

FACULTY OF SCIENCE

DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL MANAGEMENT & ENERGY STUDIES

MODULE ENS0027

INTERNATIONAL GEOGRAPHICAL & POLITICAL ASPECTS OF ENERGY

(ENERGY POLITICS)

CAMPUS APK

EXAM NOVEMBER 2014

DATE 2014.11.07 SESSION 08:30 – 11:30

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EXTERNAL MODERATOR MR H. VOSLOO

(ESKOM)

DURATION 3 HOURS MARKS 100

NUMBER OF PAGES: 2 PAGES

INSTRUCTIONS:

Please answer any THREE of the following FIVE questions. Each answer should be in the form of a comprehensive <u>essay</u>, with sketches and diagrams where these may be appropriate to <u>enhance</u> your answer. Alternatively you may provide your answer in point form. Each answer is worth the same number of marks (33.3%)

QUESTION 1

 The Politics of Climate Change. The Intergovernmental Panel for Climate Change (IPCC) has recently released its fifth assessment report (AR5) which has evoked widespread controversy. There is growing mistrust in the work of the IPCC and its ability to stick to science instead of politics. Discuss your own take on climate change, and where the world is going with climate change politics.

(33.3)

QUESTION 2

2. The Politics of Natural Gas in Southern Africa. Write an essay on how the recent discoveries of natural gas in Mozambique and Tanzania might affect the energy politics of the region. It is believed that there are vast reserves of natural gas under the Karoo in South Africa. There is a political storm raging around the exploitation of this resource through "fracking". Discuss the issues in question.

(33.3)

QUESTION 3

3. Nuclear Energy Politics. The recent agreement between South Africa and Russia regarding nuclear cooperation has elicited massive media speculation. The building of nuclear power plants and the management of spent fuel are both emotive subjects, fuelled by media images of Hiroshima, Chernobyl and then Fukushima in Japan. Germany has shut down three nuclear plants and has said it will phase out nuclear power altogether. Discuss the international politics of nuclear energy and the anti-nuclear movement in the context of the nuclear industry's safety record and the global approach to nuclear power.

(33.3)

QUESTION 4

4. The Politics of Biofuel Production in South Africa. There have been a number of government and private sector proposals for the large-scale production of biofuels in South Africa. These have largely ignored aspects such as land use, land ownership, access to water and introduction of alien plants. Discuss the complex issues around biofuel production in this political environment.

(33.3)

QUESTION 5

5. The IRP 2010 implementation of renewables into the electricity mix in South Africa. Several new photovoltaic and wind generation plants have recently been connected to the national grid. How will the implementation of solar and wind plants in South Africa affect people at local, national and international level? Write an essay on the politics of renewable energy in South Africa.

(33.3)

SUB-TOTAL [33.3]

TOTAL [100]