Module Title: Professional Issues
Exam Diet (Dec/April/Aug): Specimen 2017

Brief notes on answers:

1. (a) You can choose almost any of the aspects of the Code of Conduct provided you justify appropriately. Here, you could choose:

    (i). **Professional Competence and Integrity:** It is important for the organisation to understand that there are limits to your competence and you will not go beyond those limits. In this case could be the case that you are pushed to make ethical judgements that are beyond your competence [4 marks].

    (ii). **Duty to the Profession:** Ensure that the organisation has legitimate aims and they are appropriate employers. This is a campaigning organisation and it may be that the work will be controversial, it is important that your work is seen as professional and impartial [4 marks].

   (b) The key sources for questions are the DPA and the GDPR. For example the following are legitimate questions to ask:

    (i). Who has access?
    (ii). Where are they storing the data?
    (iii). What measures are being taken to keep the data safe and secure?
    (iv). What's the data being used for?
    (v). How long are they keeping the data for?
    (vi). What's the criterion for how long is necessary

    All of these are justifiable from the point of view of the privacy of the individual. For example the last two allow you to work out how much video data is begin stored and whether there are sound criteria for discarding data. Answers to these questions that suggest the data is being kept for a long time suggest it may be being used for purposed beyond those declared to the ICO [3 marks for each question together with a justification].

   (c) Here you are looking at the GDPR and identifying the aspects of the GDPR that could potentially pose problems for the supermarket chain in fully implementing the GDPR. The DPA does not consider video data to be identifiable but the GDPR has a much wider definition of identifiable. So the focus is on issues of identifiable data. Any two of the following would be fine [4 marks each].

    (i). It may be that there will need to be some way that people consent to the capture and use of video data. This could pose problems in finding a practical approach.

    (ii). Because video data may have many individuals in the field of view there may be issues on how to implement Right to be Forgotten.

    (iii). The use of algorithms to make automated decisions is covered in the GDPR. It may be that issues like explainability and the need to have human recourse to an automated decision.

2. (a) In the lectures we saw two management structures that might be appropriate here:

(i). Bureaucratic: hierarchical with a tree-like authority structure. There are clear job descriptions and to some extent people who are appropriately trained and be substituted into the role anywhere in the organisation.

(ii). Matrix: has a hierarchical line management structure but in addition people work on multiple projects in teams with a team leader who directs the day-to-day work.

It may be possible to justify either, but matrix is the best match because it has a project structure and the company has people working on multiple projects. The bureaucratic structure also gives people job roles and can be used to structure training, have a clear promotion route etc. The company is probably too small for a pure bureaucratic structure [3 marks for a description of the the structure and 4 marks for a justification].

(b) (i). Notes on the following would be appropriate [2 marks per issue up to max of 6]:

A. Looking at bias in the selection of the team is important - we need to ensure a well-balanced team.

B. Consider the different team roles (Belbin) (leader, completer/finisher etc). To ensure that key competences are included in the team.

C. The BCS Code of Conduct demands the team have appropriate experience and competence in the area of work.

D. It may be important to include Ethical expertise because it may be that the individual rights of the students could be compromised by the system.

(ii). Notes on the following would be appropriate [2 marks per issue up to max of 6]:

A. Ensure the use of clear and agreed metrics, for example a metric based solely on the use of the wiki would reward quantity over quality.

B. Ensure there are clear examples of acceptable working to establish the right pattern of work.

C. Look at bias in metrics e.g. in progress metrics it is easy to bias towards simple progress measures that do not capture all aspects of progress

D. Need to consider carefully how explainable metrics are to the users and others.

E. Who sees what data is an important issue. There can be benefits to sharing data across individuals but this can easily result in ethical issues relating to privacy.

(iii). Notes on the following would be appropriate [3 marks per issue up to max of 6]:

A. Transparency: it should be possible to see how all activity in the system is related to the user's activity and it should be possible to audit any measures in order to see how they have been derived.

B. Clear principles on who accesses what data for what purposes. Purposes should be clearly defines and data should not be used outside of this.

C. Ensure that exceptional and unanticipated circumstances can be dealt with equitably.

       D. Ensure there is a clear mechanisms for gaining consent to use data.

3. (a) Potentially sensitive information: (This is just a list the privacy issues come in the next question.):
   - (i). Health issues
   - (ii). GPS location (Might be in 'dangerous' part of town; work out where eating; work out whether walking/driving/getting public transport)
   - (iii). Bluetooth connectivity
   - (iv). Activity information
   - (v). Microphone data

   (b) Here you need to provide two or three points below:
   - (i). There would need to be a clear statement of how the data was going to be used because it is possible to infer many more things than just health risk from this data.
   - (ii). There will almost certainly be times and locations that people feel it is inappropriate to be monitored so there would need to be some control.
   - (iii). There would need to be a mechanism for people to review the data in a meaningful way.
   - (iv). There would need to be a strong consent mechanism that ensured continuing unambiguous consent.

   (c) Issues on discrimination:
   - (i). Health is strongly correlated with the neighbourhood of residence it may be that GPS data results in unjustified low rating of health.
   - (ii). It may be that access to a gym and so to easily documented physical activity is mainly related to ability to pay and this may discriminate against poorer people.
   - (iii). There are healthy activites that don't involve taking your phone along (e.g. swimming). To be fair the app would need to take issues like this into account.

   (d) Suitability of structure and other possible structures:
   - (i). Issues with partnerships:
     - The partners are personally liable for charges against the company
     - So the company could be forced to bankruptcy
     - Partnerships are good for the partners because all of the profits of the company are distributed to the partners.
   - (ii). One other alternative is a PLC or Limited company:
     - Limited companies are limited to lose on the guarantee and this can be very small.
     - This would limit the liability of the company owners
     - The company could go bankrupt but the owners would not be liable for this.
     - If the company has shareholders this would mean that some profit of the company would be distributed to them and so the profit to the original owners would be smaller.