



# **TECHNICAL UNIVERSITY OF MOMBASA**

---

**FACULTY OF ENGINEERING AND TECHNOLOGY**

**DEPARTMENT OF BUILDING AND CIVIL ENGINEERING**

**UNIVERSITY EXAMINATION FOR:**

**BSC IN CIVIL ENGINEERING**

**HRD 2315 : ECONOMICS FOR CIVIL ENGINEERS**

**END OF SEMESTER EXAMINATION**

**SERIES: APRIL 2016**

**TIME: 2 HOURS**

**DATE: 10 May 2016**

## **Instructions to Candidates**

You should have the following for this examination

*-Answer Booklet, Drawing Instruments, Scientific calculator, examination pass and student ID*

This paper consists of five questions.

Attempt question ONE (Compulsory) and any other TWO questions.

Question one

- a) Outline the functions of the resident civil engineer. (6marks)
- b) The structural engineer is in charge of ensuring the structural stability of the building structure. Discuss what this entails. (8marks)
- c) Outline the main components of a feasibility study (8marks)
- d) Discuss the main marketing activities a construction firm should be engaged in to ensure that they sustain themselves in the volatile and competitive construction industry. (8marks)

### Question two

- a) Discuss the following, as pertains initial public offer;
  - i) Issuing house,
  - ii) Underwriting,
  - iii) Prospectus. (6marks)
- b) Outline the following methods of making new issues to the public;
  - i) Offer for sale,
  - ii) Issue by tender,
  - iii) Placings. (6marks)
- c) Explain what a debenture is, and outline the following;
  - i) Debenture trust deed,
  - ii) Mortgage debentures,
  - iii) Simple or naked debentures. (8marks)

### Question three

With the aid of hypothetical examples outline the following financial appraisal techniques;

- i) Pay back period.
- ii) Accounting rate of return,
- iii) Discounted cash flow. (20 marks)

### Question four

- a) Explain the following advertising techniques;
  - i) Persuasive,
  - ii) Informative (5marks)
- b) Discuss the functions of a wholesaler in the distribution chain, and state the principles which enhance their effectiveness. (6marks)
- c) Discuss the importance of the following aspects in marketing;
  - i) Sales price,
  - ii) Market segmentation,
  - iii) New product development. (9marks)

### Question five

- a) Explain the following terms as used in organization structures;
  - i) Bureaucracy,
  - ii) Power, authority and responsibility,
  - iii) Span of control.

- b) Explain the principles of line and staff organizations, and outline a typical line and staff organization chart, for a construction firm, with an annual turnover of sh760m, and an establishment of 180 employees.

