

Time : 3 hours

Full Marks : 100

Instructions:

- (1) The figures in the right-hand margin indicate full marks for the questions.
- (2) Write legibly, to the point and in your own words as far as practicable.

1. Read the given passage carefully and answer the questions that follow :

When night falls a great change takes over in the animal world. While birds, butterflies and most of the other creatures that are active by day seek their resting places, deer, foxes, badgers, field mice and many other smaller animals wake up and venture out into the open. The atmospheric temperature goes down and the air also becomes damp because it cannot hold so much water vapour when it is cool. If it cools down very much, some of the moisture may condense and form dew. This is very important for small creatures such as slugs, snails and woodlice which have no waterproof coats. They can come out at night without risk of drying up but they have to spend the daytime hidden away under stones and leaves. Earthworms may also leave their burrows at night and search for food on the surface. They make quite a bustle as they move among the leaves, but they are too easy to find because they retreat rapidly into their burrows if disturbed. Most desert-dwelling creatures also come out at night and get much of their water supplies by eating dew-laden food.

The light is poor at night and many of the nocturnal animals have large eyes which gather in as much light as possible. The owl is a good example. Our own eyes are also quite good at night, although the cells which detect colour do not work at low light levels and we see everything in shades of grey. Cats, foxes and some other nocturnal animals increase the sensitivity of their eyes by having a reflecting layer at the back. You can see this layer shining brightly if the animal passes through the beam of a torch or a car headlight. The light passing back through the sensitive part of the eye helps to produce a brighter image.

- (A) (i) What are the changes that take place in the animal world at nightfall? 3
- (ii) What leads to the formation of moisture at night? 3
- (iii) How is the formation of dew helpful to creatures such as slugs and snails? 3
- (iv) Why do we see most things in grey in the dark? 3
- (v) How do cats and foxes see so clearly in the dark? 3
- (B) Find the opposite of the given words from the passage : 1×5=5
- (i) Sleep
- (ii) Exposed
- (iii) Advance
- (iv) Slowly
- (v) Dimly

2. Write an essay on any **one** of the following topics : 25

- (a) Preserving our National Monuments
- (b) Digital India
- (c) Genetic Engineering and Agriculture

3. Give a précis of the given passage and add a suitable title to it : 15

Environmental pollution is a direct consequence of industrial progress. It is more pronounced in large industrial belts. In these areas the air is getting polluted by the exhausts of automobiles, furnaces, industrial soot, etc. Again there are other factors like decomposition of garbage and other refuse which makes the atmosphere heavy. Indiscriminate burning of all sorts of conventional and unconventional fuels release large portions of carbon monoxide, carbon dioxide and other fumes in the air. These cause heavy damage to the health of living creatures. Random destruction of forest cover also adds to the problem. Surveys have clearly shown the injurious effect of atmospheric pollution upon the lungs and eyes of the residents living in areas and cities surrounded by industries. In winter, the smoke cannot move quickly. It descends and causes burning sensation in eyes and also damages lungs. In fact, several cities are choking to death with their own fumes.