Dr. Jagadish Kumar Tripathy Professor and Head Dept. of Earth Sciences Sambalpur University, Jyoti Vihar, Burla-768019 Mob: 9437444750

No 264/ES/2023



12/2023 DH.

To

The Controller of Examination, Sambalpur University

Sub: submission of alternative to MOOC syllabus.

Sir,

In response to your letter 6043/Acd-1, dated 18/10/23, I am herewith submitting the alternative to MOOC syllabus of Department of Earth Sciences.

Yours faithfully,

J.K. Tripathy, Head,

Department of Earth Sciences HEAD P.G. Department of Earth Sciences Sambalpur University, Jyoti Vihar

Alternative of MOOC course (3 CH, 100 marks)

The Dynamic Earth

UNIT I

5 . 1

General characteristics of solar system, origin of earth (cataclastic and evolutionary hypothesis); Age of Earth.

UNIT II

Internal constitution of Earth; Earthquakes and Volcanoes.

UNIT III

Hypothesis of Isostasy (Pratt's hypothesis, Airy's hypothesis, Heiskanen hypothesis); Weathering of rocks.

UNIT III

Geological work of wind, river, glacier and ocean.

Books recommended:

- 1. Mukherjee P. K. (1931) A textbook of Geology, The World Press Pvt. Ltd.
- 2. Datta A. K. (1984) Introduction to Physical Geology, Kalyani Publishers.
- 3. Mahapatra G. B. (1992) Text Book of Physical Geology, CBS Publishers & Distributors Pvt. Ltd.

Mark Distribution- Internal Assessment – 20 marks + Term end question-80 marks

The term end examination will be consisted of 4 questions of 20 marks each. Each question will be consisted of a long type question with two short notes/another long question in the OR section.