

# **SYLLABUS**

- Policy Development of S&T in India
- Different Organization Institution and Various Department for the S&T
- Space
  - Satellite Communication in India
  - INSAT Satellite Applications
  - Remote Sensing Applications
  - Cryogenic Rockets
  - Global Positioning System
  - Role of Space in Development
  - ISRO as Soft Power
  - Issue of Space Race
  - Space Activities Bill, 2017
  - Outer space treaty
- IT, Telecom and Communications
  - IT Industry in India
  - Applications of Information Technology
  - Display Technologies
  - Telecommunication
  - Government Initiatives
  - Contemporary Debates
- Defense
  - Missile System and their Classification
  - India's Missile System
  - India's Ballistic Missile Defense System
  - UAVs in India
  - Stealth Technology ,Chemical Weapons ,                      Biological Weapons
- Nano- Science and Nano - Technology
  - Nanoscience Nanotechnology and Nanomaterials
  - Applications of Nanotechnology
  - Health & Environmental Impacts of Nanotechnology
  - Social & Ethical Impacts
  - Nano-Science& Nanotechnology in India
- Robotics
  - Robotics & Artificial Intelligence
  - Applications of Robotics
  - Robotics and Issues of Unemployment
- Nuclear Energy
  - Nuclear-Power Policy of India
  - Non-energy Applications of Nuclear Energy
  - Impact of Radiation, Issue of Radioactive Waste
  - Institutions involved in Nuclear Energy Development
  - Nuclear & Radiological Disasters
- Biotechnology
  - Application of Biotechnology
  - Biotechnology Projects

- Issue of Bio-Piracy
- Bioinformatics
- Biotechnology and IPR Issue
- Ethical Dimension In Biotechnology
- Renewable Energy
  - Ocean Thermal Energy Conversion (OTEC)
  - Concept of Green Building
  - Tidal , Wave , Geothermal Energy , Fuel Cells
- Achievements of Indians in the field of Science and Technology
  - Scientists of Ancient India
  - Science and Scientists of Medieval India
  - Scientists of Modern India
  - Policies& Reports related to Science
- Technology Vision Document 2035
- National Biotechnology Development Strategy 2015-2020
- National Intellectual Property Rights Policy
- Policy on Synthetic Biology
- Law Commission Report on Human DNA Profiling
- Contemporary issues in the field of science and technology + Applied Science and Modern Day Technology

+ Current Affairs Nov'21

## Sources

- Science and Technology by spectrum.
  - Science and Technology in India – Ravi P Agrahari.
  - Websites like ISRO, DST, DRDO, DAE etc.
  - Science Reporter Magazine
  - The Hindu: Science News,
  - Indian Express
  - Magazines like Yojana & Kurukshetra
  - PIB : [www.pib.nic.in](http://www.pib.nic.in)
  - TOI, Livemint, etc.
- Magazines like Economic & Political Weekly, Frontline, India Today, etc.

