

U.G. 3rd Semester Examination - 2021**PHYSICS****[HONOURS]****Course Code : BPHSSEHT305****Course Title : Renewable Energy and Energy Harvesting**

Full Marks : 50

Time : 2 Hours

The figures in the right-hand margin indicate marks.

Answer all the questions by choosing correct alternative:

2×25=50

1. The Chipko movement was originated in
 - a) Uttarakhand
 - b) Arunachal Pradesh
 - c) Madhya Pradesh
 - d) Himachal Pradesh
2. Van Mahotsav includes-
 - a) Planting and protecting trees
 - b) Destruction of trees should be curtailed
 - c) Restoration of green cover
 - d) All the above
3. The Wild Life Protection Act was established in
 - a) 1952
 - b) 1972
 - c) 1980
 - d) 1970

4. Which of the following is a fossil fuel?
 - a) Tar
 - b) Coal
 - c) Petroleum
 - d) All the above
5. Green House effect refers to
 - a) Cooling of earth
 - b) Trapping of UV rays
 - c) Warming of earth
 - d) Cultivation of plants
6. Jim Corbett National Park was established in
 - a) Uttar Pradesh
 - b) Tamil Nadu
 - c) Gujarat
 - d) Uttarakhand
7. Hydropower plants converts the kinetic energy of flowing water into
 - a) Mechanical energy
 - b) Tidal energy
 - c) Wind energy
 - d) Electricity
8. Deforestation generally decreases.
 - a) Rain fall
 - b) Drought
 - c) Global warming
 - d) Soil erosion
9. Process of burning of non-biodegradable solid waste is called
 - a) Composting
 - b) Incinerations
 - c) Segregation
 - d) Sanitary land filling
10. In nuclear reactor raw material used is
 - a) U^{235}
 - b) U^{238}
 - c) U^{239}
 - d) U^{237}

[Turn Over]

11. The working principle of solar cell is based on
- Faraday's electrochemical effect
 - Joule-Thomson effect
 - Photoelectric effect
 - Kerr effect
12. The force that is responsible for the changing direction of global wind is
- Centripetal force
 - Centrifugal force
 - Gravitational force
 - Coriolis force
13. In atmosphere ozone layer absorb
- Gamma rays
 - X-Rays
 - Ultraviolet rays
 - Infrared rays
14. Biogas is a mixture of
- Methane and CO_2
 - Methane, CO_2 and NO_2
 - Methane, CO_2 and H_2S
 - None of the above
15. Where is a thermal power plant not situated?
- Mejia
 - Santaldih
 - Bakreswar
 - Panchet
16. Waste from nuclear power plant is hazardous. So it is —
- thrown into river
 - dumped in ground outside the power plant
 - buried deep inside ground in special containers
 - burnt immediately.
17. Solar cell converts
- electrical energy to heat energy
 - light energy to electrical energy
 - chemical energy to heat energy
 - light energy to chemical energy
18. Energy conversion in tidal energy plant is
- thermal energy to kinetic energy
 - kinetic energy to electric energy
 - thermal energy to electric energy
 - None of the above
19. Solar cooker may be efficiently used
- in a bright sunny day
 - in a cloudy and windy day
 - at midnight
 - in a rainy day

20. Geothermal energy is found in
- a) flowing rivers
 - b) rock and fluids beneath the earth's crust
 - c) upper surface of ground
 - d) water stored in dam
21. The major contributor to wind turbine efficiency is
- a) material of turbine
 - b) height of turbine
 - c) location of turbine
 - d) air velocity reaching turbine
22. Which country uses renewable energy to generate all their electricity?
- a) India
 - b) Iceland
 - c) Finland
 - d) England
23. Cigarette lighter/gas lighter uses principle of
- a) photovoltaic effect
 - b) piezoelectric effect
 - c) Zeeman effect
 - d) thermonuclear effect

24. Which one is wrong about primary cells?
- a) can be used only once
 - b) cannot be recharged
 - c) used in wireless devices
 - d) can be recharged
25. Linear generator works on the principle of
- a) Thermoelectric effect
 - b) Electromagnetic Induction
 - c) Chain reaction
 - d) Stark effect
