



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2015/2016

**FOURTH YEAR FIRST SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR ARTS IN ECONOMICS WITH
INFORMATION TECHNOLOGY**

CITY CAMPUS

AEC 420: ENERGY ECONOMICS

Date: 10th December, 2015

Time: 2.00 - 4.00 pm

INSTRUCTIONS:

- Answer question ONE (Compulsory) and any other TWO questions.
- Question ONE carries 30 marks. Other questions carry 20 marks

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ISO 9001:2008 CERTIFIED



Q 1. Oil reserve has reached a critical minimum of 200 billion stock reserves which can last for another 80years. The consumption per barrel per annum is 2%. The production rate is 2% p.a.

Q 1. Oil reserve has reached a critical minimum of 200 billion stock reserves which can last for another 80 years. The consumption per barrel per annum is 2%. The production rate is 2% p.a.

- a) Determine the actual stock reserve by the end of its life time
- b) Distinct between renewable and non-renewable energy resources
- c) Discuss conservation criteria and the measures undertaken by the government to conserve energy resources
- d) Discuss the determinants of FDI in oil industry.
- e) Briefly explain market failures in energy resource allocation

Q 2. The stock of non-renewable resources available at a time is 500 tones. The rate of extraction of these resources at a time is 4%.

- a) Based on the theories of depletion, comment on production rate (p_t) is a function of the amount Q_t yet to be extracted at time t .
- b) Optimum depletion is important to an economist, discuss.

Q 3.

- i) With relevant example, distinct between exhaustible and inexhaustible energy resources
- ii) Renewable resources are appropriate for rural development, discuss.

Q 4.

- i) Discuss the market structure of energy resources and the policies undertaken to increase supply of energy in Kenya.

Q 5.

- a) What do we understand by energy crisis
- b) Discuss broad categories of energy source and how they are distributed by sector use in Kenya.