biology and Biotechnology, Physics, Statistics and Computer Science and Zoology and two units – Science Education Unit and English Language Teaching Unit.

Brief History of the Department

The Department of Geology (the Department) was established in 1964 by the founder Professor in Geology P.W. Vithanage with professional and financial supports from the UNESCO and the Government of Canada. Initially, it was a sub-department under the Department of Geography, however later affiliated to the Faculty of Science as a fully fledged Department. During the early days of the development, the Department benefited from the assistance and the guidance provided by several United Nations (UN) experts in Geology. Since its elevation to a fully fledged academic department in 1964, it has been the only Geology Department in the University system of Sri Lanka and produced about 500 graduates to the country.

Since its establishment as an independent Department, a four year B.Sc. Special Degree Programme in Geology and a three – year General Degree Programme with Geology as a subject are currently being conducted at the University of Peradeniya. Before the Course Unit system came into operation in the year 2000, Chemistry-Geology-Physics was the only subject combination that was available for students who wanted to follow Geology as a subject at the University level. Presently, the Department offers three subject combinations with Geology as a subject giving an opportunity to students from both Physical and Biological Science streams to study Geology. In addition to this widening-up of opportunities and increasing student intake, the Department from time to time has been modifying its undergraduate curriculum to accommodate the present-day needs and expectations.

The Department has been based in the Faculty of Arts premises for the last 45 years. However, a new building complex for the Department is being constructed in the Science Faculty premises, and it is likely that the Department will occupy the new building within this year.

3. AIMS, LEARNING OUTCOMES AND PROGRAM DETAILS

3.1 Aims

- To provide a wide range of high academic quality courses to undergraduate and postgraduate students.
- To continue to strengthen the academic courses and programmes with wider scope in line with the advancements of basic and applied sciences.
- To provide opportunities for students to develop transferable skills and self learning ability to problem solving and communication.
- To produce quality geologists employable in state and private sector, local and abroad, confident in taking up any career in the discipline of Geology or in other areas.

3.2 Learning Outcomes

On successful completion of the courses, the students are expected to;

- Have a thorough knowledge and understanding of the basic concepts in Geology and related disciplines
- Develop practical and transferable skills.
- Gain self-learning ability to acquire new knowledge in emerging fields of Geology and other related areas.
- Develop scientific thinking, communication skills and confidence to pursue a satisfactory career and to contribute effectively to the national and global development.

4. FINDINGS OF THE REVIEW TEAM

4.1 Curriculum Design, Content and Review

Curricula of all degree programmes offered by the Faculty are constructed on a Semester based course unit system. The students entering the Faculty of Science follow a common study programme offered by various Departments in the year 1. These courses are designed to give students a ground requirement of English language and Computer application and Mathematical knowledge / basic Biological Science and History of Science etc. In addition students selected for Geology are given basic courses to cover Fundamentals in Geological Sciences including laboratory work and field work, since Geology is not taught in the A – Level classes in schools.

The reviewers were pleased to note that the first year (100 level) courses are well planned to enable the students to receive necessary language skills (since courses are conducted in English) and computer skills in addition to the foundation courses in major discipline Geology and other related sciences. The reviewers also noted that the curriculum content of all course units (100-400 levels) offered by the Department reflects adequate academic standards and enable students to achieve the intended learning outcomes in the form of knowledge and understanding of the subject and development of interpersonal skills. The curriculum provides strong theoretical background and practical training in fundamental disciplines in Geology such as Mineralogy, Petrology, Structural Geology and Geochemistry. As the course progresses the undergraduate gets the opportunity to focus more on Applied Geological Sciences or further specialize in theoretical aspects.

The advanced course modules offered by the Department at 400 level on Hydrogeology, Geological and Hydrological Hazards, Advanced Environmental Geology, to name a few, are intended to produce experts who will be able to handle current issues related to major geological events of the environments related to disaster management. The review team appreciates the comprehensive / completeness of the curriculum taught in the Department.

Practical classes, field visits assignments, presentations, involvement of students in the activities of the Departmental Geological Museum., enrich the experience of student and promote students learning and development of practical skills, other interpersonal and social skills, their ability to work in groups etc..

The reviewers are particularly pleased and appreciate the opportunity available for students, to pursue training programs at various geology-related institutions. However the reviewers

are of the opinion that an internship or industrial training in such institutions should be made available to students on a regular basis and be given appropriate credit rating.

