

# University of Sargodha

BS 8<sup>th</sup>/ 4<sup>th</sup> Semester (5<sup>th</sup> Intake) Exam 2026

Subject: IT

Paper: Cyber Security (ITCC-402/ITCC-4543)

Time Allowed: 02:30 Hours

Maximum Marks: 60

**Note:** Objective part is compulsory. Attempt any three questions from subjective part.

## **Objective Part (Compulsory)**

**Q.1.** Write short answers of the following in 2-3 lines each on your answer sheet. (2\*12)

- i. Define cyberspace intrusion.
- ii. What is ID/PS management?
- iii. Define risk in hardware and software infrastructure.
- iv. What is access control?
- v. Define business continuity planning.
- vi. What are cyber threats at home?
- vii. Define information security management.
- viii. What is security analyzer?
- ix. Define email protection.
- x. What are international cyber laws?
- xi. Define distributed defense.
- xii. What is cyber warfare?

## **Subjective Part (3\*12)**

**Q.2.** Describe different types of ~~Intrusion~~ Detection and Prevention Systems (ID/PS) and their roles.

**Q.3.** Explain the importance of physical, personal and environmental security in business continuity planning.

**Q.4.** Discuss cyberspace laws and their role in combating cybercrime internationally.

**Q.5.** Explain the working and configuration of protection tools such as firewalls and password analyzers.

**Q.6.** What is cyber warfare? Describe its implications for homeland security.

# University of Sargodha

BS 8<sup>th</sup> / 4<sup>th</sup> Semester (5<sup>th</sup> Intake) Exam 2026

Subject

Information Technology

Paper

Database Administration & Management (ITCC-406/ITCC-4450)

Time Allowed: 02:30 Hours

**Maximum Marks: 40**

**Note: Objective part is compulsory. Attempt any three questions from subjective part.**

## **Objective Part (Compulsory)**

**Q.1.** Write short answers of the following in 2-3 lines of each on your answer sheet. (2\*8)

- i. What is the purpose of a control file in Oracle?
- ii. Explain the concept of a System Global Area (SGA).
- iii. What is an SPFILE and how is it different from a PFILE?
- iv. Describe the role of the SMON process in Oracle.
- v. What is a Program Global Area (PGA) and how does it differ from the SGA?
- vi. Write a query to create a bitmap index on a table column.
- vii. Explain the use of Oracle Managed Files (OMF).
- viii. What are Archived Redo Logs, and why are they important for recovery?

## **Subjective Part (3\*8)**

**Q.2.** What is recovery, write steps for recovering instance, data file and control file?

**Q.3.** What are different ways of space management in table spaces?

**Q.4.** Differentiate between system privileges and object privileges with example of each.

**Q.5.** What are initialization parameters? Differentiate between static and dynamic parameters with example of each.

**Q.6.** Explain Oracle physical storage structure with examples.