1. What is the primary function of the attitude control system in a satellite?
a) Power regulation
b) Thermal control
c) Station keeping
d) Control of satellite orientation

Answer: d) Control of satellite orientation
Explanation: The attitude control system is responsible for controlling the orientation or attitude of the satellite in space, ensuring it maintains the desired position for optimal functionality.

2. Which subsystem of a satellite is primarily responsible for maintaining its position in orbit?
a) Power supply
b) Thermal control
c) Station keeping
d) TT&C subsystem

Answer: c) Station keeping
Explanation: The station keeping subsystem adjusts the satellite's orbit to compensate for any deviations caused by gravitational forces or external perturbations, ensuring it stays within its designated orbital slot.

3. What does TT&C stand for in satellite systems?
a) Time Tracking & Control
b) Tracking, Telemetry & Control
c) Transmitting, Tracking & Communication
d) Telemetry, Time & Communication

Answer: b) Tracking, Telemetry & Control
Explanation: TT&C subsystem is responsible for tracking the satellite's position, collecting telemetry data, and controlling its operations from the ground station.

4. Which satellite system is primarily responsible for communication between the ground stations and the satellite?
a) Power supply
b) Antenna subsystem
c) Thermal control
d) Transponders

Answer: d) Transponders
Explanation: Transponders aboard the satellite receive, amplify, and re-transmit signals between the ground stations and the satellite, facilitating communication.

5. What is the purpose of the thermal control subsystem in a satellite?
a) To regulate power consumption
b) To maintain satellite orientation
c) To manage temperature extremes
d) To control communication signals

Answer: c) To manage temperature extremes
Explanation: The thermal control subsystem ensures that the satellite's internal components remain within safe temperature ranges despite the extreme thermal conditions of space.

6. Which satellite system is responsible for converting received signals into usable data?
a) Power supply

b) Attitude control
c) Transponders
d) Antenna subsystem

Answer: c) Transponders
Explanation: Transponders receive signals from ground stations, amplify them, and re-transmit them back to Earth, making the data usable for communication.

7. Which type of Earth segment TV system allows multiple households to access television signals through a shared antenna?
a) Receive-only home TV systems
b) Master antenna TV system
c) Community antenna TV system
d) Transmit-receive earth station

Answer: c) Community antenna TV system
Explanation: A Community Antenna TV system allows multiple households to access television signals through a shared antenna system, improving signal reception and quality.

8. Which Earth segment TV system receives television signals directly without the capability of transmitting signals back?
a) Receive-only home TV systems
b) Master antenna TV system
c) Community antenna TV system
d) Transmit-receive earth station

Answer: a) Receive-only home TV systems

Explanation: Receive-only home TV systems are designed solely to receive television signals without the capability of transmitting signals back to the source.

9. Which Earth segment TV system is commonly used in apartment buildings to distribute TV signals to multiple units?
a) Receive-only home TV systems
b) Master antenna TV system
c) Community antenna TV system
d) Transmit-receive earth station

Answer: b) Master antenna TV system
Explanation: Master antenna TV systems are often used in apartment buildings or complexes to distribute television signals from a central antenna to multiple units or households.

10. What is the primary function of the transmit-receive earth station in the Earth segment?
a) To receive television signals from satellites
b) To transmit television signals to satellites
c) To regulate power consumption
d) To control satellite orientation

Answer: b) To transmit television signals to satellites
Explanation: Transmit-receive earth stations are responsible for transmitting television signals up to satellites for distribution and communication purposes.