The frequency of curriculum revisions was specially mentioned in the Self Evaluation Report (SER). The reviewers particularly noted that initial steps have been taken by the Department to revise the curriculum in the immediate future in consultation with the external experts in the field.

The review team was of the opinion that the short introduction of the course modules in the Faculty handbook should contain a brief mention of students learning outcomes for each course unit. It was also felt that most of the reference list of books recommended as texts do not carry the year of publications and that some of them are also published more than 10-15 years ago.

The reviewers note Curriculum Design, Content and Review aspect of the Department of Geology as satisfactory.

4.2 Teaching Learning and Assessment Methods

The academic staff of the Geology Department consists of highly qualified experienced and committed persons, as seen by their scientific achievements involvement in research and publications and extensive preparation of practical classes and lectures and the delivery of teaching components. The junior members of the staff are trained on teaching methodology through staff development programme in the University.

The curriculum of each module is well written with brief course contents and reference books, methods of assessments, examination procedures that are provided to all students in the Faculty of Science Student's Handbook. However review team noted that the general learning outcomes of the course units are not given in the Handbook. The reviewers felt that intended learning outcomes also should be included in the Student's Handbook.

The documents submitted in respect of learning assessment procedures, mechanisms of programmes approval and examination procedures, observation of teaching and learning process of students, samples of student work, question papers, answer scripts enabled the review team to conclude that the teaching, learning and assessment methods used by the Department are well organized and executed to facilitate the acquisition of the intended learning outcomes by the students.

There is a diversity of teaching and assessment methods used by the Department. In addition, lecturers and students participate in field work, mapping projects, field camps and vacation training to strengthen and supplement their theoretical knowledge. The Department follows Faculty guidelines for assessment of theory components, practical components, field work, project work etc. The mode of assessment, in the opinion of the reviewers is very comprehensive and has been consistent.

It should be mentioned that during meeting between students and review team, the students expressed great satisfaction with the courses conducted by the Department and in general about the teaching, learning process. They were also very pleased that the Department conducts a mid semester examination, which motivate the students to pay attention to a continuous learning process throughout the semester.

The students also were of the opinion that their workloads are reasonably balanced and that they are not overburdened. The review team was very pleased to hear such comments from the major stake holders of the programme.

However the review team strongly felt the need of having one or more external examiners for the modules or the entire examination process, for transparency and quality assurance of the degree programme to comply with the expectation of the quality assurance system recommended by the QAAC of the UGC.

This is an indispensable vital component / criterion which have been repeatedly mentioned, under many aspects of the review in the Quality Assurance Handbook. It is therefore suggested that external examiners contribution is obtained, wherever it is relevant.

The reviewers note Teaching Learning and Assessment Methods of the Department of Geology as satisfactory.

4.3. Quality of Students including Student Progress and Achievements

Admission of students to the Faculty of Science is through the UGC based national policy on University admission. The SER claims that there is a high demand for places by students to select Geology as a subject. In the academic year of 2011/2012, 48 students have been selected to study Geology as a subject and at present a total number of 121 students are studying in the Department. Both Biological Science and Physical Sciences students follow Geology as a subject for the B Sc degree and 03 different subject combinations are now available.

The selection of students to Geology Department is based on “Z” score of GCE (A/L) Examination and most of the students admitted represent Kandy and Kurunegala districts (NW and Central Provinces) and few from other districts. The entry criterion for the Faculty of Science has resulted in this uneven geographical distribution of the students registering to follow degrees in Geology. The reviewers observed that opportunities for the G.C.E. (A/L) students from Northern and Eastern provinces of the country to enter the Geology degree programme are almost non-existent because the selection for Geology stream is done from the Faculty’s intake which is mostly confined to the region.

The “Z” score of the present students following Geology as a subject ranges from 1.0264 – 1.6639 for biological science students and 0.9093 – 1.633 for Physical science students.

Review team found that large majority of undergraduate students command a satisfactory level of proficiency in English. They are also pleased to note that all students entering the Faculty of Science have to follow a credit rated Basic English Course, Computer Application Course and a Mathematics Course.

The students expressed satisfaction about the foundations courses offered during the first year.

It was also noted that the students are clearly informed about the University, Departments study programmes, selection of subjects, learning and assessment methods prior to the commencement of the lectures, through a well documented Faculty Handbook. In addition Heads of Departments and other relevant staff members brief the students about academic

programme, facilities available, career opportunities, attendance and other requirement during their preliminary briefing programmes.

