- 109. Which one of the following does not promote stability of the ecosystem?
  - (a) Balancing between production and consumption of each element in the ecosystem.
  - (b) Balance between input and output of energy
  - (c) Normal functioning of different biochemical cycles.
  - (d) Increase of human population.
- 110. The usual source of restriction endonucleases used in gene cloning is
  - (a) Fungi
  - (b) Bacteria
  - (c) Plants
  - (d) Viruses
- 111. What is the first thing the OSIRIS-REx spacecraft orbited?
  - (a) The Sun
  - (b) The Earth
  - (c) Bennu
  - (d) The Moon
- 112. Consider the following statements about NASA's OSIRIS-REx
  - OSIRIS-REx is a robotic spacecraft in orbit around a small asteroid named Bennu.
  - II. Asteroid Bennu orbits the Moon near the Earth
  - III. Bennu is important because there is a small chance that Bennu will hit the Earth in the late 22nd century.

Select the correct answer from the above statements–

- (a) Only I and II
- (b) Only II and III
- (c) Only I and III
- (d) All of the above
- 113. Which one of the following is the most common internet protocol?
  - (a) HTML
  - (b) NetBEUI
  - (c) TCP/IP
  - (d) IPX/SPX
- 114. Consider the following statements on National Digital Communications Policy-2018-

- I. The new telecom policy has been formulated in place of the existing National Telecom Policy-2012.
- II. It comes with a view to cater to the modern needs of the digital communications sector of India.
- III. The policy aims to ensure digital sovereignty, and the objectives are to be achieved by 2022.
- IV. It has kept a target of providing 1 Gbps connectivity to all Gram Panchayats by 2020 and 10 Gbps by 2022.

Select the correct answer from the above statements–

- (a) I, II and III
- (b) Only II, III
- (c) I, III and IV
- (d) I, II, III and IV
- 115. Which of the following is used to select genes of interest from a genomic library?
  - (a) Restriction enzymes
  - (b) Cloning vectors
  - (c) Gene targets
  - (d) DNA probes
- 116. The enzymes which are absolutely necessary for recombinant DNA technology are
  - (a) Restriction endonucleases and top isomerases
  - (b) Endonucleases and polymerases
  - (c) Restriction endonucleases and ligases
  - (d) Peptidases and ligases
- 117. Which of the following statements could be valid with respect to the ICMP (Internet Control Message Protocol)?
  - (a) It reports all errors which occur during transmission.
  - (b) A redirect message is used when a router notices that a packet seems to have been routed wrongly.
  - (c) It informs routers when an incorrect path has been taken.
  - (d) The "destination unreachable" type message is used when a router cannot locate the destination.

