University of Sargodha

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.