

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF BUSINESS AND ECONOMICS

UNIVERSITY EXAMINATIONS FOR DEGREE OF BACHELOR OF BUSINESS MANAGEMENT [LOGISTICS OPTION]

END SEMESTER EXAMINATIONS 4TH YEAR 1ST SEMESTER 2023/2024 ACADEMIC YEAR KISUMU CAMPUS

COURSE TITLE: OPERATIONS MANAGEMENT COURSE CODE: BAB 1439 ABA 441 TIME: ____ DATE **DURATION: 2 HOURS INSTRUCTIONS:** I. This paper contains Five questions II. Answer question **ONE** and any other **TWO** questions III. Question one is **COMPULSORY** IV. Candidates are advised not to write on the question paper Candidates must hand in their answer booklets to the invigilator while in the examination room **Question One (30marks)** a) Highlight FOUR determinants of a product/service to successfully satisfy its intended purpose (4marks) b) Explain the following terms as used in Materials Requirements Planning – MRP system i) Item (1 mark) ii) Lead time (1 mark) iii) Gross requirements (1 mark) iv) Projected on hand (1 mark) c) Outline TWO mathematical techniques a production and/or operations managers may use in Aggregate Planning (2marks) d) Explain FOUR justifications of holding stocks of raw materials or goods in an enterprise (4marks) e) Distinguish between warehouse layout and fixed position layout (2marks) f) Outline THREE key inputs to capacity planning (3marks) g) Explain the meaning of 'Product reliability' (2marks) h) Explain THREE differences in the service design and product design (3marks) i) Outline **TWO** generic competitive strategies (2marks)

(2marks)

j) State TWO types of production function

k) With an example, explain the meaning of capital (2marks) Question Two (20marks) a) Explain FIVE usefulness of a product standardisation to a consumer (10 marks) b) Highlight FIVE functions of Master Production Scheduling (10 marks) **Question Three (20marks)** a) The following data relates to a particular stock item Normal usage 120 per day 60 per day Minimum usage Maximum usage 150 per day Lead time 26 - 32 days8,000 units Order quantity Determine the THREE stock control levels (10 marks) b) Highlight FIVE informational requirements for design of a process layout (10marks) **Question Four (20marks)** a) Describe the THREE aspect in Kano Model that are considered in product and design (6 marks) b) Describe SEVEN types of internal economies of scale an organisation is likely to enjoy (14 marks) **Question Five (20marks)** a) Explain the SEVEN attributes of world class manufacturing (14marks)

(6marks)

b) Explain **THREE** basic steps in Materials Requirements Planning (MRP)