

1. Helio centric theory asserts that
 - a. The sun is at the centre of the solar system
 - b. The earth is at the centre of the solar system
 - c. The earth does not revolve around the sun
 - d. There are no other planets than the earth

2. Galileo believed in
 - a. empirical quality of investigations
 - b. the concept of a flat earth
 - c. the opinion that Jupiter is not a planet
 - d. theoretical argument as the sole method of investigating nature

3. Mind-body dualism asserts
 - a. separation of the physical world from aspects of the mind and thought
 - b. dualism of mind alone
 - c. power of scientific truths over philosophical speculation
 - d. none of the above

4. The Decimal System is also called
 - a. Hindu Arabic numeral system
 - b. Binary system
 - c. Aryabhata's system
 - d. Kerala mathematical system

5. The iron pillar at the Qutub Minar is remarkable because
 - a. it has not rusted all these years
 - b. it is a metal alloy that resists ageing
 - c. it illustrates that sophisticated metallurgical processes existed in early times
 - d. of all the above reasons

6. Pasteurization is a process that
 - a. gives foods a sweetness
 - b. makes pathogens in the food unviable
 - c. destroys all harmful chemicals in food

- d. is not described by any of the above
7. LASER is a
- a. coherent and intense light source
 - b. narrow beam of light that does not diverge much
 - c. information reader on CDs
 - d. tool that is all of the above
8. India's budget allocation for S&T is
- a. less than 1% of GDP
 - b. 5% of GDP
 - c. 3% of GDP
 - d. more than 5% of GDP
9. Antibiotics
- a. do not destroy viruses
 - b. should be taken preferably in the morning
 - c. were known around the time of the first world war
 - d. have no known side effects
10. Which of the following is a non renewable source of energy?
- a. solar
 - b. wind
 - c. coal
 - d. biofuel

Two mark questions:

1. In modern science
- a. assertions are subject to modification in light of new evidence
 - b. alternative explanations of a phenomena must be subject to empirical investigations to choose one
 - c. abstract concepts may be used if they help in better understanding natural phenomena
 - d. all of the above are valid
2. The "green revolution" is criticized by some because of the following reason(s):

- a. it created an agricultural surplus
 - b. it promoted monoculture varieties in food grain
 - c. it increased the dependence on fertilizer and pesticides
 - d. both b and c are true
3. Genetic screening can help in:
- a. Identifying potential of developing certain gene-linked disorders
 - b. Identifying intelligence
 - c. Linking genetics to external factors
 - d. all of the above
4. Nanotechnology offers an advantage of
- a. Reducing the size of devices
 - b. Control of processes often involving molecular size scales
 - c. Cost effectiveness
 - d. None of the above
5. Critics of nuclear power generation in India point to
- a. the possibility of atomic explosions in nuclear power plants
 - b. the enormous costs of power generation in the current scenario in India
 - c. the need to bring in nuclear power from other other countries
 - d. the inability to convert nuclear energy to other forms of energy