


Name:	 <b>UPES</b> UNIVERSITY OF TOMORROW
Enrolment No:	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**

**End Semester Examination, May 2021**

**Course/ Program: M.Tech (HSE)**

**Semester : II**

**Course Code: HSFS4007**

**Time : 03 hrs.**

**Subject: Fundamental of Sustainable Development & Economy**

**Max. Marks: 100**

**No. of page/s:4**

**SECTION A (6\*5=30 Marks)**

S. No.	Answer all the question	Marks	CO
Q 1	Enumerate the following terms: a) LCI b) EIA c) EIS d) Footprint e) Carbon credits f) Agenda 21	5	CO1
Q 2	Define ESG & explain its application for industry as well as society.	5	CO1
Q 3	Outline the various dimensions of sustainable development. What are its fundamental principles?	5	CO3
Q 4	Discuss the various parameters influencing the calculations of carbon and ecological footprints.	5	CO2
Q 5	Write full form of the abbreviations: i) COP ii)CER iii)CDM iv)MDG. v)UNESCO	5	CO2
Q 6	How is misuse of Common Pool of Resources (CPR) related to tragedy of commons?	5	CO1

**SECTION B (5\*10=50 Marks)**

	Answer four questions.		CO
Q 7	How to tackle tragedy of commons?	10	CO4
Q 8	Write short notes on the following: i. Sustainable Development ii. Sustainable Development Goals iii. Carrying Capacity	3+3+4 =10	CO3
Q 9	Discuss the context of Plastic Management for Circular Economy.	10	CO3
Q 10	Describe the interrelationships of LCA and ISO-14040 after describing the use of LCA and its merits and demerits.	10	CO5
Q 11	Enumerate the following terms: a) Ecological footprints b) ESG c) Carbon footprint d) Sustainability indicators	10	CO3

**SECTION-C**

	Answer all questions.		CO4
Q 12	What challenges are there in terms of environment and global water supply? How to meet goals and subgoals of SDG 6?	20	CO4