

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

**42.** Which of the following regarding the application(s) of Cyber-Physical Systems is correct?

- 1. Green Buildings
- 2. Traffic Control
- 3. Infrastructure Monitoring

Select the correct option from the codes given below.

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

**43.** With reference to Medical devices, consider the following statements,

- 1. India imports at least 70% of the medical devices needed in the country.
- 2. This sector is under Production Linked Incentive Scheme launched to boost investment in the sector.

Which of the statements is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

**44.** With reference to mRNA Vaccines, consider the following statements:

- 1. These vaccines carry very higher risks, as they contain the RNA of viruses and cause disease in persons getting injected.
- 2. Smallpox vaccine is a kind of mRNA vaccine.

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

**45.** With reference to Genome India Project, consider the following statements:

- 1. The project aims to perform genome sequencing and data analysis of DNA of all Indians, to create a reference Genome.
- 2. This will aid in understanding the genetic diversity existing in India, and the type of diseases that affect Indian population.

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.** A '51% attack' is associated with:

- (a) Blockchain hacking
- (b) Cyber attack on critical information infrastructure
- (c) Social media hacking
- (d) Online financial Fraud

**47.** With reference to Scientific Social Responsibility (SSR), consider the following statements:

- 1. SSR aims to strengthen the science and society connect to harness latent potential of the country's scientific community.
- 2. Corporates and MNCs can choose between implementing CSR or SSR.

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

**48.** Consider the following statements:

- 1. 5G wireless communication will have higher speed and latency than 4G
- 2. Use of millimeter wavelength of Electromagnetic spectrum in 5G communication enables more devices to be connected within the same geographic area

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only