

University of Sargodha

BS 8th/ 4th Semester (5th 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)
- Define cyberspace intrusion.
 - What is ID/PS management?
 - Define risk in hardware and software infrastructure.
 - What is access control?
 - Define business continuity planning.
 - What are cyber threats at home?
 - Define information security management.
 - What is security analyzer?
 - Define email protection.
 - What are international cyber laws?
 - Define distributed defense.
 - 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.

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BS 8th/ 4th Semester (5th 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.