Sources of Energy

SECTION - I

Straight Objective Type

This section contains multiple choice questions. Each question has 4 choices (A), (B), (C), (D), out of which ONLY ONE is correct. Choose the correct option.

1. *The capacity to do work is*

   (a) power *(b) force*

   (c) work *(d) energy*

2. *The C.G.S. unit of energy is*

   (a) dyne *(b) erg*

   (c) kwh *(d) joule*

3. *The source of energy that can be replenished when once they are used up is called*

   (a) good source *(b) bad source*

   (c) renewable source *(d) non-renewable source*

4. *The source of energy that cannot be replenished when once they are used up is called*

   (a) good source *(b) bad source*

   (c) renewable source *(d) non-renewable source*

5. *The source of energy that produces pollution is*

   (a) solar energy *(b) tidal energy*

   (c) petroleum *(d) wind energy*

6. *Dependence on non-renewable sources of energy leads*

   (a)energy crisis *(b) energy distribution*

   (c) energy production *(d) availability of more energy*

7. *Anthracite consists of*

   (a) 69% of carbon *(b) 96% of carbon*

(c) 27% of carbon (d) 72% of carbon

8. The process form which various useful components are derived from the crude oil is

(a) centrifuge (b) electrolysis

(c) fractional distillation (d) electroplating

9. Kerosene is obtained from

(a) chemicals (b) ethyl alcohol

(c) coal (d) diesel

10. Bituminous coal is the source of

(a) coke (b)kerosene

(c) petrol (d) diesel

11. Liquefied petroleum gas (LPG) mainly consists of

(a) methane (b) butane

(c)oxygen (d) nitrogen

12. The substance, that is added to detect the leakage of LPG is

(a) ethylmercaptan (b) alcohol

(c) HCl (d) mercury

13. Solar cookers works based on

(a)nuclear energy (b) chemical energy

(c)solar energy (d) wind energy

14. An array of solar cells mounted on a panel is called as

(a)solar plate (b) solar sheet

(c) solar cell panel (d) solar mat

15. The electric needs of an artificial satellites are fulfilled by using

(a) solar cell panels (b) chemicals

(c) wind energy (d) nuclear energy

16. *Wind mills are not used in*

(a) *grinding* (b) *pumping*

(c) *generating electricity* (d) *running automobiles*

17. _____ *energy of flowing water is converted into electricity.*

(a) *kinetic* (b) *potential*

(c) *pressure* (d) *chemical*

18. *The heat present inside the earth's crust is called the*

(a) *thermal energy* (b) *chemical energy*

(c) *geothermal energy* (d) *nuclear energy*

19. *The anaerobic fermentation of cattle dung produces*

(a) *bio-gas* (b) *oxygen*

(c) *hydrogen* (d) *nitrogen*

20. *A good fuel should have high*

(a) *calorific value* (b)*cost*

(c) *moisture* (d) *non-combustible matter*

SECTION - II

Assertion - Reason Questions

This section contains certain number of questions. Each question contains STATEMENT-1 (Assertion) and STATEMENT - 2 (Reason). Each question has 4 choices (a), (b), (c) and (d) out of which ONLY ONE is correct. Choose the correct option.

21. *STATEMENT-1: A ideal fuel should have moderate ignition temperature* ***because***
STATEMENT - 2: low ignition temperature is dangerous for storage and transport, on the other hand, high ignition temperature troubles in lighting the fuel.
(a) Statement - 1 is True, Statement - 2 is True; Statement - 2 is a correct

explanation for statement - 1
(b) Statement - 1 is True, Statement - 2 is True; Statement - 2 is NOT a correct explanation for Statement - 1
(c) Statement - 1 is True, Statement - 2 is False
(d) Statement - 1 is False, Statement - 2 is True

22. *STATEMENT-1: The solar energy renewable source of energy.*
because
STATEMENT - 2: Solar energy is energy is obtained from the sun.
(a) Statement - 1 is True, Statement - 2 is True; Statement - 2 is a correct explanation for statement - 1
(b) Statement - 1 is True, Statement - 2 is True; Statement - 2 is NOT a correct explanation for Statement - 1
(c) Statement - 1 is True, Statement - 2 is False
(d) Statement - 1 is False, Statement - 2 is True

SECTION – III

Linked Comprehension Type

This section contains paragraphs. Based upon each paragraph multiple choice questions have to be answered. Each question has 4 choices (a), (b), (c) and (d), out of which ONLY ONE is correct. Choose the correct option.
The process of breaking up of the nucleus of a heavy atom into two roughly equal parts with the release of a large amount of energy is called nuclear fission. Nuclear reactor is a device which controls the chain reaction and the nuclear energy produced is utilized for constrictive purposes. Reactors are used in electricity generation.

23. *Splitting of a nucleus is called*
(a)nuclear fusion *(b) nuclear fission*
(c)nuclear activity *(d) radioactivity*

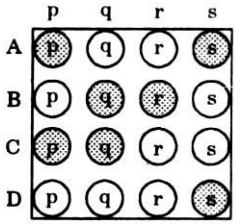
24. *Nuclear fission is the principle of*
(a) atom bomb *(b) hydrogen bomb*
(c) radioactivity *(d) radiation*

25. *Controlled chain – reactions take place in*
(a) atomicpile *(b) atom bomb*
(c) hydrogen bomb *(d) radiation*

SECTION – IV
Matrix - Match Type

This section contains Matrix-Match type questions. Each question contains statements given in two columns which have to be matched. Statements (a, b, c, d) in Column I have to be matched with statements (p, q, r, s) in Column II. The answers to these questions have to be appropriately bubbled as illustrated in the following example.

If the correct matches are a-p, a-s, b-q, b-r, c-p, c-q and d-s, then the correctly bubbled 4 x 4 matrix should be as follows:



23.

Column I	***Column II***
(a) Biogas	*(p) renewable source*
(b) Nuclear energy	*(q) non-renewable source*
(c) LPG	*(r) petroleum*
(d) Coal	*(s) Cow dung*