

First Semester
Paper – V
HISTORY OF SCIENCE AND TECHNOLOGY

Unit – I

1. Science and technology – Meanings and Scope.
2. Sources of history of science and technology and its importance.

Unit – II

1. Origins and development of technology in prehistoric period.
2. Beginning of agriculture and its impact on the growth of science and technology.

Unit – III

1. Science and technology during Vedic and later Vedic age.
2. Doctrine of five elements, theory of atomism and attributes of matter in ancient India.

Unit – IV

1. Development in astronomy with special reference to Aryabhata, Varahmihira and Bhaskara.
2. Development in medicine and surgery : Charaka and Sushruta Samhitas.

Unit – V

1. Development of Mathematics : geometry of the sulva sutra.
2. New development in technology – Persian wheel, gunpowder, textiles, bridge building.

Suggested Readings :

1. Alvares, C. : Homo Faber Technology and Culture in India and China, Delhi-1979
2. Anderson, R.S. : Building Scientific Institutions in India, McGill Univer. Press, Montreal, 1976.
3. Biswas, A.K. and Mukhopadhyaya, K.L. : Science in India, Kolkata-1969
4. Dharmpal : Indian Science and Technology in the 18th Century, Delhi-1971
5. Inkstem, Ian. : Science and Technology in History, Macmillan, London.