D.K. COLLEGE DUMRAON (BUXAR)
V.K.S UNIVERSITY (ARA)

B.C.A-IV SEMSTER   *ACADEMIC SESSION: 2020-23*

ASSIGNMENT OF INTERNAL ASSESMENT AND TERM WORK
SUBJECT NAME: OPERATING SYSTEM [4BCA1]

1. *What are an Operating Systems? What are the major functions of Operating system?*
2. What is process? How does the processing of process state transition Occur?
3. What is process control Block? When and how is a process control Block is updates?
4. Write short notes on: -
   a. Critical Section.
   b. Semaphores.
   c. Deadlock Detection & Recovery
5. What is paging? What is difference between a page and frame? Explain Memory segmentation.
6. Explain the term: -
   a. Demand paging.
   b. Page fault.
   c. Single use contiguous storage allocation.
   d. Contiguous V/S Non- Contiguous allocation.
   e. Variable portion multiprogramming.
7. Explain Disk scheduling?
   a. FIFO scheduling.
   b. SSTF scheduling.
   c. SCAN scheduling.
   d. CSCAN scheduling
8. In a round robin Schedules with quantum is 20 time and there are 3 Process P1, P2, P3 Job burst time of 44, 17, 14, time units respectively. These 3 processes omit at the about the time but in order of P1, P2 and P3. Find the average turnaround time and average waiting time and also find completion time.
9. What is deadlock? What is the necessary condition for deadlock? For Each explain it then is a way to present the condition and the

Consequence of doing so.

10. Using FCFS, SJF, Priority Find completion time, average turnaround time and average waiting time for given process.

Process	Arrival time	Burst time	Priority
P1	0	5	1
P2	1	1	2
P3	2	7	3
P4	4	8	4