

Vivekanand College, Kolhapur (Autonomous)
Syllabus, B.A. (Part I) STD, Semester I
 Ability Enhancement Compulsory Course (AECC)
Science, Technology and Development
June 2018 onwards

Course Outcomes (COs): STD

Semester I	
B.A.I.	Science Technology and Development (GEC) -1
CO No.	On completion of the course, student will be able to:
CO1	To Familiar the students with various dimension of Science and Technology
CO2	Introduce the latest concepts in Science Technology & development,
CO3	aware about the status of science and technology in the modern era
CO4	Enhance specific fundamental concept in scientific thinking.
Semester II	
B.A.I.	Science Technology and Development (GEC) -2
CO No.	On completion of the course, student will be able to:
CO1	narrate the challenges and confronting the science and technology
CO2	Develop a systematic approach towards global scientific temper and needs
CO3	To develop research thinking among students.
CO4	Enhance knowledge about current situation of science and technology

Hati

(Dr. H. P. Patil)

Head

DEPARTMENT OF GEOGRAPHY
VIVEKANAND COLLEGE,
KOLHAPUR.



VIVEKANAND COLLEGE, KOLHAPUR

Syllabus

CBCS System

B.A. Part I

Ability Enhancement Compulsory Course (AECC) (2)

Science Technology and Development (STD)

SEMESTER-I

(Teaching Hours 15 & 1 Credit per Module)

Module 1. Introduction to Science and Technology:

Definitions, Nature and Scope, Fundamental Concepts in scientific Thinking, Stages in the study of science observation, experiment – Analysis Result and Hypothesis, Impact of Science and technology on society, Science and superstitions, Development of science and Technology.

Module 2. Contribution of Eminent Scientist in the Development of Science and Technology

Newton, Einstein, Edison, Dr. Homi Bhabha, Dr. M. S. Swaminathan, Dr. A. P. J. Abdul Kalam

Module 3. Non Conventional Power Resources of India-

Importance of power resources, types of power resources, Non conventional power resources- Solar energy, wind energy, hydel power energy, Nuclear energy, Bio energy, geothermal energy Tidal energy, carbon credit.

Module 4. Science Technology and Human Health-

Impact of Science and Technology on Human Health, **Human Blood-** Blood groups, importance of matching Blood groups in Human health , **AIDS-** A challenge before world facts, figures, causes, effects, treatment, social outlook, Addiction a Social Problem, types, Causes, effects and Solution, Need of Cleanliness “Swachh Bharat Abhiyan” (Clean Indian Mission)

Reference Books:

1. Introduction to information Science and Technology, Edited by Charles H. Davis and Debora Shaw, 2011
2. Annual Review of Information Science and Technology (ARIST) 39. By Blaise Cronin information Today 2004.
3. Encyclopedia of computer Science and Technology (facts on File Science Library) Hard cover- Import, 15th Jan. 2009.
4. Encyclopedia of Space Science and Technology, Wiley online Library.
5. Indian Ocean Research Volumes: Geopolitical Orientations, Regionalism and Security in the Indian Ocean (Routledge Revivals), Dennis Rumley, Sanjay Chaturvedi (Editor) 2015.
6. Disaster Management in India, Kadambary Sharma, 2010.
7. Bagila A. V. (Ed.) Science and Society, Lavani Publication House , 1972
8. Bose D. M. (Ed) A Concise History of Science in India, Indian National Science academy, 1971
9. Butle J. A. V. Science and Human Life, Pergamon Press, London
10. Encyclopedia Britannica
11. Flower W. S. The Development of Scientific Method, Pergamon Press, London

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B.A. Part I

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Science Technology and Development (STD)

SEMESTER-II

(Teaching Hours 15 & 1 Credit per Module)

Module 1. Disaster Management-

Types of disaster- Earthquake, Flood, Drought, Fire, Accident, Crowd.

Module 2. Means of Communications and Information Technology-

Brief history of communication, Origin development and importance of computer, computer network, internet, computer viruses, information technology.

Module 3. Science Technology in Space Research-

Beginning of Satellite ERA in the World, Rocet technology, Artificial Satellite-types and Uses, Satellite Programme of India, Introduction of: a) Geographical Information System (GIS) b) geographical Positioning System (GPS).

Module 4. Science Technology in India's Defence and Ocean Research-

Science Technology in National Defence, Defence research and development organization (DRDO), Importance of Ocean Study, Indian Institute of Oceanography, Antarctica expedition of India.

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