

THEMED ASSIGNMENT

You will be required to do some research work on one the following titles below allocated to you. This should be condensed in a report ***not exceeding 10 pages***. There will also be a 5 minutes presentation where you will have to support your report as well as answer any questions that might crop up from the audience.

Theme 1: Peer-To-Peer networking

Give some examples of the following P2P applications, their features and how they work.

1. File Sharing programs
2. Collaboration tools
3. Internet Telephony (VoIP)
4. P2P Search Engines
5. Internet TV

Theme 2: Wireless Technologies

6. Current challenges and future directions for wireless hotspots.
7. The prospect for Wireless Asynchronous Transfer Mode (ATM) in Mauritius.
8. Wireless information system for motorway condition surveillance.
9. Networking digital cameras: the electronic postcard.
10. An IP-based wireless voice network for student hostels.
11. The prospect of using high-altitude balloons as temporary cell sites.
12. An all-optical fibre network architecture for UTM.
13. Using free-space optical beams for high-speed Internet access in Mauritius.
14. Personal Video-On-Demand services on portable devices over the Internet in Mauritius.
15. The prospect for providing Internet access to UTM by satellite?
16. The prospect for wearable computing in Mauritius?
17. Will DLNA proved to be actually popular in Mauritius and Worldwide?
18. When will UWB devices be expected to hit the market and take over Bluetooth Technology?

Theme 3: Cellular Technologies: GSM, GPRS, UMTS, HSPDA, LTE

19. Explain how these five technologies operate and their respective features.
20. Compare the cost of the services provided by these technologies in Mauritius as opposed to mature markets.
21. Critically analyse whether cellular SMS should be a free service?
22. What are the effects on teenagers by analyse the marketing strategies used by the service providers?
23. Has 3G Technology been a flop in Mauritius?
24. What are the prospect of 4G communication in Mauritius?
25. Comment on the market penetration of HSPDA technology in Mauritius.

Theme 4: WAN Technologies

26. Explain how the xDSL technology operates and its features and limitations.
27. Outline their similarities and differences and their future.
28. Compare relative cost of service provided by these technologies in Mauritius to that of mature markets.
29. Explain how the concept of video-on-demand (VOD) is possible with the MyT service proposed by MT.
30. Analyse critically the currents status of Frame Relay Technology and its future.
31. Analyse critically the current status of ATM technology in Mauritius and how it has fared so far.
32. Explain how MPLS technology works and its future in Mauritius.
33. Explain how ISDN technology works and its future in Mauritius.
34. Dial-up technologies are becoming obsolete for domestic use. Critically analyse why this is so?

Please email me your report by **1st November 2012** on rheerasing@umail.utm.ac.mu using your title number as filename. e.g. **title1.doc** or **title14.pdf**. **Remember to include your name in the report.**

Note: You may optionally want to zip your assignment, e.g. title1.zip if the source document file is too large.

This assignment will count as 15% of the entire module. The report will account for 70% of the marks + 30% for the presentation. **The presentation will take place during Weeks 14 & 15.**