A i) One problem with the BNF shown includes:
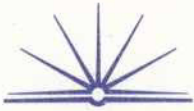
• with the assignment statement of identifier after the recursion symbol "|" an underscroll "_" is contained with the absence of parameters ie "< >"

ii) BNF of hexadecimal

< hexadecimal > ::= < Hex No > | < Hex NO > < Hex letter >

< Hex No > ::= 0|1|2|3|4|5|6|7|8|9

< Hex letter > ::= A|B|c|D|E|F

b) With improved network communications technology that are currently emerging the doctors will be able to be linked to one another to share information on patients, treatments etc. and be linked to a central office practice where patient records, drug treatment information etc. can be on hand 24 hours a day. The improvements in this technology would allow patients to visit their doctor simply by logging on to a computer and they may be able to pose simple queries to a logic logic & program at the core of the network to limit the workload of doctors. Simply, it would benefit all parties by bringing them close enough to share information without having to travel the vast distances. It would aid the patients in their reciept of information.

c)i) The analyst could survey ^(and interview) patients ~~and~~ to guage what their needs of the practice are and then how these needs could be fulfilled by the system. Interviews/surveys of the doctors to establish their needs and then to define the objectives that the system overall will need to meet to satisfy those needs. These objectives should be agreed to by the doctors, patients and receptionists (all ~~a~~users of the system).

After agreeing on the ~~solutions~~ solution's, objectives the boundaries of all a users must be considered. Interviews with the users to determine their computer literacy, ~~their~~ ^(the) ~~acc~~availability of a computer etc. need to be taken into account.

ii) The end-user approach would ~~be~~ ^(not) be very feasible as the doctors may not have the skills and the time to implement such an approach. Rapid Application Development (RAD) also requires ~~much~~ knowledge in computer ~~sys~~ systems that the doctors might
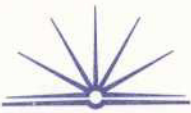
not have. Therefore a structured approach by a system ~~const~~ analyst would be optimal to ensure that the finished product is effective, effecient and is well maintained. This approach may be more costly than the use of RAD software or end-user development but the benefits above outway the cost factor. This is also ~~se~~ probably the least time consuming as a trained IT proffessional is implementing the system.