

Section II

60 marks

Attempt Questions 21–23

Allow about 1 hour and 50 minutes for this section

Answer each question in a SEPARATE writing booklet. Extra writing booklets are available.

If you include diagrams in your answer, ensure that they are clearly labelled.

	Marks
Question 21 (20 marks) Use a SEPARATE writing booklet.	
(a) Identify TWO important project management techniques. For each technique you have identified, discuss its importance in ensuring the successful completion of a software development project.	4
(b) A particular software development project has serious implications for the working conditions of an organisation's employees. There will be job losses and significant changes in people's roles. In this situation the employees may have negative feelings towards the project and could be quite obstructive as the project team tries to do its work. Both management and the project team must consider this problem. Discuss TWO strategies that might be adopted.	4

Question 21 continues on page 11

Question 21 (continued)

- (c) The ABC Motel is a small country motel that has recently been taken over by a large administration company, the XYZ Company. You are a systems analyst who has been employed by XYZ to review current operations at the ABC Motel with a view to upgrading and expanding its current computer system.

At present the ABC Motel has a small computer-based system (ABC Motel System) that handles the following:

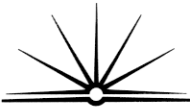
- reservation of rooms;
- issuing of bills to guests;
- recording of payment; and
- issuing of receipts for payment.

The motel does not accept credit card payments, nor provide EFTPOS facilities. Payment is by cash or cheque only. All money taken is banked daily.

Each week a room occupancy report and a financial report are forwarded to the XYZ Company.

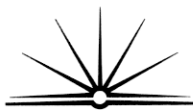
- | | |
|--|----------|
| (i) Draw the context diagram for the existing ABC Motel System as described above. | 3 |
| (ii) Draw a data flow diagram (DFD) showing the main processes of the existing ABC Motel System. This diagram should show any relevant data storage. | 5 |
| (iii) Explain how the motel employees might assist you in your review of the motel operations and the production of such data flow diagrams. | 4 |

End of Question 21

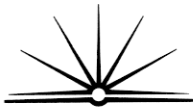


A) Two project management techniques are Gantt charts and process diaries. A Gantt chart lists all tasks ~~comp~~ that compose ~~this~~ project and the expected time spent on each of the tasks. It is important in ensuring the successful completion of a software project because it allows the progress of the project to be charted to where ~~they~~ the team should be up to, as well as helping to identify what has been done up to this point and how long each task should have been focused upon, ^{as well as keeping the team on schedule to successfully complete the project.} A process diary is a logbook which is filled out by the project team after every day to describe any accomplishments or pitfalls in the development of the project. It is important that this is done to secure a successful project as it ~~also~~ allows for ~~other~~ ~~team~~ different team members to find out what problems others may have had on similar tasks, that each team member is doing a task correctly and on time and also as a tool for new team members to get up to speed and learn what problems and accomplishments the team has had.

B) Two strategies that management and the project team can employ to remove negative feelings towards the project are to ~~consult~~ for the project team to consult ~~son~~ users about what they

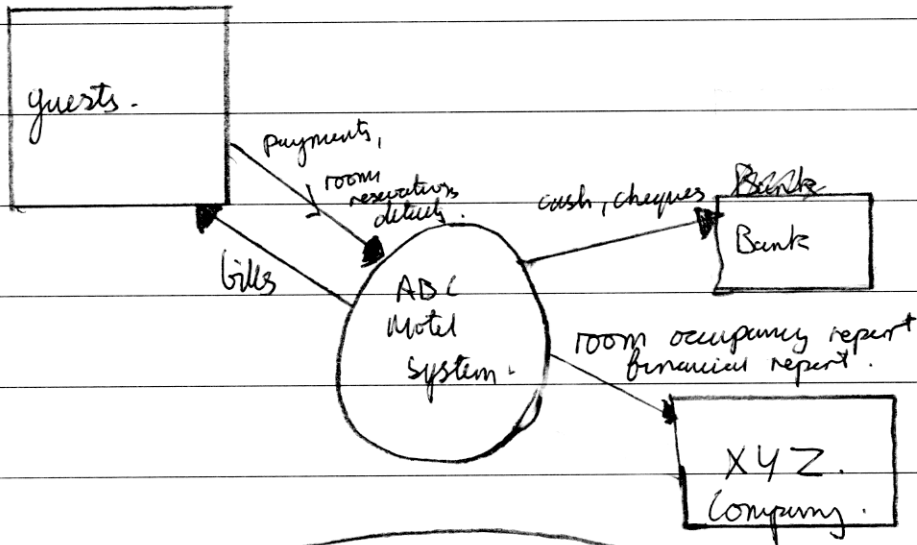


want from the solution and for management to provide clear and concise training for those employees who have to change roles. The project team can find out what users need from the system by conducting interviews, surveys, questionnaires and focus groups to discover what the users want the new system to do. They can also involve the users throughout the development cycle so that they feel the system belongs to them, that the user is empowered. If the users find out that their needs are being considered and their ideas used by the project team, they will change their attitude to the project. The management can help to change the attitude of their staff by providing clear and easy to follow training for staff who have to change their attitudes practices during the process with the new system. By showing them how to operate the new system, some staff's fears are brought upon by not hearing what the system does may disappear. The management can also provide new jobs or help to find similar jobs for those who are retrenched due to the new system so they are able to continue working. Another method of reducing ~~no-it-feelings~~ another method of reducing 'it-feelings' is constant communication between project team and users to provide feedback

