

# Network design paper

Technology, Information Technology



NETWORK DESIGN PAPER affiliation The appropriate IP addressing scheme will be as shown in the table below Workstation Range of IP Address

Range

Instructional Computer labs

172. 31. 17. 1 to 172. 31. 17. 50

172. 31. 16. 12

Student Computer Lab

172. 31. 18. 1 to 172. 31. 18. 50

172. 31. 16. 13

6 various offices

172. 31. 19. 21 to 172. 31. 19. 50

172. 31. 16. 14

Admission office

172. 31. 12. 2 to 172. 31. 13. 10

172. 31. 16. 15

Library

172. 31. 13. 11 to 172. 31. 13. 30

172. 31. 16. 16

Library

172. 31. 13. 31 to 172. 31. 13. 40

172. 31. 16. 17

5 classrooms

172. 31. 13. 41 to 172. 31. 13. 45

172. 31. 16. 18

The appropriate cable media will shielded twisted pair cable. The cable will

combine the cancellation, shielding and wire twisting techniques. Each pair of wire will be covered in a foil. The pairs of wires will then be wrapped in the metallic foil, normally in a 150 ohm cable. The STP will minimize the electrical noise within and outside the cable. The network design will stem from the bus topology. The single cable will connect all the computer found in the network in one line. Some of the selected network equipment include the hub, repeater, switch, bridge, router, gateway, Brouter, and also connecting cables. The set up will provide services related to local area network in the school and wide area network throughout the vicinity of the school. This connectivity will involve internet connection available from the computer network. These internet services will include the network printing services, file storage and file sharing, internet access, and email. The users of the network services will include the staff, students, and also other people who will be given access to the network services of the school.

(This is the draft)