※ 考生請注意：本試題不可使用計算機。　請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

1.　Explain in details the following terminologies. <25%>

　　(A) 3-way handshake

　　(B) Vehicle Ad Hoc Network (VANET)

　　(C) CSMA / CD

　　(D) SACK

　　(E) Proxy Server

2.　(10%) What does Error control mechanism at the transport layer be responsible for?

3.　(20%) Which layer in TCP/IP model should the following items be in ?

　　(ex. Twisted Pair → Physical Layer)
　　A.　TELNET,
　　B.　Switch,
　　C.　WiFi AP,
　　D.　IP Address,
　　E.　Router,
　　F.　Port Number,
　　G.　Retransmission,
　　H.　Business rule,
　　I.　SCTP,
　　J.　Framing

4.　(10%) Why TCP/IP protocol does not be replaced by the OSI model?

5.　(15%) What is DDoS?　What is PING?　Explain how to use PING to achieve DDoS.

6.　(10%) What is Internet of Thing (IOT)?　What are the features of IOT?

7.　(10%) Connect the following Network or Transport layer protocols to the application layer protocols (1-to-1 mapping).

　　(A) UDP, (B) TCP, (C) SCTP, (D) IPV4, (E) ICMP

　　(1) Multimedia communication,　(2) SMTP,　(3) DHCP,　(4) PING,　(5) DNS