

B A

# COMPUTER SCIENCE: Entrance Scholarship

Answer **ALL** questions (Total marks 100)

1.

[5]

Two examples are shown in the table below:

Forename	Surname	Student ID	Code	Year	Enrolled	Welsh Speaker
Da yd	Evans	S5000102414	G400	2	2013-09-23	Yes
John	Bloggs	T3211012911	I110	1	2015-10-01	No

With reference to your preferred high-level language suggest the data types needed to represent this information. Include which language you have chosen in your answer.

12. Describe a multi-core processor, how does it differ from a single-core processor? Why would multi-core processors be useful when dealing with multimedia applications? [5]
13. System CPUs (Control Processing Units) have an address, data, and control bus for dealing with the rest of the system. Describe what each of these three busses do. [5]
14. [5]