Examination report – June 2013 series

2730-018 Programming principles

Section 1 – Areas of good performance
Syllabus reference: 1.7, 1.8 – Basic Knowledge. The meanings given for fetch, decode, execute and write-back (store) with reference to Central Processing Unit (CPU) data handling were satisfactory. However, surprisingly few candidates were able to state two CPU registers. Syllabus reference: 1.24, 1.25 – Basic programming concepts. On the whole this syllabus section was answered fairly well. Syllabus reference: 1.27, 1.28 – Basic programming concepts. This syllabus section was very well answered. Syllabus reference: 1.32, 1.33, 1.36, 1.37 – Basic programming concepts. On the whole this syllabus section was answered satisfactorily. Syllabus reference: 1.42, 1.43 – Basic programming concepts. The descriptions for the flat file database and relational database were often vague and inaccurate.
Section 2 – Areas for development
Syllabus reference: 1.13 – Basic knowledge. This syllabus section was the least popular. Very few candidates had any idea what the function of the assembly language program was, although some candidates knew what each line of code did. Syllabus reference: 1.15, 1.16 – Basic knowledge. This syllabus section requires candidates to analyse a program, understand and hence state what it is doing. Several candidates knew the function of each command used but were unable to work out what the purpose of the program was. Syllabus reference: 1.17, 1.18 – Basic knowledge. Solutions given for this syllabus section were often vague and inaccurate. Very few candidates could show how comments could be applied to a high or a low-level language. Syllabus reference: 1.42 – Basic programming concepts. Solutions given for this syllabus section often lacked detail and accuracy. Syllabus reference: 1.46 – Basic programming concepts. Although many candidates could produce the correct tag structure for the HTML web page few candidates knew how to use the <a href tag to define each link.

Section 3 – Recommendations
Candidates need to improve their knowledge in the following areas: · Analysis of assembly and high-level language programs. · 4GL programs. · HTML coding.