

19th August 2023

Web & Database Developer
COMPUTER PRACTICAL PAPER
Tibetan Computer Resource Centre(TCRC) - DOF
Under Secretary

Duration: 3:00 hrs

Maximum Marks: 100

Access the server with IP: 192.168.56.4 username: tcrc / password: tcrc

1. Create a new user(developer) in Ubuntu Server with sudoer privilege **(20 Marks)**
 - a. Create a private and public key to access the server from your remote computer
 - b. Change the ssh port number to 4000
 - c. Access the server using the newly created user and create a folder called **project** with permission owner-full, the group - read-only, others- read-only and keep all your subsequent files in this folder.

2. Set up a Virtual host for the project folder with the hostname of your choice. **(15Marks)**
3. Make the server accessible only to a few IP addresses of your choice and block ssh access for some IPs **(15Marks)**
4. Make a new MySQL username called exam, create a new database named exam_db, and assign it to the newly created user. **(10 Marks)**
5. Create a cron job to export exam_db from the database every Tuesday at 04:50 **(10 Marks)**
6. Analyze the access log file and extract the last 10 records with their Network IP, machine detail, OS details, and timing. **(15Marks)**
7. Create a PHP class called student with the constructor function for any 5 subjects in it and perform average percentage. Create a class called detail and inherit its members from the student class. (Put this file with the name index.php at the root of the project folder) **(15 Marks)**