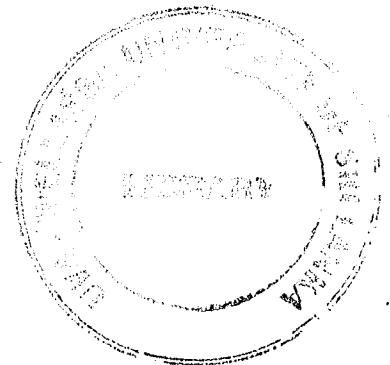


Uva Wellassa University of Sri Lanka
Faculty of Science and Technology
Department of Science and Technology
200 Level 1st Semester Examination – May/June 2017
MRT 252-2 Structural Geology



Part B

Use Separate answer book to answer following questions
Answer any two questions

01. Study the Map 02 and answer the questions. (Map 02 will be provided)

A constantly dipping coal seam has been found in boreholes A and B at depths shown in the Map 02 and at the surface at point C on the Map 2 opposite.

- a. Draw structure or structural contours across the whole of the Map 02 for the base of the coal seam.
- b. Draw the outcrop of the coal seam.
- c. Calculate the true dip of the coal seam.
- d. Shade the area where the coal seam will not be found beneath the surface.

(45 mark)

02. Use stereographic net to answer following questions

a. A geologist has measured the following bedding and cleavage readings in a garnet biotite gneiss. Plot them in a Wulft Stereonet

- i. Bedding :- 100/32W
- ii. Cleavage :- 24/82NW

b. An upright fold has limbs 180/60E and 031/80W,

- i. Calculate the interlimb angle
- ii. What is the apparent angle between the limbs visible on a vertical cross-section which trends 130°

(45 mark)

03. Compare and Contrast followings.

- a. Comparable contacts and Uncomparable contacts
- b. Graded Bedding and Cross Bedding
- c. Blocky Vein and Fibrous Veins

(45 mark)