45. This creeper in combination with the pith of the roots of a jackfruit tree yields a saffron dye. The bhikkhus of a Buddhist monastery in the 152-year-old Chalapather Shyamgaon had bemoaned the near-extinction of this creeper. The concern of the monks triggered a movement for conserving the adjoining Chala Reserve Forest and the reserve forest under the Sivasagar Forest Division was declared the Chala Village Sanctuary.

Which of the following creepers has been described in the passage given above?

- (a) Dodder
- (b) Bengal Clock Vine
- (c) Bhungloti
- (d) Bougainvillea
- **46.** Keeling Curve, often seen in the news, is a graph
 - (a) for measuring impact of environmental policies on economic policies.
 - (b) that represents the concentration of carbon dioxide (CO2) in Earth's atmosphere since 1958.
 - (c) that shows progress of achievements of the nations with respect to their Nationally Determined Contributions (NDCs).
 - (d) for comparing ozone depletion with respect to concentration of chlorofluorocarbons in atmosphere.
- **47.** Consider the following statements regarding the ecological pyramids:
 - 1. Ecological pyramids can provide clues to seasonal and diurnal variations.
 - 2. Detritus such as litter and humus are not depicted in ecological pyramids.
 - 3. Saprophytes are not represented in ecological pyramids.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3

- **48.** Consider the following statements regarding adaptation and acclimatization:
 - 1. Both adaptation and acclimatization cannot be reversed.
 - 2. While adaptation is a gradual process, acclimatization is a rapid process.
 - 3. Both adaptation and acclimatization affect the evolutionary process.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 only
- (c) 3 only
- (d) 1, 2 and 3
- **49.** With reference to Indian monsoons, consider the following statements:
 - 1. The off-shore trough is responsible for the strengthening of the monsoon in terms of rainfall.
 - 2. The off-shore vortex is responsible for the occurrence of heavy to very heavy rainfall over the east coast during the monsoon season.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- **50.** Consider the following:
 - 1. Salher and Kalsubai are important peaks of this mountain range.
 - 2. The Deccan Trap constitutes the northern portion of this mountain range.
 - 3. They run along the south of the Tapti river valley to Kanyakumari.

Which of the following mountain range has all the above characteristics?

- (a) Western ghats
- (b) Eastern ghats
- (c) Satpura range
- (d) Aravalli range