Name: Rogel R. Gerodiaz  
Grade&Section: BSIT-32E1  
  
  
  
**1. IP & Web Security:**

IP (Internet Protocol) and web security refer to the measures and practices implemented to protect data transmitted over networks and accessed via web browsers. This includes safeguarding against unauthorized access, data breaches, malware attacks, and other security threats that may compromise the confidentiality, integrity, and availability of information.

**2. IP Security Protocol:**

IP Security (IPsec) is a suite of protocols used to secure Internet Protocol (IP) communications by authenticating and encrypting data packets sent over a network. IPsec provides confidentiality, integrity, and authentication services for IP traffic, ensuring that data remains protected from interception or tampering during transmission.

**3. ITS Architecture:**

Intelligent Transportation System (ITS) architecture refers to the framework and design principles used to develop and implement technology solutions for managing and optimizing transportation systems. ITS architecture encompasses a range of components, including sensors, communication networks, control systems, and information processing algorithms, to improve traffic flow, enhance safety, and reduce congestion on roadways.

**4. Web Security Considerations:**

Web security considerations involve identifying and addressing vulnerabilities and threats associated with web applications, websites, and online services. This includes implementing secure coding practices, using encryption for data transmission, validating user input, protecting against cross-site scripting (XSS) and SQL injection attacks, and regularly updating software to patch known vulnerabilities.

**5. Secure Electronic Transactions:**

Secure Electronic Transactions (SET) is a protocol developed by Mastercard and Visa to facilitate secure online payment transactions over the Internet. SET employs cryptographic techniques to ensure the confidentiality and integrity of payment information exchanged between buyers, sellers, and financial institutions, reducing the risk of fraud and unauthorized access to sensitive financial data.