

**UNIVERSITY OF BOLTON**

**SCHOOL OF ENGINEERING**

**BSc CONSTRUCTION PROJECT MANAGEMENT**

**SEMESTER TWO EXAMINATION 2023/2024**

**SUSTAINBLE CONSTRUCTION**

**MODULE NO: CAS6004**

Date: Tuesday 14<sup>th</sup> May 2024

Time: 2:00pm – 4:00pm

---

**INSTRUCTIONS TO CANDIDATES:**

There are SIX questions.

Answer ANY FOUR questions.

Marks for parts of questions are shown in brackets.

This Examination paper carries a total of 100 marks.

---

PAST EXAMINATION

School of Engineering  
BSc Construction Project Management  
Semester Two Examination 2023/24  
Sustainable Construction  
Module No. CAS6004

**Students to answer any FOUR of SIX questions (each question 25 marks)**

1. Historic England supports and promotes sustainable growth in the built historic environment; this theme is included in the National Planning Policy Framework (NPPF2023). Critically evaluate the benefits of the theme to society.  
**(25 marks)**
2. Sustainability can be defined in many ways within the construction sector, and can include contributions made by individuals within social frameworks. Display your understanding of how you as a 'lifelong learner' (Graduates Attributes Matrix for Employment -GAME) can enhance the industry with your skillset.  
**(25 marks)**
3. The Environment Act (2021) is part of legislation to govern sustainable practice, and to protect the environment. Critically examine if the legislation goes far enough to protect the environment by holding organisations and individuals accountable; explain and provide alternative solutions which may enhance the validity of the legislation.  
**(25 marks)**
4. The United Nations has 17 Social Development Goals (SDG). Discuss how goal '11 - Sustainable Cities and Communities' can contribute to the broader sustainability agenda.  
**(25 marks)**
5. A major project is about to gain the 'green light' to proceed to construction on-site, however, there needs to be a reduction to the current budget. You, as the project lead, must decide where to reduce financial costs. Critically evaluate the long-term benefits of sustainable investment compared to the short-term reduction in total project cost.  
**(25 marks)**
6. The Ellen MacArthur Foundation states a circular economy could reduce global CO2 emissions from building materials by 38% in 2050. Where does this statement fit with your knowledge of your own company working towards this?  
**(25 mark)**

**END OF PAPER**