SEMESTER-II (Pool-A)

Course Title: Electricity Access- India and World
(CHOI-A37)

Number of Credit: - 02   **Maximum marks: 50**

Unit-I
Electricity production, access and per capita electricity consumption in different regions and countries -Africa, Asia, China, Europe, Middle East, United States, Germany, Japan, Nepal, Bangladesh, Sri Lanka, Pakistan, and India, world overview.

Unit-II
Electric Power Production in India-Pre-independence, post independence, five year plans, present status, growth of power sector, installed capacity and generation since independence to present scenario, growth of renewable energy in power production, National Solar Mission.

Unit-III
Estimated benefits of universal access of electricity to households, comparison of electricity access in various states and Union Territories of India, rural and urban areas, different income groups.

Unit-IV
Barriers to household electricity access and adoption- availability, power reliability, affordability, transmission and distribution (AT&C) losses for different states, comparison of losses in India with United States, electricity theft.

Unit-V
Rural electrification-history, evolution of rural electrification in India, Rural Electrification corporation, Kutir Jyoti Yojna, Pradhan Mantri Gramodaya Yojana, Rajiv Gandhi Grameen Vidyutikaran Yojana, Deen Dayal Upadhyay Gram Jyoti Yojana.

References
1. Power for All, Electricity access challenge in India, Sudeshna Ghosh Banerjee, Douglas Barnes, Bipul Singh, Kristy Mayer, and Hussain Samad, World Bank Group, 2015.
2. Garv Dashboard, https://smartutilities.net.in/2017/03/16/garv-dashboard/
3. Electrification Status, Saubhagya Dashboard, https://saubhagya.gov.in/
4. Rural Electrification in India http://www.ddugjy.gov.in/
5. Gram Swaraj Abhiyan https://saubhagya.gov.in/dashboard/gsa
6. Ministry of Power Uday Dashboard https://www.uday.gov.in/home.php
7. Energy Statistics 2019, Central Statistics Office, Ministry of Statistics and Programme Implementation, Government of India, http://www.mospi.gov.in/sites/default/files/publication_reports/Energy%20Statistics%20 2019-finall.pdf
8. Energy Statistics 2018, Central Statistics Office, Ministry of Statistics and Programme Implementation, Government of India, http://mospi.nic.in/sites/default/files/publication_reports/Energy_Statistics_2018.pdf
9. Ministry of New and Renewable Energy, https://mnre.gov.in/

10. Ministry of Power https://powermin.nic.in/en/content/power-sector-glance-all-india
11. NITI Aayog, Energising India, https://niti.gov.in/writereaddata/files/Energising-India.pdf
12. World Energy Outlook, International Energy Agency https://www.iea.org/reports/world-energy-outlook-2019
13. World Energy Statistics https://yearbook.enerdata.net/
14. World Bank Energy Use per capita https://data.worldbank.org/indicator/EG.USE.PCAP.KG.OE
15. IEA Atlas of Energy http://energyatlas.iea.org/#!/tellmap/-1118783123