# UNIVERSITY OF LONDON

# GOLDSMITHS COLLEGE

## B. Sc. Examination 2010

## COMPUTING AND INFORMATION SYSTEMS

## 2910323    E-Commerce

**Duration:** 2 hours 15 minutes

**Date and time:**

*There are five questions on the paper. Please answer three questions. Full marks will be awarded for complete answers to three questions. Candidates must not attempt more than the required number of questions. Calculators are not allowed.*

# THIS EXAMINATION PAPER MUST NOT BE REMOVED FROM THE EXAMINATION ROOM

## QUESTION 1

### Scenario: MyStyle Traditional Clothing Retailer

*MyStyle is a traditional clothing retailer in Central London. MyStyle sells classic, traditional British clothes to men and women from its shop and also has a mail order business. MyStyle's emphasis has always been firmly on tradition and establishing the reputation of quality. All merchandise is made to exclusive specifications from materials traditionally found in the UK.*

*MyStyle's reputation has been built on service. Each member of staff is well trained in the art of selling to customers and also in the large range of stock the shop has. In addition each member of staff is generally a specialist in at least one area of traditional British clothing and therefore can act a consultant when needed.*

*Although MyStyle has considered selling its range online, it has always decided against it. The main concern is one of protecting the brand and its values. However, more and more traditional British clothing is being sold to customers who are tourists, wishing to bring back classic British style to their home countries. MyStyle has now realised that, with the huge demand for its traditional British clothes abroad, it is possibly missing out on a large potential market.*

*Furthermore, MyStyle believes that its staff members' detailed understanding of clothing could be put to good use through a magazine about traditional clothing sold all around the world.*

*Following a board meeting, it has been decided that MyStyle is to launch online a website providing the ability not only to show an extended catalogue of clothes, but also to allow e-commerce trade to take place across the world. In addition, the website will also have an interactive magazine containing video of current clothing ranges for sale, historical styles, and special features. Articles for the magazine will be written by freelancers from around the world, informed by staff from the shop. The new online store will also allow people to use a special store card which will offer 10 percent off all purchases conducted online. This store card, it is hoped, will encourage and stimulate people to use the website and read the magazine.*

For this question, you must use the information provided above in the scenario.

(a) Using the information in the case study above, propose a formal design for the MyStyle website. This design should include a network diagram, a set of 10 key features, and appropriate costings for the development of the website. In addition, you should specify at least 5 sticky mechanisms or digital content which you suggest MyStyle should include in the site which will keep customers returning to the site.

[ **15 Marks** ]

(b) It is important for MyStyle that the magazine component of the site raises enough revenue to support the costs associated with its online presence. Compare and contrast 5 different revenue models which could be used by MyStyle to finance its online presence.

[ **10 Marks** ]

## QUESTION 2

### Scenario: World Pictures

*World Pictures is a website dedicated to the art of photography. Established in 2000, World Pictures is a virtual community for showing the world photographs you have taken and communicating with other members about their photos.*

*At World Pictures, members join for free and can then upload pictures they have taken to their own online albums. A members album can be viewed by other members. Members can comment on the photos taken by other members and include them in their own albums if they like them. Albums are limited to 50 megabytes in size, and are displayed with banner advertising. Members can also combine photos from several albums into a photo montage which can be embedded on other people's websites.*

*A key feature of World Pictures is a Recommender function. This allows members to recommend photographers to each other and also to recommend members to companies and organisations outside World Pictures who may wish to employ them.*

*All photos in a members album are tagged with meta data allowing them to be searched for and grouped. In addition, World Pictures creates virtual catalogues across members photographs, and these catalogues can be browsed by members and visitors to the site.*

*World Pictures is well-known as a website where companies seeking freelancers look, although at present there is no formal mechanism for companies to evaluate photographers, look through CVs, or approach them other than via email.*

*World Pictures is now becoming a victim of its own success. With more and more members joining each day, the amount of advertising revenue it has does not cover its ever-increasing costs. Furthermore, there have been several cases where members have been hiding criminal information inside photographs stored on its site. This use of steganography has meant that, on several occasions, the site has had to be closed and searched by the authorities.*

*In order for World Pictures to survive, it believes it must evolve its online presence so that it can harness other revenue streams, its members can make money from their photographs, and businesses can utilise the skills of its members. In addition, the question of charging members in some way has to be addressed so that the long-term future of World Pictures can be secured.*

*You have been employed as an internet consultant to write a report proposing a new direction for World Pictures. The following questions need to be addressed in this report:*

For this question, you must use the information provided above in the scenario.

