

I. Choose the best answer:

1. MRI stands for _____
 a) Magnetic Resonance Imaging
 b) Magnetic Running Image
 c) Magnetic Radio Imaging
 d) Magnetic Radar Imaging
2. A magnet attracts _____
 a) wooden materials
 b) any metal
 c) copper
 d) iron and steel
3. Which of the following is the working principle of rockets?
 a) Newton's I law
 b) Newton's II law
 c) Newton's III law
 d) all the above
4. Which is known as syn gas?
 a) marsh gas
 b) water gas
 c) producer gas
 d) coal gas
5. The unit of calorific value of fuel is _____
 a) KJ mol^{-1}
 b) KJ g^{-1}
 c) KJ kg^{-1}
 d) J kg^{-1}
6. The main component of natural gas is _____
 a) methane
 b) ethane
 c) propane
 d) butane
7. Organism that control insects and pests of plant crops is _____
 a) bio-pesticides
 b) bio-fertilizers
 c) earthworms
 d) neem leaves
8. The method in which water flows over the soil surface and allow it to infiltrate is _____
 a) irrigation
 b) surface irrigation
 c) springler irrigation
 d) drip irrigation
9. Deforestation means _____
 a) cleaning of forest
 b) to grow plants
 c) to look after plants
 d) none of these
10. Wildlife Protection Act was implemented in _____
 a) 1986
 b) 1972
 c) 1973
 d) 1971

II. Fill in the blanks :

5 x 1 = 5

11. Mudhumalai Wildlife Sanctuary is located in _____ district.
12. _____ is a plant growing in a place where it is not wanted.
13. The main component of natural gas is _____.
14. Our sun belongs to _____ Galaxy.
15. The magnetic strength is _____ at the poles.

III. Answer the following briefly (any 10)

10 x 2 = 20

16. What is artificial magnet? Give example.
17. What are cryogenic fuels?
18. Name the Indians worked at NASA.

19. Match the following :

- | | |
|-------------------------|----------------------|
| a) Octane rating | - Diesel 2 |
| b) Cetane rating | - Methane 3 |
| c) Simplest hydrocarbon | - Petrol 1 |
| d) Peat | - Brown in colour 5 |
| e) Lignite | - First stage coal 4 |

(2)

20. **Give reason** : Anthracite is known as the highest grade coal.
21. Name the places in Tamilnadu harnessing wind energy from wind mills.
22. What is green manure?
23. Name the methods of sowing? *sowing by hand ; Seed drill and dibbling*
24. What is foliar spray?
25. a) Name two endangered animals.
b) What is IUCN?
26. a) WWF stands for _____.
b) _____ is observed as "World Wildlife Day".
27. Assertion : Iron filings are concentrated more at the magnetic poles.
Reason : The magnets are so sharp.
- a) both assertion and reason are true and reason is the correct explanation of assertion
b) both assertion and reason are true but reason is not the correct explanation of assertion
c) assertion is true, but reason is false d) assertion is false, but reason is true

IV. Answer in detail (any 3)**3 x 5 = 15**

28. a) List out the uses of magnets.

(OR)

- b) What are the achievements of Chandrayaan.

29. a) Explain the different types of coal.

(OR)b) **Match the following**

- | | | |
|----------------|---|--|
| i) Chandrayan | - | Fuel ³ |
| ii) Mangalyaan | - | Moon ¹ |
| iii) Cryogenic | - | First manned mission to moon ⁴ |
| iv) Apollo - 8 | - | First man landing mission to moon ⁵ |
| v) Apollo - II | - | Mars ² |

30. a) Explain how animals are affected by deforestation?

(OR)b) i) **Match the following :**

- | | | |
|-------------------|---|-------------------------------------|
| 1) Bio-pesticide | - | Neem leaves ⁵ |
| 2) Bio-predators | - | Bacillus thuringiensis ¹ |
| 3) Bio-fertilizer | - | Control white flies ² |
| 4) Bio-indicators | - | Improve soil fertility ³ |
| 5) Bio-repellents | - | Quality of environment ⁴ |

- ii) What is crop rotation.
