

I. Choose the correct answer:

$$12 \times 1 = 12$$

- Reflection of light from a smooth surface is _____ and that on a rough surface is _____.
a) diffused, specular
b) irregular, regular
c) improper, proper
d) specular and diffused
- Our galaxy, the Milky Way is an example of a _____ galaxy.
a) elliptical
b) irregular
c) cluster
d) spiral
- The _____ is a space telescope.
a) Hubble
b) GSLV MK III
c) Geo Sat
d) NASA
- Nylon is used in making _____.
a) parachutes
b) ropes
c) toothbrushes
d) all of the above
- Choose an example of a thermosetting plastic _____.
a) PVC
b) Bakelite
c) Polythene
d) PET
- _____ glass is used for oven proof objects.
a) PYREX
b) Green-tinted
c) Toughened
d) Bulletproof
- _____ are also called painkillers.
a) Analgesics
b) Antibiotics
c) Antipyretics
d) Antiseptics
- Burning is a _____ reaction.
a) ORS
b) endothermic
c) combustion
d) all of the above
- The minimum temperature at which a substance catches fire is called the _____.
a) low temperature
b) ignition temperature
c) medium temperature
d) none of the above
- This animal fibre is used in parachutes.
a) silk
b) wool
c) jute
d) none of these
- Worker bees are _____ females.
a) sterile
b) fertile
c) muga
d) eri
- This is an Indian variety of bees used in apiculture.
a) Apis mellifera
b) Apis florea
c) Aspergillosis
d) None of these

II. Answer the following: (Any 14)**14 x 2 = 24**

13. Give the expansions of PSLV and GSLV.
14. Analogy:
 - a) Short distance: Meter :: Very long distance: _____.
 - b) Older stars: Elliptical galaxy :: Young stars: _____.
15. A person standing 3m from a mirror looks at a tree, which is 1.5m behind her. What is the distance of the image of the tree from her?
16. What is an epicycle?
17. Name the four different types of galaxies.
18. State the difference between a mirror and a glass plate.
19. Fill in the blanks:
 - a) _____ is a natural polymer.
 - b) _____ is abbreviated as ORS.
20. Match the following:
 - a) Bakelite - Leads to respiratory problem
 - b) Rayon - Thermosetting plastic
 - c) Phosphorus - Wood pulp
 - d) Carbon dioxide - Spontaneous combustion
21. Give reason: Saucepan handles are made of thermosetting plastics:
22. List any four natural polymers.
23. Give three examples that are considered household hazardous waste.
24. Define antibiotics.
25. State whether the following sentences are true or false. If false, Correct them.
 - a) Silk is used as an insulator in space vessels.
 - b) Endangered species are those that are no longer present on the earth.
26. Assertion and Reasoning:
 - a) Assertion (A): Eggs are highly nutritious and rich in protein.
Reason (R): They are consumed in the daily diet by people of all ages.
 - b) Assertion (A): Ahimsa silk is also known as 'peace silk'
Reason (R): Silkworms are killed during the process of manufacturing the fabric.
 - A) Assertion is correct, Reasoning is correct.
 - B) Assertion is correct, Reasoning is incorrect.
 - C) Assertion is incorrect, Reasoning is correct.
 - D) Assertion and reasoning are incorrect.
27. What is incubation?
28. What is reeling?
29. Name an organization involved in wildlife conservation.

III. Answer the following in detail: (Any 4)**4 x 5 = 20**

30. Define the different terms in optics related to reflection.
31. Explain the waxing and waning phases of Venus.
32. Write a short note on constellations.
33. Why should we avoid using plastics? Explain.
34. List the steps to prepare ORS at home.
35. What are the uses of silk?

IV. 36. Draw and label the zones of a flame:**1 x 4 = 4**