Q 34.B

• Forest-PLUS is a bilateral program between India and the U.S. to develop solutions for sustainable forest land use in India. The program, in partnership with the Ministry of Environment, Forest and Climate Change (MoEFCC), prepares India to implement successfully Reducing Emissions from Deforestation and Forest Degradation (REDD+), an international mechanism for climate change mitigation, livelihoods improvement, and biodiversity protection.

Q 35.D

- Pollination is a type of sexual reproduction in which pollen are transferred from the anther to the stigma of a flower. If the pollen lands on the stigma of the same flower, it is called self-pollination. When the pollen of a flower lands on the stigma of another flower of the same plant, or that of a different plant of the same kind, it is called cross-pollination.
- **Statement 1 is correct**: Generally pollen grains have a tough protective coat which prevents them from drying up.
- Statement 2 is correct: they are light weighted, so that they can be carried by wind or water.
- **Statement 3 is correct**:Insects visit flowers and carry away pollen on their bodies, here attractiveness of the flower i.e. appearance, odour etc. matters.

Q 36.C

- A **false fruit** or pseudo-carp is derived from the floral parts other than ovary, e.g., peduncle in cashewnut, thalamus in **apple**, pear, **strawberry**, gourd and cucumber and fused perianth in mulberry. Jack fruit and **pine apple** are also false fruits as they develop from the entire inflorescence. False fruits are also called spurious or accessory fruits.
- A true fruit or eucarp is a mature or ripened ovary, developed after fertilization, e.g., Mango, Grape etc.

Q 37.B

- A wide range of organisms belonging to bacteria, viruses, fungi, protozoans, helminths etc. could cause diseases in man. Such disease causing organisms are called pathogens.
- Pair 1 is correctly matched: Tuberculosis (TB) is an infectious disease caused by the bacterium Mycobacterium tuberculosis (MTB). Tuberculosis generally affects the lungs, but can also affect other parts of the body. Most infections do not have symptoms; in which case it is known as latent tuberculosis. The symptoms of active TB are a chronic cough with blood-containing sputum, fever, night sweats, and weight loss.
- Pair 2 is correctly matched: Plasmodium, a tiny protozoan is responsible for malaria. Different species of Plasmodium (P. vivax, P. malaria and P. falciparum) are responsible for different types of malaria. Of these, malignant malaria caused by Plasmodium falciparum is the most serious one and can even be fatal.
- Pair 3 is not matched correctly: Diphtheria is an infectious disease caused by bacterial microorganisms known as Corynebacterium diphtheriae.

Q 38.D

Vitamin	Deficiency
Vitamin A (beta- carotene or retinol)	night blindness and eye disease, dry and scaly skin, increased infections, and kidney stones
Vitamin B-1 (thiamin)	Disease is beriberi; Symptoms of a deficiency include depression, irritability, attention deficit; Severe deficiency leads to edema, paralysis, and heart failure
Vitamin B-2 (riboflavin)	Symptoms are dry, scaly skin on face, oral swelling, and cracking at the corners of the mouth
Vitamin B-6 (pyridoxine)	Not common; symptoms include mouth sores, nausea, nervousness, anaemia, convulsions
Vitamin B-12 (cobalamin)	Pernicious anaemia, muscle and nerve paralysis