9. Tarachand : History of Freedom Movement in India

10. Thapar Romila : Bharat ka Itihas

11. Mosui Shireen : The economy of the Mughal Empire

12. Gupta P.L. : Imperial Guptas

13. Gopal S. : British Policy in India

14. Choudhary Tapan Roy & Irfan Habib : The Cambridge Economic History of India Vol. I to III

15. Lal K.S. : History of Khaljis

16. Ali Athar : Mughal Nobility under Aurangzeb

17. Saran P. : Provisional Administration under the Mughal.

18. Husan Ibu : Central structure of the Mughal Empire

19. Nigam S.B.P. : Nobility under the Suitnate.

20. Tripathi R.P. : Some aspects of Muslim Administration

21. Satish Chandra : Party and Politics of Mughal Court.

22. Aziz Abdul : The mansabdari System & the Mughal Army

PAPER- IV (A,B & C) (4)
HISTORY OF SCIENCE AND TECHNOLOGY IN PRE-COLONIAL INDIA

M.M. 100

Unit-I

Science and Technology- the beginnings.

a. Science and technology - meanings, scope and importance. Interaction of Science, Universalism of Science. Sources of history of science and technology.

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

Unit-II

Science and technology during Vedic and later Vedic

a. Times including physical and biological sciences.

b. An outline of the development of concepts: doctrine of five elements, theory of atomism and attributes of matter in ancient India.

Unit-III

Development in Science and Technology in India, A.D. 1st century to 17th century.

a. Major development in the history of science and technology from AD 1st century to c.1200.

b. Developments in astronomy with special reference to Aryabhatta, Varahmihira and Bhaskara.

Unit-IV

a. Development in medicine and surgery: Charaka and Sushruta Samhitas and Subsequent developments in Human anatomy, Physiology and materia medica.

b. Development of Mathematics: geometry of the sulva sutra; mathematics of Bakshali Manuscript,mathematics of the classical period.

c. Concept of rationality and scientific ideas in Arab thought and its reception in India

Unit-V

a. New developments in technology- Persian wheel; gunpowder; textiles; bridge building; etc.

b. Developments in medical knowledge and interaction between unani and ayurveda and alchemy.

c. Astronomy in the Arab world and its impact on Indian with special reference to Sawai Jaisingh

Books Readings :

1. Michael Adas, 1992: Machine as the Measure of Men: Science, Technology and ideological of western dominance, OUP, Delhi.
2. David Arnold, 1993: Colonizing the Body, Delhi.
3. 1999, Science, Technology and Medicine in colonial India, The New Cambridge History of the Indian Series, OUP, Cambridge.

4. Grovw, R.: 1994, Green Imperialism, OUP, Delhi.
5. Headrick, D.R.: 1981, The tools of Empire Technology and European Imperialism in the Nineteenth Century, OUP, New York.
6. Kumar Anil : 1998, Medicine and the Raj, Sage, Delhi.
7. Kumar Deepak : 1995, Science and the Raj. OUP, Delhi.
8. .....,2000. Disease and Medicine in India: A Historical overview, Tulika Publications, Delhi.
9. Macleod, Roy and Kumar Deepak : (eds.) 1995, Technology and the Raj, Sage, Delhi.
10. Patitjean Petal. (eds.): 1992, Science and empires, klluwer, Dordrechit.
11. Prakash Gyan: 2000, Another Reason: Science and the Imagination of modern, OUP., Delhi.
12. Oaisar, A.J.: 1982, The Indian Response to European Technology and Culture, OUP. Delhi.
13. Raina D. and Habib I. : (eds.) 1999, Situating History of Science : Dialogues with Joseph Needham, OUP, Delhi.
14. Sangwan S.: 1990, Science, Technology and Colonisation: Indian experience Amamika. Delhi.
15. Sen, S.N.: 1991, Scientific & Technical Education in India INSA, New Delhi.
16. Vishwanathan S.: 1985, Organising for Science, OUP, Delhi.