NAVRACHANA UNIVERSITY
a UGC recognized University

School: School of Engineering and Technology
Program: Bachelor of Computer Applications
Year: 3rd   **Semester:** 5th
Examination: End Semester Examination
Examination year: December - 2021

Course Code: IT229   **Course Name:** Operating System Concepts
Date: 02/12/2021
Time: 2:30 to 4:30 pm

Total Marks: 40
Total Pages: 01

Instructions:

→ *Write each answer on a new page.*
→ *Use of a calculator is permitted.*
→ *All Questions are compulsory.*
→ ** COs=Course Outcome mapping. # BTL=Bloom's Taxonomy Level mapping*

Q. No.	Details	Marks	COs*	BTL#
Q.1	List & Explain Different types of operating System in detail.	5	CO1	BTL 1,2,4
Q.2	What is thread? Explain types of thread with its advantages & Disadvantages.	5	CO1	BTL 1,2
Q.3	What is deadlock? Write & Explain four condition for deadlock to occur.	5	CO2	BTL 1,2
Q.4	Explain segmentation in memory management & write its advantages & Disadvantages.	5	CO2	BTL 1,2,4
Q.5	Write a short note on: Device Controllers	5	CO3	BTL 1,2
Q.6	List out various disks scheduling algorithm. ➡ Consider the following disk request sequence for a disk with 100 tracks 90, 130, 120, 180, 10, 140, 70, 80 Head pointer starting at 63 and moving in left direction. Draw the Gantt chart & Find the number of head movements in cylinders using **C-Look** Scheduling.	5	CO3	BTL 1,2,3,5
Q.7	Define the following: I. File Attribute II. File operation	5	CO4	BTL 1,2
Q.8	Write a short note on : CIA	5	CO4	BTL 1,2,3

************End of Question Paper************