The students who perform well in their first and second year examinations are selected to follow the special degree programme in Geology.

All students performances for each course offered by the Department is assessed through tutorials, field and laboratory assignments/projects mid semester examinations and end semester examination. Students who are following special degree programme undergo vacation field training projects at various institutes/organization dealing with Geology / Geo Sciences

SER specially mentions that all information pertaining to students' attendance, performances at examinations are recorded in the Department and that students' attendance is displayed in the department notice board. This motivates students to improve their performance and Review team considers it as a good practice. University regulations require 80% attendance for all components of a course.

The number of students obtaining good class level passes shows a satisfactory trend over the last few years. In the General Degree programme a similar improvement is not seen. In fact there has been only one first class during 2002-2008 in the General Degree programme.

The completion rate of general degree students are not mentioned in the SER or in any documents submitted to the reviewers.

Incentives are provided for students who perform well at examination. Awards are given for outstanding performances in the name of the founder Professor P.W. Vithanage and other distinguished scholars.

The Department and the Faculty provides ample opportunities for students to improve general attitudes, self-confidence through the courses, and independent study, presentations, field classes, research projects and vacation training programme. The review team during the meeting with students observed the self confidence of students.

The review team was pleased to note that the Department has seriously analyzed the employability of the graduates of Geology. According to the SER and presentations of the Head of Department, majority of the General degree students and special degree are employed in Geology related institutes in Sri Lanka. Others and some special degree students pursue higher education and some are absorbed into University teaching and many follow either local or foreign postgraduate programmes.

The reviewers note Quality of Students including Student Progress and Achievements of the Department of Geology as satisfactory.

4.4 Extent and Use of Student Feedback

The quality of each course and its delivery is evaluated by the students independently at the end of the course unit through a well designed teacher evaluation form. The students are not expected to disclose their identity and the teachers are not involved in the administration of the questionnaire form, allowing unbiased feedback. Summaries of the results of the course unit questionnaire are passed over to individual lecturer in order to identify areas that require their attention and to take appropriate action.

The review team had the opportunity to examine such evaluation forms. The large majority of students clearly expresses satisfaction of the teaching and learning aspects of course units.

The review team wishes to express its satisfaction on this important practice of considering the student feedback by the Department of Geology as satisfactory.

4.5. Postgraduate Studies

The Department offers ample opportunities for students to pursue postgraduate research. The postgraduate programmes and research in the Department are at a very commendable level. The Department has well qualified scientists in the fields of Geochemistry, Petrology and Engineering Geology, Geophysics, Hydrogeology, who have earned recognition both in Sri Lanka and overseas.

All postgraduate programmes in the Department are conducted in collaboration with Postgraduate Institute of Science (PGIS) through the Board of Study in Earth Science (BOSES). The Department conducts below listed seven (7) Postgraduate M.Sc. courses;

Disaster Management
Environmental Science
Engineering Geology & Hydrogeology
Gemology and Industrial Minerals
GIS and Remote Sensing
Oceanography
Water Resource Management

In addition, the Department conducts research degree programme including M.Phil. and Ph.D. in Petrology, Engineering Geology, Geochemistry, Hydrogeology, Disaster Management and GIS etc.

These programmes are conducted by the members of academic staff and resource persons from other institutes.

The achievements of the Department with respect to the award of postgraduate degrees Ph.D., M.Phil. , M.Sc., Diploma is highly commendable.

All research students and staff members engaged in research are funded mainly by National Science Foundation (NSF), University of Peradeniya, National Research Council (NRC) and some foreign collaborative institutes.

The reviewers are very pleased that the Department has produced a considerable number of research publications both in local and foreign journals within the 2005 – 2010 period.

The Department has 2 research laboratories and some basic / special equipment needed for research. But the SER submitted by the Department points out the limitations of their research capability, due to inadequacy of modern research equipment. The review team also very strongly felt that, the Department of Geology, being the only one of its kind in the University system of Sri Lanka needed more support to be established as a centre of excellence in Geology teaching and research in Sri Lanka. Therefore the review team unanimously recommends special funding for equipment for the Geology Department in view of its potential to National level contribution in addressing geological mapping and disaster management needs related to Geology in Sri Lanka.

4.6. Peer Observation

The Department is practicing a peer review process, where teaching performance of all teachers, regardless of their academic rank or tenure status is evaluated.

Peer review is done by fellow staff members, and observations made by them are recorded on a standard form and made available for discussion at staff meeting for any corrective action.

