GENERAL STUDIES

[Compulsory Paper For B.A. and B.Sc. III Sem] [Syllabus prescribed by the Mangalore University]

UNIT - I

Page No.s

OUR PLACE IN TIME AND SPACE

- a) The Universe: Galaxies Stars Planets Satellites Asteroids and Comets - Black Hole.
- b) The Origin of the Universe the Big Bang.
- c) Earth Size and Structure Continental Drift Plate Tectonics Seismic Activities - Volcanoes, Earthquake, Tsunami.
- d) Our World The Continents Oceans and Seas Mountains, Rivers, Deserts, Grasslands and Lakes - Geographical Features of India - Mountains and Ghats - Seas and Rivers - Deserts and Forests.

UNIT - II

SOME SCIENTISTS WHO HAVE CHANGED OUR VISION OF THE WORLD AND WHAT WE COULD DO

45 - 70

Contributions of Copernicus, Galileo and Newton to the understanding of the Universe; James Watt and heat engines; Volta-Battery; Faraday - Dynamo and Electric Power; Einstein and Theory of Relativity; Rutherford - Discovery of Atomic Nucleus and Development of nuclear energy; William Shockley - Development of Transistor and electronic revolution. Linnaeus - Taxonomy; Darwin - the Theory of Evo-Iution: Gregor Mendel - Theory of Inheritance; Watson, Crick and Wilkins - DNA model; Edward Jenner - Vaccination; Louis Pasteur - Pasteurization; Alexander Fleming - Antibiotics; Dmitri Mendeleev - Periodic Table; LIVING IN MODERN INDIA John Dalton - Atomic Mass; G.N. Lewis - Acid Base Concept; Amedeo Avogadro - Avogadro Number; Charaka and Shushrutha - Indian Knowledge in Medicine and Surgery.

UNIT - III

SCIENCE AS IT MATTERS TO US

71 - 87

Structure of Chromosome - DNA - Gene - Biotechnology and its application - Biogas, Insulin Vaccines, Enzymes, Steroids, dairy products, Brewery - Genetic Engineering - Transgenic Plants and animals, DNA finger-S printing: Gene Therapy; Tissue Culture, Stem - Cell Structure - Hazards of Biotechnolog on Health and Environment - Social and Ethical Prob-

THE MAKING OF THE MODERN WORLD

The Modern Revolutions and Ideas Which They Upheld - The English Revolution -The American War of Independence - The French Revolution

THE IDEAS AND CHANGES IN THE MODERN WORLD PAGE

Colonialism and Imperialism - Decolonisation - The World Wars - Attempts to forge International community - League of Nations - U.N.O. -Commonwealth - NAM - SAARC - European Union - The end of Cold War and the experience of Unipolar World.

GANDHIJI IN THE MAKING OF THE MODERN INDIA

147 - 160

Gandhiji and Non-Violence - Gandhiji and Satyagraha Gandhiji's Vision of Rural India and Social Justice

UNIT - VII

EMINENT INDIANS

161 - 191

Swami Vivekananda - Rabindranatha Tagore, Jamshedji Tata - Sri M. Vishveshwarayya - Srinivasa Ramanujam - Sir C.V. Raman - Homi J. Babha - S. Radhakrishnan - P.V. Kane - Vikram Sarabhai - Bismillah Khan - M.S. Subbalakshmi - Balasaraswathi - R.K. Narayan - Kota Shivaram Karanth - K.K. Hebbar - Satyajith Ray - Nargis Dutt - Dhyan Chand -Ranjithsinhji - Mother Theresa.

UNIT - VIII

192 - 243

Changing Perception of Development: a) Privatization, Liberalization, Globalisation and Consumerism - b) Consumer's Rights - People Empowerment - Lokayukta - Right to Information - Role of the Media. c) Income Tax - Computation of Tax - Taxable Income - Authorised Deductions - Filing Income Tax Returns of the Salaried Class d) Symbols of Independent India - National Flower, Animal, Bird - National Flag - National Song [Vande Matharam] - National Anthem.

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