1) Answer <u>all</u> parts

   (a)   Lists advantages and disadvantages of group-work and discuss how groupware may affect these aspects.

                        (6 marks)

   (b)   Discuss the *group formation space* providing examples of a virtual 'concocted group' and of a virtual 'self-organised group'. Provide suggestions on the most suitable groupware tools to support trust-building in the two settings.

                        (7 marks)

   (c)   Discuss the problem of *loss of predictability* in mobile collaboration giving examples of how this may negatively affect group-work. Propose design solutions to mitigate these negative effects.

                        (7 marks)

2) Answer <u>all</u> parts

   (a)   Present the *task taxonomy* and match each type of task to the best communication medium according to the required communication richness.

                        (4 marks)

   (b)   Discuss the implications of a strict or relaxed WYSIWIS design on a synchronous drawing task. Identify the best solution for (a) an educational context (training) and (b) a work context (consultancy).

                        (6 marks)

   (c)   You are the IT manager of a small UK enterprise which has recently opened an office in Japan – a country which you do not know at all. The company's business is software design, and the Japanese office is in charge of the localisation of software produced in the UK. Unfortunately, there is no budget for travelling. Describe how you would inform your selection of groupware applications to support co-ordination and communication, create an effective team, and guarantee the best possible performance.

                        (10 marks)

3) Answer <u>all</u> parts

(a) Define the concept of critical mass and its role on the success/failure of groupware adoption.

(5 marks)

(b) Discuss the concept of awareness with respect to distributed team performance and give examples of how different forms of awareness can be supported by groupware design.

(6 marks)

(c) Imagine a newly established team which relies <u>exclusively</u> on e-mail communication. Discuss the effect of this constraint on the team creation and propose solutions to counteract eventual problems. Analyse each phase in the creation stage of the team life-cycle.

(9 marks)

4) Answer <u>all</u> parts

(a) Discuss the problems related to the evaluation of groupware and list the main *evaluation criteria* which apply to this technology.

(6 marks)

(b) Compare and contrast *field studies and inspection method*'. Decide which method is more suitable for the evaluation of a new interface to convey mobile presence information and justify your choice.

(7 marks)

(c) Explain the approach that you would adopt for evaluating an early prototype of a shared word processor and discuss the limitation of your approach.

(7 marks)

5) Answer <u>all</u> parts

(a) Explain the concept of *usability and sociability* in on-line community design and discuss their mutual interrelations.

(5 marks)

(b) Define what is meant by the term *lurker* in on-line community, discuss the main reasons for such behaviour and propose design solutions to counteract this problem.

(6 marks)

(c) You are part of a team hired by the University of Manchester to design a distance education MSc in Business & Information Technology. Your task is to design an on-line community to support educational activities and user socialisation. Write a *community-centered development* plan. List all the stages of the process, consider how you would implement them within the given context, and discuss their potential outcome.

(9 marks)