Exam Questions 2022-23

QUESTION 1

- a) Discuss in detail FIVE (5) sources of to identify new product opportunities.
- b) Describe the Strategic Decision-making process in relation to the allocation of funds for R&D using a diagram.

QUESTION 2

- a) Define Phase 2 of the Product Development Process System-level Design. Describe the TWO (2) different modes of system-level design. Use suitable examples to demonstrate your understanding.
- b) Product architecture determines the arrangement of functional elements of a product. Identify and discuss FIVE (5) implications of product architecture in the context of a product development process.

QUESTION 3

a) A digital music service provider (Spotify) is promoting and hosting a live-streamed concert by TNT on a global games console platform (Sony PlayStation) during the interval of an eSports tournament being held and promoted by a leading games publisher (Electronic Arts) working alongside a famous brand (Gucci). The brand is providing digital as well as physical merchandise to fans – they can purchase original non-fungible tokens (NFTs), exchange them for a VIP personalised experience or physical fashion items.

Consider all the different commercial entities and their assets appearing in this scenario. Outline a possible intellectual property (IP) strategy for protecting these assets. Identify the different assets and appropriate intellectual property rights attached to them.

b) Xiu Li is using her Oculus VR (virtual reality) headset to attend the live-streamed concert by TNT. Even though she received multiple notifications to update the firmware on her headset, she has not installed any of the critical software patches. Hackers have successfully used this weak point and gained access to her network credentials, acquiring the same account privileges as her. This gave them access to her personal and biometric data.

Identify and discuss in detail the following cybersecurity concepts: vulnerability, threat, risk, and safeguard. Use suitable examples from the scenario above to demonstrate your understanding.