

IT / CS 6215 Management of Technology and Innovation

Semester I – 2024/2025

Type of Assignment: Group Assignment

Weight: 10 Marks

Deadline: 6th January 2025

Instructions:

- Discuss thoroughly then Prepare a well-organized PowerPoint presentation.
 - White background and Black texts with minimal designs for headings,
 - Font size should be 36 pt for headings and 28 pt for body texts.
 - Don't include many or long slide Transitions and animations.
- Assignment will be graded during class presentation starting **7th January 2025**.
- **Every part of the question / presentation must be well understood by each member of the group.** Any member will be appointed to explain any part of the presentation and if fails will affect grade of other members of the group.
- Question 1 – 3 will be for ICT class and the rest for Computer Science class divided as Shown at each question.
- Everyone must attend all presentations even if your group has already present. There will be deduction of **5 marks** for the absentees in any of the presentation.

QUESTIONS:

ICT - IT 6215 Question Pack - (4 Groups)

1. Technology Life Cycle (TLC) and Technology Forecasting (Group 1)

- What is Strategic Planning
- What is TLC and its Importance
- Stages of TLC
- Factors influencing TLC
- What is Technology Forecasting and its Importance
- Methods of Technology Forecasting
- Challenges and Limitations of Technology Forecasting
- Applications of Technology Forecasting

2. Innovation Roadmap (Group 2)

- Key Components or Elements of Innovation roadmap
- Levels of Innovation roadmap
- Steps for developing innovation roadmap
- Benefits of Innovation roadmap
- Example of a company innovation roadmap.

3. Market adoption and technology diffusion

(Group 3 & 4)

- Illustrate how the diffusion of innovation theory influences consumer adoption of products and services;
- Identify and discuss the technical, financial and organizational obstacles that have to be overcome to bring an invention to the market;
- Explain innovation and diffusion as ongoing processes with a range of factors affecting success at each stage;
- Recognize the role marketing plays in the early stages of product innovation;
- Explain how market vision helps the innovation process; and understand how the pattern of consumption influences the likely success or failure of a new product.

Computer Science CS 6215 Questions Pack - (9 Groups)

4. Technology Policy, National Systems of Innovation and Entrepreneurship in Tanzania.

(Group 1)

- Understand that the role of national states considerably influences innovation;
- Identify the structures and activities that the state uses to facilitate innovation;
- Recognize the role played by entrepreneurship in innovation;
- Recognize the role played by universities in delivering entrepreneurship.

5. Managing Intellectual Property

(Group 2 & 3)

- Intellectual Property
- Trade Secrets
- Patents
 - Novelty and key factors of Novelty.
 - Exclusions from patents
 - Key elements of Configuration of patent

- Some famous patent cases
- Patents in Practice.
- Expiry of patents and patent extension.
- Uses of patents
- Do patents hinder innovation management?
- Trademark: identify the link between brand name and trademark;
- Copyright

6. Strategic Alliances.

(Group 4)

- Define Strategic Alliances
- Forms of Strategic Alliances 8
 - Licensing
 - Supplier relation
 - Outsourcing
 - Joint Venture
 - Collaboration (non-joint venture)
 - Innovation Network

7. Open Innovation and Technology Transfer

(Group 5 & 6)

- Open Innovation
- Introduction to technology transfer
- Process of technology transfer
- Models for technology transfer
 - Top-down model
 - Science Park model
 - Intermediary agency model
 - Knowledge transfer partnership model
 - Research model
 - Consultancy
- Factors which facilitate Technology transfer
- Limitations or barriers to technology transfer.

8. Business Models

(Group 7)

- The Business model and Business Plan
- Types of Business Models and business plan
- Consideration in designing business model
- Case study: Developing new product for teeth whitening.

9. Product and Brand Strategy.

(Group 8 & 9)

- Capabilities, networks and platforms
- Product platforms
- Product planning
- Product strategy
- Competitive strategy
- Product portfolios
- Brand strategy
- Brand extensions
- Market entry
- Launch and continuing improvement
- Withdrawing products
- Managing mature products