

FIRST SEMESTER 2021-2022

Course Handout Part II

Date: 20-8-2021

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, Room No. K 118, HSS

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 |
|----------------|-----------------------|---|--------------------------------|
| | Gain an overall | Course Structure | TB Part I |
| 1-2 | perspective of the | Science and Technology in Global | |
| | course | Context | |
| 3-15 | Learn about origin | Greek Natural Philosophy, Arabic Middle | TB Part I and |
| | and evolution of | Ages | II |
| | Natural | Chinese and | |
| | Philosophy/Science | South American Civilization | Reading |
| | in different cultures | | Material |
| 16-25 | Examine emergence | European Renaissance | TB Part III |
| | of modern science | Scientific and | and IV |
| | and its role in | Industrial Revolution | |



| | industrial revolution in the western world | | |
|-------|--|-----------------------------|----------|
| 26-36 | Reflect and analyze | Vedic period | Reading |
| | evolution of Science/ | Gupta era | material |
| | Technology in India | Moghul period | |
| | | Colonial India | |
| 36-43 | Appreciate | Traditional and Modernity, | Reading |
| | 'modernity' as an | Modernity and Globalization | material |
| | idea and its | | |
| | relationship to | | |
| | science and | | |
| | technology | | |

Evaluation Scheme:

| Component | Duration (Minutes) | Weightage (%) | Date & Time | Nature of Component |
|-----------------------------|--------------------|------------------|-----------------------------|------------------------|
| Assignment | | 35 | | Open Book |
| Mid semester Examination | 90 | 30 | 22/10/2021 3.30 - 5.00PM | Open Book |
| Comprehensive examination | 120 | 35 | 24/12 FN | Close Book |

Notices: Notices will be displayed on CMS.

Plagiarism: Please be aware that cutting and pasting from websites is considered plagiarism. Students are advised to document all sources. If you are not sure that you need to document a source, please ask the instructor. Any hint of plagiarism will fetch a zero.

Chamber consultation: Thursday 11-12. A google meet link will be provided for online consultation.

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

