

IV. CORE COURSE [CCHIS304]:

(Credits: Theory-04, Tutorial-01)

Marks: 30 (MSE: 20Th. 1Hr + 5Attd. + 5Assign.) + 70 (ESE: 3Hrs)=100	Pass Marks (MSE:17 + ESE:28)=45
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Instruction to Question Setter:**Mid Semester Examination (MSE):**

There will be **two** groups of questions in written examinations of 20 marks. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type five** questions of five marks each, out of which any three are to be answered.

End Semester Examination (ESE):

There will be **two** groups of questions. **Group A is compulsory** and will contain two questions. **Question No.1 will be very short answer type** consisting of five questions of 1 mark each. **Question No.2 will be short answer type** of 5 marks. **Group B will contain descriptive type six** questions of fifteen marks each, out of which any four are to be answered.

Note: There may be subdivisions in each question asked in Theory Examinations

The Mid Semester Examination shall have three components. (a) Two Semester Internal Assessment Test (SIA) of 20 Marks each, (b) Class Attendance Score (CAS) of 5 marks and (c) Class Performance Score (CPS) of 5 marks. "**Best of Two**" shall be applicable for computation of marks for SIA.

(Attendance Upto 75%, 1 mark; 75 < Attd. < 80, 2 marks; 80 < Attd. < 85, 3 marks; 85 < Attd. < 90, 4 marks; 90 < Attd, 5 marks).

HISTORY OF SCIENCE AND TECHNOLOGY**Theory: 60 Lectures; Tutorial: 15 Hrs**

- Unit I : Science and Technology in Ancient India
- Development in Astronomy – Aryabhatta
 - Development in Astronomy - Varahmihira
 - Development in Medicine - Charaka
 - Development of Surgery - Sushruta
- Unit II : Science and Technology in Europe
- Greece
 - Rome
 - Copernicus and Galileo
 - Newton
- Unit III : Science and Technology in Medieval India
- Sawai Jai Singh and Astronomy in India
 - Textile Industries
 - Metal Industries
 - Cottage Industries
- Unit IV : Science and Technology in 20th Century
- Einstein
 - Roentgen
 - Madam Curie
 - Rutherford
- Unit V : Progress of Science in India
- J. C. Bose
 - Homi Bhabha
 - Hargovind Khorana
 - APJ Abdul Kalam