The review team noted that peer review process has been extended to include reviewing and scrutinizing of course unit materials, examination papers prepared by members of staff by a senior professor in the Department. The reviewers consider this as a good practice.

4.7 Skills Development

In the present context, skills development is considered as an essential component of University education. The Universities and their academic Departments make attempts to instill various skills in the student population, and it is encouraging to note that the Department of Geology has introduced several approaches to fulfill this requirement. As evidenced from the meeting with students, the students too have a clear understanding of the importance of skills development and apparently making use of the opportunities given by the Department.

The SER elaborated on the methodologies followed by the Department, both within and outside the curriculum in this respect and the reviewers were presented with evidence to support the claims made. Such activities are summarized below;

- Assignments – critical thinking, reading and report writing skills and interpersonal skills working in groups – social sensitivity and ethical rectitude.
- Field visits – students are given the responsibility of planning the visits, multitude of skills including communication skills, skills needed for working in groups.
- Laboratory experiments – research and technical skills development in both General, Special Degree students, when facilities are not available in the department, students are directed to other Departments of Faculty.
- Seminars and workshops by staff members and visiting scholars – Listening and comprehension knowledge of current developments in Geology and related fields.
- Research project (Compulsory for Special Degree) reading writing, critical thinking, presentation, language and computer skills.

- Functions of the University Geological Society – leadership, organizational, writing of articles etc.
- Presentations and vacation training – communication skills and team working skills

During the discussions with students, it was revealed that students have developed the ability to communicate in English Language. They also mentioned that they have been provided with computer skills and are capable of handling a computer for word processing, data analysis, presentations and internet and email access.

The undergraduate and postgraduate research reports and thesis observed by the Reviewers were of high quality and can be taken as evidence for the success of the attempts made by the Department to support the skills development in students.

The Reviewers are pleased to note that the curriculum of the Department of Geology is designed to facilitate skills development of students and that the assessment methods are in place to evaluate students' personal skills in addition to their subject knowledge. Reviewers were given the opportunity of listening to presentations made by students and the presentation was of high standard.

The reviewers note Skills Development aspect of the Department of Geology as satisfactory.

4.8 Academic Guidance and Counseling

The review team had a separate meeting with academic counselors, personal counselors, and senior student counselors of the Faculty and others who generally look after the safety and welfare of the students.

The Faculty prospectus provided to students at the commencement of the courses contains ample information on academic matters. The orientation programmes, notices posted frequently on notice boards of the Faculty and Department appear to convey any urgent information necessary. The University has an excellent medical centre with qualified medical and nursing staff to provide medications for sick and generally to give medical guidance to students.

In addition the SER states that all undergraduate in the Geology Department have a senior student counselor responsible for their academic welfare.

The University and Faculty and the Department had excellent mechanisms in place for student guidance and counseling on almost all aspects of University life during their stay in the University. The students have readily access to academic staff and other counselors.

The review team however was unable to obtain evidence whether the academic staff receives any training in the preparation for their role as academic counselor or personal tutor.

Also the review team felt that a formal Student-Staff Liaison Committee would facilitate an even more conducive learning environment.

Based on the observations made during the visit by the review team the eight aspects were judged as follows:

Aspect Reviewed	Judgment Given
Curriculum design, Content and Review	Good
Teaching Learning and Assessment Methods	Good
Quality of Student including Student Progress and Achievements	Good
Extent and Use of Student feedback, Qualitative and Quantitative	Good
Postgraduate Studies	Good
Peer Observation	Good
Skills Development	Good
Academic Guidance and Counseling	Good

5. CONCLUSIONS

1. Curriculum Design, Content and Review

Strengths/Good Practices

Well designed curriculum, stake-holder consultation in curriculum reviews

Weaknesses

None

2. Teaching. Learning and Assessment Methods

Strengths/Good Practices

Mid semester examination assessment procedure

Weakness

Absence of external examiners

3. Quality of Students Including Student Progress and Achievements

Strengths / Good Practice

- Selection of students from both Biological Science and Physical Science streams for the Geology courses.
- High demand for the subject among the new entrants
- Monitoring attendance of students in lectures and practical classes

Weakness

Completion rates of General Degree students not given in the SER. Unbalanced geographical distribution of the students registering for Geology degree programme.

4. Extent and Use of Student Feedback

Strength/Good Practice

Regularization of the process of teacher evaluation by students.

