BOARD OF STUDIES
NEW SOUTH WALES

Centre Number: ..... Student Number: .....

a) (i) definition of <special_character>

<special_character> ::= " |#|.....|>|||, there is no need for the last / as there is nothing after it.

(ii) <hexadecimal> ::= <digit> | <letter> | ~~<digit><hexadec~~

<digit><hexadecimal> |

<letter><hexadecimal> $$

(b) Emerging network communications technology can have both good and bad effects on this system. As the technology improves things like video 'hookup' can take place, meaning that patients may only need to travel to nearest medical practise to get specialised help from a leading doctor in another town. Or in a extreme case like seen between America and France

where an operation was performed by; robots, being control by doctors in France on a women in America, So the emerging technology can have a postive effect.
A downside that with specialist treatment over the network reduces the number of jobs for specialists who would normally be in these areas.

(c)(i) The analyst could use information gathered from the users such as patients, receptionists and the doctors.
By consulting the patients the analyst can gain understanding in to how they prefer to arrange appointments. But as numbers would be large, a survey, or interviews with a select few would be appropriate.
By considering the ways in which the receptionists are involved in the current process the analyst can gain better definition of the

problem. Also by assessing the needs of the doctors. The analyst will be able to make all 3 groups of people by providing feedback to him on how the current system operates.

(ii) The two software development approaches that could be used are either the structured approach or Rapid Application Development.

Both these approaches would allow for through testing between systems, ~~and~~ the RAD approach may actually suit better as it is quicker due to the reuse of objects. But the structured will give a more formal definition with long term reliability. The prototyping approach wouldn't be appropriate as too many users have to access the system therefore making the feedback too big.