

44. With reference to “hate speech”, consider the following statements:
1. It has been defined in the Indian Penal Code.
  2. The expression of hate speech has not been explicitly mentioned as a restriction on the freedom to speech and expression under Article 19(2) of the Constitution.
- Which of the above statements is/are correct?
- (a) 1 only  
(b) 2 only  
(c) Both 1 and 2  
(d) Neither 1 nor 2
45. Consider the following statements with respect to Atlantic Meridional Overturning Circulation (AMOC):
1. It carries warm surface waters from the tropics towards the Northern Hemisphere, where it cools and sinks.
  2. Slowing down this circulation is likely to increase global warming.
- 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
46. Which of the following is provided for by the Representation of People Act, 1950?
1. Officers related to conducting elections
  2. Manner of filling seats in the Council of States allotted to Union Territories
  3. Corrupt practices and other offenses at or in connection with such elections
  4. Delimitation of constituencies of the Parliament and state legislature
- Select the correct answer using the code given below.
- (a) 2 and 3 only  
(b) 1, 3 and 4 only  
(c) 1, 2 and 3 only  
(d) 1, 2 and 4 only

47. Consider the following statements regarding the Sikh reform movement:
1. Baba Ram Singh was the founder of the Nirankari movement.
  2. Namdharis wore white clothes with a white turban and carried a rosary to further set them apart from all others.
  3. Nirankaris follow a set of rituals modeled after Guru Gobind Singh's founding of the Khalsa.
- Which of the statements given above is/are correct?
- (a) 3 only  
(b) 2 and 3 only  
(c) 1 and 2 only  
(d) 2 only
48. With reference to monsoon in India, formation dynamics of the Asian tropopause aerosol layer (ATAL) during the monsoon season along with El Nino played a major role in creating a rainfall deficit over India. This layer is made up of
- (a) sulfate aerosols only  
(b) CFCs, HFCs, Carbon Tetrachloride and free chlorine atoms  
(c) sulfates along with black carbon, organic aerosols, nitrates and dust particles  
(d) salt particles, silver iodites and Ground level Ozone
49. Consider the following statements regarding fast-breeder reactors:
1. FBRs are designed to breed more fuel than they consume.
  2. In this reactor plutonium-239 undergoes fission to produce energy, while the uranium-238 present in the fuel transmutes to additional plutonium-239.
  3. It is a part of stage 1 of India's Nuclear power program.
- Which of the statements given above is/are correct?
- (a) 1 only  
(b) 1 and 2 only  
(c) 2 and 3 only  
(d) 1, 2 and 3