(a) Propose 5 mechanisms which can be included in the World Pictures site to allow meaningful interactions to take place between members and potential businesses. For each

mechanism you propose, describe how it will operate, and list its potential benefits. Furthermore, you should also provide a real-world example of a website you know that is using such a mechanism.

[ **15 Marks** ]

(b) Propose 5 e-commerce services or facilities that could be included in the new World Pictures site to allow its members to pay for services and thereby raise revenue for World Pictures. For each facility you have chosen, describe how it will work, how revenue will be generated and collected, and what benefits it will give to the member.

[ **10 Marks** ]

## QUESTION 3

### Scenario: Film Star Films

*Film Star Films is an independent film distribution company which sells films to 50 countries across the world. Film Star Films is well respected by all within the industry and its films are considered some of the best in the business.*

*The managing editor of Film Star Films is Kate Jones: a woman with great ideas and a belief that the future of film distribution will be the internet. Kate Jones has been investigating the possibility of Film Star Films publishing some or all of its films online.*

*At present Film Star Films distributes all types of films such as documentaries, feature films, children's films and family European classics. Film Star Films also employees a team of freelance reporters who write articles about films and sometimes record audio interviews with actors and directors of films. On occasion they use video recording but this is rare. Film Star Films also has a large back catalogue archive of films, photographs, and articles covering its 25 year old history.*

*After several meetings and much thought Kate Jones has decide to create Film Star Films Online. This will be a unique website offering some of their latest films and the entire back catalogue of Film Star Films in a digital format to the general public. People will be able to watch films, read reviews and listen to audio clips.*

*Kate Jones believes that users would only pay for this digital content if the online version of Film Star Films provided viewers with facilities and content which they do not currently have access to.*

*Kate Jones is also concerned that any new online version of Film Star Films does not take too many viewers away from going to the cinema to see films as she knows that the majority of the company's revenue comes from cinemas wishing to show the films it distributes.*

*The new site will have to be self supporting by generating its own revenue rather that taking advertising revenue from cinemas. Although Kate Jones knows that different revenue models exist online she is not sure which is most appropriate for the new online version of the company.*

For this question, you must use the information provided above in the scenario.

(a) Using the case study above, describe how market segmentation and an understanding of product-based and customer-based marketing strategies could be used in the design of the new Film Star Films Online website. Your answer should include a suggestion of 4 different ways in which Film Star Films could segment their offerings on the new site and how each segment internet offerings might differ.

[ **10 Marks** ]

(b) Using the case study above, propose 5 digital products that Film Star Films could market and sell on the new website. For each digital product you suggest, describe what the product comprises of, and how it will be sold online.

[ **5 Marks** ]

(c) Films Star Films are planning to create an auction facility so that they can sell off excess stock of DVD films which they have not been able to distribute. Propose 3 alternative approaches to conducting an online auction facility, and make a recommendation of which one you think is best suited to Film Star Films. For each auction approach you propose, describe how the auction works, how it could be implemented online and what the potential benefits are.

[ **10 Marks** ]

**QUESTION 4**

(a) It is important that any business wishing to create an effective web presence clearly understands the alternative approaches to branding that can be considered. Compare and contrast the following branding approaches that can be employed by businesses online: product differentiation, rational branding and affiliate marketing strategies. For each strategy, provide at least one real-world example that employs that brand strategy.

[ **10 Marks** ]

(b) A key reason for a traditional business to migrate online is the potential to reduce transaction costs associated with supplying products or services to customers. Using as an example a company that produces computers for retail to the public, describe how moving from a traditional store on the High Street to a store online can reduce transaction costs.

[ **5 Marks** ]

(c) Using the games industry as an example, describe how the creating of a virtual community can be used by a business to build long-term relationships with customers. Include in your answer a description of 5 different ways in which a virtual community can be used to provide a business with valuable information about current and future products and services.

[ **10 Marks** ]

**QUESTION 5**

(a) Media commentators have described the current generation of online businesses as being part of a second wave of e-commerce. This second wave, they argue, is distinct from the first in many ways. Compare and contrast the first wave of e-commerce with the second.

**[ 5 Marks ]**

(b) It can be argued that, without the evolution of mark-up languages, it would not have been possible to conduct efficient e-commerce, and to build effective web presences. Describe in detail the role and evolution of markup languages used in e-commerce. Include in your answer a description of the history of mark-up languages from SGML to HTML.

**[ 10 Marks ]**

(c) Describe in detail the use of encryption in ensuring channel secrecy when providing customers with secure channels for communication. Include in your answer a comparison of public and private key encryption.

**[ 10 Marks ]**