Weakness

None

5. Postgraduate Studies

Strength /Good Practices

National contribution to Geological research in Sri Lanka.

Weakness

None

6. Peer Observation

Strengths /Good Practices

Peer reviewing of course unit contents, question papers by senior members of the staff.

Weakness

None

7. Skills Development

Strengths/Good Practices

- Staff members with good research background
- Organization of field visits, field classes and other activities where students can take part as a group.
- Being able to get satisfactory services from computer unit including internet access.

Weakness

None

8. Academic Guidance and Counseling

Strengths

Availability of a mechanism for student support

Weakness

None

6. RECOMMENDATIONS

1. Establishment of a **Departmental committee** of staff and students (Staff Student Liaison Committee).
2. Appointment of one or more external examiners **to strengthen** the quality assurance procedure of the Department.
3. Strengthening the vacation training component by introducing a regular, credited course unit.
4. Increased funding to buy scientific equipments to make Geology Department, the center of excellence of Geology teaching and research in Sri Lanka.
5. Providing the opportunity for the G.C.E. (A/L) students from all parts of the country to enroll in Geology degree programme as it is the only Geology course in Sri Lankan University system.

7. ANNEXES

Agenda of the Programme

Day 1, 21st May, 2012

- 8.00 -8.30 – Meeting of the Review panel with QAA council representatives
- 8.30 -9.00 - Meeting with VC, Dean and Head of the Department
- 9.00- 9.30 - Discussion for the organization of the Agenda
- 9.30-10.30 - Presentation on the Self Evaluation Report – Head/Geology & Discussion
- 10.30-11.00- Tea
- 11.00-12.00- Observation of available facilities of the Department
- X12.00-12.30- Reviewers Meeting with geology special Degree students
- 12.30-13.30- Lunch
- 13.30-14.00- Reviewers Meeting with technical staff and other non-academic staff
- 14.00-14.30- Observation of Practical teaching
- 14.30-15.00- Tea
- 15.00-16.00- Reviewers Meeting with Undergraduates
- 16.00-16.30- Observation of teaching – a lecture
- 16.30-17.00- Reviewers Meeting of Reviewers

Day 2- 22nd May, 2012

- 9.00-10.00 - Reviewers Meeting with the academic staff
- 10.00-10.30-Tea
- 10.30-11.00- Student Presentation
- 11.00-11.30- Observation of facilities in the Faculty other than Department of Geology
- 11.30-12.30- Reviewers Meeting with postgraduate students
- 12.30-13.30- Lunch
- 13.30-15.30- Observation of prepared documents
- 15.30-16.00- Tea
- 16.00-17.00- Meeting of Reviewers

Day 3- 23rd May, 2012

- 9.00-10.00 - Observation of other available facilities in the University (outside the Faculty)
- 10.00-10.30- Tea
- 10.30-11.00- Academic guidance and Counseling-core aspect meeting
- 11.00-11.30- Reviewers Meeting
- 11.30-12.00- Reviewers Meeting with the Head of Department and Staff for reporting
- 12.00-13.00- Lunch
- 13.00-17.00- Report Writing

GUIDE TO DOCUMENTS

1. Aims, Learning Outcomes and Program Details

- Aims and expected learning outcomes of Geology course

2. Students, Staff and Facilities

- Publications
- Awards and Patents
- Geology new building file
- Contribution to the National Development

3. Curriculum Design, Content and Review

- Syllabus changes
- Syllabus review
- Geology syllabus 1990'1991' 1993' 2012'

4. Teaching, Learning and Assessment Methods

- Lecture notes
- Marking schemes
- Second markings
- Lesson plans
- Undergraduate research project evaluation

- Exam papers
- Assignments
- Additional reading materials
- Field reports
- Produced field maps
- Inter-departmental course

5. Quality of Students Including Student Progress and Achievements

- Undergraduate thesis
- Student achievements and employability
- Student profile / Recruitments
- Undergraduate publications
- Scholarship materials
- Special degree applications
- Student result sheets
- Geology student list from 1964

6. The Extent and Use of Student Feedback, Qualitative and Quantitative

- Evaluation sheets
- Student feedback analysis

7. Postgraduate Studies

- MSc, MPhil, PhD thesis
- Postgraduate supervision
- Recent research grants

8. Peer Observation

- Minutes of Department meetings
- Peer observations of teaching

9. Skills Development

- Field camp reports and maps
- Vacation training reports
- University Geological Society

10. Academic Guidance and Counseling

- Evidence for academic counseling