****

**FIRST SEMESTER 2020-2021**

# Course Handout Part II

Date: 17-8-2020

In addition to part-I (General Handout for all courses appended to the time table) this portion gives further specific details regarding the course.

*Course No.* : **BITS F214**

## Course Title : **Science, Technology and Modernity**

Instructor-in-Charge : **Biswanath Dash**

**Scope and Objective of the Course:** The course is aimed at exploring the interrelationship between modern society and science/ technology. Specifically, it seeks to interrogate the relationship in terms of analyzing emergence of modern science in the western world and its implication and contribution to the idea of a modern society. It covers to an extent, the impact of such development in India and examines the contemporary debates over the role of science/technology within modernization and globalization.

**Textbooks:**

1. McCllelan III, J.E. and Dorn, H. 2006. *Science and Technology in World History*, Second Edition, Maryland: John Hopkin University Press

**Reference books**

1. Reading material to be uploaded on CMS
2. Bernal, J.D. 1971 *Science in History* Vol. 2. Massachusetts: MIT Press

**Course Plan:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Lecture No.** | **Learning objectives** | **Topics to be covered** | **Chapter in the Text Book** |
| 1-2 | Gain an overall perspective of the course | Course Structure  Science and Technology in Global Context | TB Part I |
| 3-15 | Learn about origin and evolution of Natural Philosophy/Science in different cultures | Greek Natural Philosophy, Arabic Middle Ages  Chinese and  South American Civilization | TB Part I and II  Reading Material |
| 16-25 | Examine emergence of modern science and its role in industrial revolution in the western world | European Renaissance  Scientific and  Industrial Revolution | TB Part III and IV |
| 26-34 | Analyze evolution of Science/ Technology in India and to examine forms through which values and belief of modern society shape science and technology | Vedic period  Gupta era  Moghul period  Colonial India | Reading material |
| 35-42 | To reflect on how scientific and technological progress have shaped modern societies, role of capitalism and some critique | Traditional and Modernity,  Rationality and modern society  Risk society, Modernity and Globalization  Critique of modernity | Reading material |

**Evaluation Scheme:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Component** | **Duration** | **Weightage (%)** | **Date & Time** | **Nature of Component** |
| Test I | 30 Minutes | 15 | September 10 –September 20 (During scheduled class hour) | Open Book |
| Test II | 30 Minutes | 15 | October 09 –October 20 (During scheduled class hour) | Open Book |
| Assignment | Take Home | 20 | 1st Sep- 5th October | Open Book |
| Test III | 30 Minutes | 15 | November 10 – November 20 (During scheduled class hour) | Open Book |
| CE | 120 minutes | 35 | As in Time Table | Open Book |

**Notices:** Notices will be displayed on CMS.

**Chamber consultation:** Thursday 4-5 pm. A Google Meet link will be shared on the CMS.

**Make-up Policy:** The make-up for an evaluation component will be given only in genuine cases.

**Academic Honesty and Integrity Policy**: Academic honesty and integrity are to be maintained by all the students throughout the semester and no type of academic dishonesty is acceptable.

**Biswanath Dash**

**INSTRUCTOR-IN-CHARGE**