


Name:			
Enrolment No:			
UPES End Semester Examination, May 2023			
Course/ Program: M.Tech (HSE) Course Code: HSFS4007 Subject: Fundamental of Sustainable Development		Semester : II Time : 03 hrs. Max. Marks: 100	
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q 1	I. In how many group the SDGs were divided: a) 4 b) 3 c) 5 d) 6 II. Tragedy of commons was written by----- III. The word, “BIO”, is everywhere but what does “bio-based” really mean? a) it’s organic b) it’s sustainable c) it’s made of renewable resources d) All IV. Four development patterns are divided based on two dimensions: level of development (x-axis) and level of coupling (y-axis). Which development strategy was in Quadrant III? a) Transformative strategy b) Fill gap strategy c) Promotion strategy d) Synergistic strategy	4	CO1
Q 2	Write short notes on following: A. Kuznets’s curve B. Butterfly effect C. 3R,5R& 7R D. Day Zero	4	CO1
Q 3	What are the key elements of food security in sustainability?	4	CO2
Q 4	Enumerate the following: I. CER II. UNFCCC III. COP IV. MCDA V. SWI VI. DCCME VII. UNEP VIII. EWI	4	CO1
Q 5	Enlist the process and significance of conducting a life cycle assessment for a product or process.	4	CO3

SECTION B (4Qx10M= 40 Marks)			
Q 6	Enlist the distinction between following: A. Bio-accumulation & Bio-magnification B. Water related disease & Water born disease C. Exponential & Logarithmic growth D. ISO 14064 & ISO 14067 E. Paris agreement & Kyoto protocol	10	CO3
Q 7	How can companies effectively incorporate ESG (Environmental, Social, and Governance) factors into their decision-making processes and business strategies to achieve sustainability and long-term success?	10	CO4
Q 8	Write Short notes on any two : A. Plastic & Circular economy B. Carrying Capacity & Carbon Footprint C. Sustainable development & Pillars of sustainability	10	CO3
Q 9	How have attitudes towards sustainability evolved over time, and what key historical events and movements have contributed to the modern understanding of sustainability as a concept?	10	CO4
SECTION-C (2Qx20M=40 Marks) Ans any two			
Q 10	What are the key differences between sustainability reporting and sustainability auditing? How can companies effectively utilize these tools to improve their sustainability performance and meet stakeholder expectations?	20	CO5
Q 11	What are the ways of evaluating regional parameters for the sustainable environmental goals? Provide exhaustive lists of various criterion, indices & scores for giving the same. Support your answer with a case study.	20	CO5
Q12	A. How will you justify the following: I. Traditional ecology knowledge & Sustainability (7) II. Shades & Shines of gender equality for timely realization of SDGs. (6) III. Mid-term performance evaluation on SDGs-provide and account of regional, national & global scales. (7)	20	CO5