

UNIVERSITY OF PORTSMOUTH

FACULTY OF TECHNOLOGY

Department of Electronic and Computer Engineering

B302 – Management and the Technology Professional

U13505

Date: 10 July 2009

Time: 9:00 – 10:30

INSTRUCTIONS

Answer BOTH questions.

This is a closed book examination.

Provided

None.

Calculators permitted are:

Casio FX 85 Series

Casio FX 83 Series

Examiners:

Professor R. Pethig, Mr C. Nguyen

CASE STUDY QUESTION 1

As a recent graduate starting a new job in China and looking to buy a personal desktop computer, **would you agree with the Chinese government policy that requires all new computers to include Internet filtering software?**

[40 Marks]

SOURCE FOR CASE STUDY QUESTION 1

Below is a modified excerpt from Wikipedia about Internet censorship in the People's Republic of China:

A notice issued by the Ministry of Industry and Information Technology on 19 May stated that, as of 1 July 2009, manufacturers must ship machines to be sold in mainland China with the Green Dam software, and that manufacturers are required to report the number of machines shipped with the software to the government. The official statement claimed its objective was "to build a green, healthy, and harmonious online environment, and to avoid the effects on and the poisoning of our youth's minds by harmful information on the internet".

A senior official of the Internet Affairs Bureau of the State Council Information Office said the software's only purpose was "to filter pornography on the Internet". Foreign ministry official, Qin Gang said the internet had always been open in China and that the government's administration of it to prevent the spread of harmful information was in accordance with the law. Jinhui's general manager said: "Our software is simply not capable of spying on Internet users, it is only a filter".

On 10 June, the Publicity Department of the Communist Party of China Central Committee issued an instruction requiring the Chinese media to stop publishing questioning or critical opinions. The instruction also required online forums to block and remove "offensive speech evolved from the topic" promptly. Xinhua later commented that "support [for Green Dam] largely stems from end users, opposing opinions primarily come from a minority of media outlets and businesses".

CASE STUDY QUESTION 2

You are part of a small team at a startup company that have spent 3 years to develop a new drug that could significantly slow the spread of lung cancer and increase the survival rate for lung cancer patients. **Which approach would you propose to launch the new product?**

[35 Marks]

Display the **decision tree** and **present value calculations** used to analyze this case study.

[25 Marks]

SOURCE FOR CASE STUDY QUESTION 2

The company estimates that the cost of launching the new product would be **\$25 million** within the first **6 months**.

If the product is launched and successful, the company estimates that the total sales revenue in the first **12 months** would be **\$100 million**. Market research conducted by the company indicates a probability of **60%** for a successful product launch.

The company could optionally choose to do market testing in one city. Conducting a market test would require **6 months** and costs of **\$5 million**. The company estimates that the probability of a successful product launch would increase to **80%** if the market testing is positive. The probability of a successful product launch would drastically reduce to **10%** if the market testing is negative. Industrial research statistics indicate that market testing has a **70%** probability of being positive.

The company is using a discount rate of **8.4%** for its risk analysis.