Examination report – June 2012 series

2730-012 Communication Systems & Digital Networks 2

Section 1 – Areas of good performance
Syllabus reference: 1.14, 1.15 – Data encoding. Both parts were answered well by the majority of candidates. Syllabus reference: 2.5 – OSI. Answered well. Syllabus reference: 3.17 – IP classes. Answered reasonably well, but often given as the reverse to the correct format. Syllabus reference: 3.13 – TCP port numbers. Answered well by most candidates. Syllabus reference: 3.10, 3.12, 4.7 – IP protocol, Nyquist formulation. These parts were answered accurately although a lack of detail in parts, cost marks. Syllabus reference: 4.17 – HDLC. Answered reasonably well but sketches could have been neater. Syllabus reference: 5.16 – Routing protocols. Answered reasonably well, but many candidates simply repeated the wording from a previous section. Syllabus reference: 5.9, 5.15 – Network switches and switching. Both parts answered well. Syllabus reference: 5.25, 5.22 – Routing metrics, dynamic routing. Both parts answered well although explanations lacked detail, costing marks.

Section 2 – Areas for development
Syllabus reference: 1.11 – Packet switched networks. Many candidates simply stated whether the items were connection oriented or connectionless oriented, without any descriptions. Syllabus reference: 2.3 – OSI. This part produced very poor answers indicating that many candidates did not appreciate the structural operation of OSI. Syllabus reference: 3.7 – IP classes. Many candidates stated that the subnet mask identified the class. Syllabus reference: 3.21 – IP addressing/subnetting. A complete lack of understanding re. subnetting existed here, as answer to were very poor. Syllabus reference: 4.8 – Signal impairments. Whilst most candidates gave the correct method of overcoming attenuation, very few gave correct answers for delay and noise impairments. Syllabus reference: 4.20 – X25. A complete lack of understanding was apparent here, as answers were generally poor and incorrect. Syllabus reference: 5.27, 5.26 – Subnetting & logic segmentation. Very weak answers given here demonstrating a basic lack of understanding in this area. Syllabus reference: 5.5 – Network level 2 switches. Many candidates gave switching methods as the answers instead of functions. Syllabus reference: 5.12 – Network connectors and interfaces. Many candidates simply explained Ethernet and Token rig instead of the appropriate interfaces.
Section 3 – Recommendations
• Read questions carefully re-descriptions, explanations etc. • Produce neat legible diagrams, if asked for. • Observe the examiners comments.