

Lecture 09 tutorial: WAN. The Internet

During tutorials prepare a short report of your activities and show it to your tutor.

Study the following **questions** and verify the correctness of the **answers** if given.

Be aware that the exam question might be directly related to the tutorial questions

Additional Instructions: Where a **group number** is indicated, please discuss this particular question with other members of your group, prepare a short written answer and email this to your tutor before the end of the class (you may wish to verify the correctness of your answer first). This will be used to produce a set of sample answers for study purposes.

Note: You should work through all questions, either during the tutorial itself or else later for revision, not just ones assigned to your group.

Group 1

Q1: Describe differences between the Wide area Networks and the Internet.

Group 2

Q2: Describe topology of the Monash Network.

Group 3

Q3: What features of the Monash Network architecture ensure resilience?

Group 4

Q4: Is there any reason to prefer a submarine fibre optics cable to terrestrial one?

Group 5

Q5: What is dark fibre and what is it used for?

Group 6

Q6: What are the T-Carrier services

Group 7

Q7: Describe the SONET/SDH services and its new replacement, the OTN standard.

Group 8

Q8: Name popular packet switched services

Group 9

Q9: What is Metro Ethernet and where is it used?

Group 10

Q10: What is MPLS and how does it work?

Group 1

Q11: Describe briefly the three-tier view of the Internet

Group 2

Q12: What are: ISPs, PoPs, peering points

Group 3

Q13: You pay for the access to the Internet, but who pays for the traffic on the internet? Explain.

Group 4

Q14: Who or what operates/runs the internet?

Group 5

Q15: What are RFCs and who take care of them?

Group 6

Q16: List Internet Access Technologies

Group 7

Q17: Describe basic features of DSL Technologies

Group 8

Q18: Describe basic features of the cable modem technology

Group 9

Q19: Describe briefly basic Fibre to the X technologies

Group 10

Q20: Compare active and passive optical network technologies