THIS EXAMINATION PAPER CONSISTS OF 10 QUESTIONS:

ANSWER ALL THE QUESTIONS (50 MARKS)

INSTRUCTIONS:

1. Read the following instructions carefully before answering the paper, as failure to act upon them will result in a loss of marks.
2. Write your answers in your answer book, which is provided in the exam.
3. Ensure that your name and student number are clearly indicated on your answer book.
4. Write your answers in either blue or black ink in your answer book.
5. Read each question very carefully before you answer it and number your answers exactly as the questions are numbered.
6. Begin with the question for which you think you will get the best marks.
7. Note the mark allocations for each question – give enough facts to earn the marks allocated. Don't waste time by giving more information than required.
8. You are welcome to use diagrams to illustrate your answers.
9. Please write neatly – we cannot mark illegible handwriting.
10. Any student caught cheating will have his or her examination paper and notes confiscated. The College will take disciplinary measures to protect the integrity of these examinations.
11. If there is something wrong with or missing from your exam paper or your answer book, please inform your invigilator immediately. If you do not inform your invigilator about a problem, the College will not be able to rectify it afterwards, and your marks cannot be adjusted to allow for the problem.
12. This paper may be removed from the examination hall after the examination has taken place.

SPECIAL REQUIREMENTS: YOU WILL NEED A PENCIL AND RULER TO COMPLETE THIS EXAM.
ANSWER ALL THE QUESTIONS (50 MARKS)

**QUESTION 1**
Name the four major methods of solving location problems. [4]

**QUESTION 2**
(a) Explain what you understand by the term ‘plant layout’? (2)
(b) Name three types of manufacturing layout. (3)
(c) There are different titles for the personnel responsible for plant layout. Name four of them. (4) [9]

**QUESTION 3**
A good plant layout engineer should have certain technical skills.
Discuss the technical skills that the plant layout engineer needs to do the different tasks. [3 × 2 = 6]

**QUESTION 4**
List five criteria for a good layout. [5]

**QUESTION 5**
Draw a typical 'rabbit chase' cell. [10 × ½ = 5]

**QUESTION 6**
Explain the following:
(a) a detailed layout (2)
(b) a plant layout template (2) [4]

**QUESTION 7**
Draw three types of templates used in this industry. [3 × 2 = 6]
QUESTION 8
Give three of the four main ways of reproducing copies of layout arrangements. [3]

QUESTION 9
Identify the objectives of a good plant layout. [4]

QUESTION 10
Give two advantages and two disadvantages of functional layout and flow groupings. [2 × 2 = 4]

TOTAL: 50 MARKS