

DIRECTORATE OF DISTANCE EDUCATION
ALAGAPPA UNIVERSITY, KARAİKUDI
INTERNAL ASSESSMENT
(Academic Year 2018-19 On wards)

Programme Code	130
Programme Name	B. Sc (Computer Science) & Lateral

V SEMESTER

MODEL ASSIGNMENT/PRACTICAL QUESTIONS

Paper Code : 13051/13251	Maximum Marks: 25
Paper Title : Operating Systems	
<ol style="list-style-type: none"> Describe in detail about the architecture of operating system with the help of examples and diagrams. What is interrupts? How it is handled by an OS? Discuss the use of semaphores in developing a solution to a bounded-buffer. Describe the steps that the banker's algorithm uses to determine whether to grant a request. What is the role of paging in an OS? Explain with the help of examples. 	
Paper Code : 13052/13252	Maximum Marks: 25
Paper Title : Relational Database Management Systems	
<ol style="list-style-type: none"> What are the different types of data models? Explain. Explain the concept of relationships in E-R model. Explain the different types of joins with the help of examples. What are the different types of integrity constraints for relational database? Describe Third Normal Form. Give an example of a relation in 2NF but not in 3NF. Transform the relation into relations in 3NF. 	
Paper Code : 13053/13253	Maximum Marks: 25
Paper Title : Computer Architecture	
<ol style="list-style-type: none"> Difference between ISA and micro architecture. What are the different types of dependencies in ILP? What are the different levels of branch prediction? What is DMA controller? Explain. What are the steps for designing and evaluating an I/O system? 	
Paper Code : 13054/13254	Maximum Marks: 25
Paper Title : LAB – Relational Database Management Systems	

1. Write a SQL code for Aggregate and Scalar functions.
2. Create the following table with 5 rows and perform the SQL operation: Library (Book_id, Book_name, Borrower_Name, Subs_id, Borrow_date) • Display the details of Books and its Borrower on a specific date.
3. Develop a PL/SQL block to calculate amount using the following calculations: • Net_usage * Rs. 1.50 if net_usage up to 100 • Net_usage * Rs. 2.50 if net_usage > 100 and <= 200 • Net_usage * Rs. 3.00 if net_usage > 200
4. Develop a PL/SQL block to illustrate the usage of cursor for an application of your own choice
5. Write a PL/SQL code for Applications using Triggers.