

[Total No. of Questions - 9] [Total No. of Printed Pages - 2]  
(2123)

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**B. Tech 1st Semester Examination**  
**Science, Technology & Society (O.S.)**  
**HU-1002**

**Time : 3 Hours**

**Max. Marks : 100**

*The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.*

**Note :** Attempt five questions in all, selecting one question from each Sections A, B, C and D. Section E is compulsory. All questions carry equal marks.

**SECTION - A**

1. Describe ancient India's contribution to Iron, Zinc and Copper Industry. **(20)**
2. Discuss the statement that "Mathematics is not the only sign of existence of a highly developed science". **(20)**

**SECTION - B**

3. (a) Discuss the salient features of "Limits of Growth-the first report of club of Rome".  
(b) Explain how the rapid technological growth will lead to depletion of natural resources. **(20)**
4. Describe Mumford's view of "Modern Technology as Megatonics-which evades long lasting industrial products". **(20)**

**SECTION - C**

5. Describe the salient features of Appropriate Technology movement of Schumacher. **(20)**

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**[P.T.O.]**

6. (a) Describe the impact of assembly line in industry.  
(b) Describe briefly the assembly line of car industry. (20)

**SECTION - D**

7. Describe various industrial hazards and precautionary measures to be taken. (20)
8. (a) Describe the ethical dilemma of an Engineer as 'Whistle blower'.  
(b) Name the countries & laws world wide which provide legal protection to a 'Whistle blower'. (20)

**SECTION - E**

9. Write short notes on following: (Each carry equal marks)
- (a) India's main contribution to Mathematics.
  - (b) Science is "organised commonsense".
  - (c) Who established Club of Rome?
  - (d) Strain between Engineers & bureaucrats in a R&D industry.
  - (e) Impact of modern technology on traditional agriculture.
  - (f) Effectiveness of environmental regulations.
  - (g) Renewable energy sources.
  - (h) Solar Photo voltaics
  - (i) Energy crisis.
  - (j) Environmental degradation of hills due to mining.
- (10×2=20)**