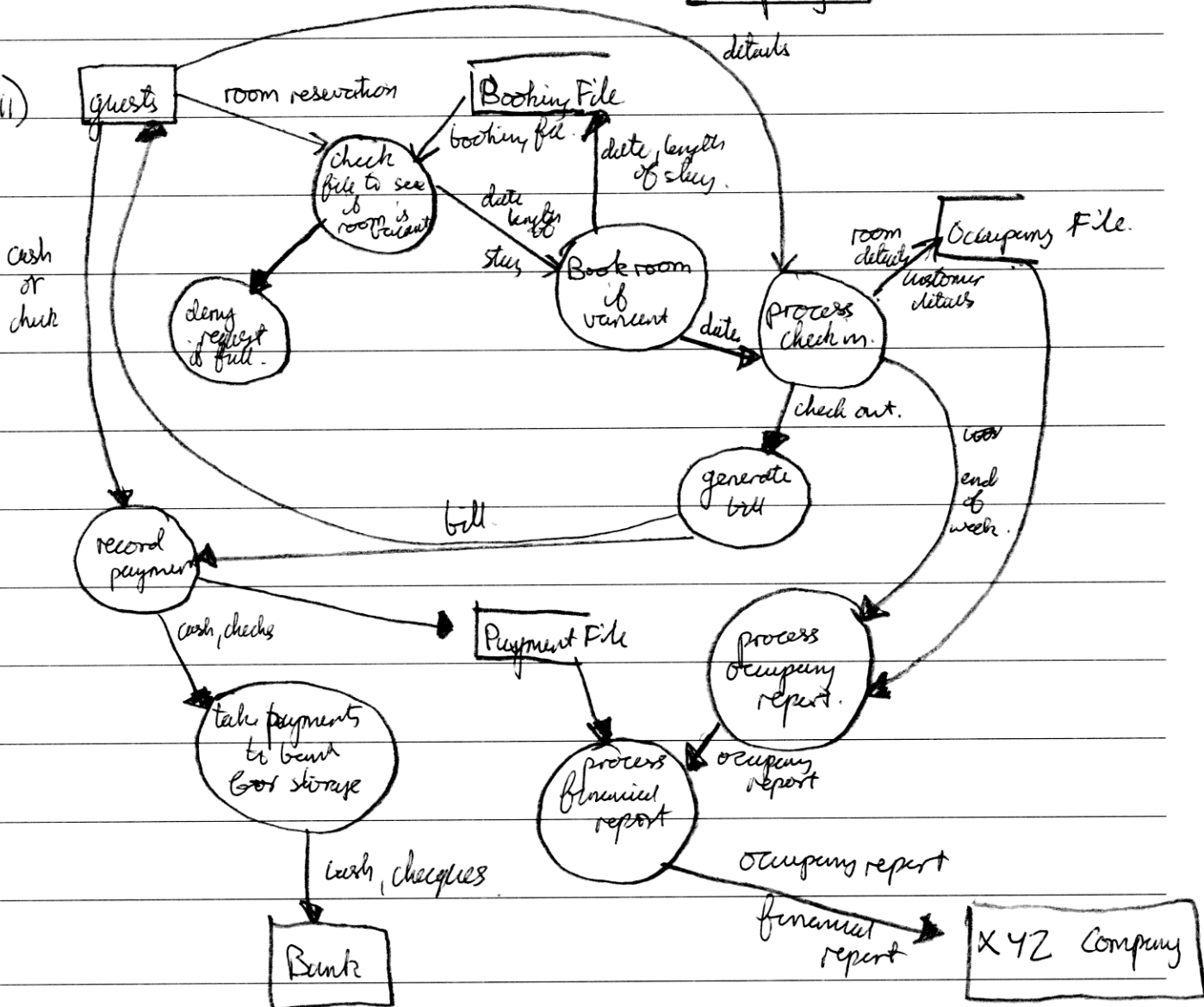


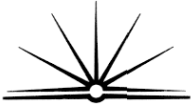
views
opinions and reports on the new system so that the users
receive a system that meets their needs

(i)



(ii)





11) Hotel employees may assist in the review of hotel operations by providing details about the day-to-day operations of the company, the process done every day and how they are done. The data can be found out by the project team through interviewing, surveying, or questioning the employees of the company. Since they are the people who in most carry out all the processes, they would know the most about how each data is processed and how they carry out this task. By obtain this data from staff, the aims, objectives and boundaries of the system can be clarified and determined, with the responses of the staff helping to ~~model~~ model the system. If every staff member is questioned, all the process carried out in the system can be ~~defi~~ found and the relationships between these processes, external entities and data stores can be found, allowing for an accurate and detailed Data flow diagram.