

CENTRE FOR DEVELOPMENT OF IMAGING TECHNOLOGY

(Under Government of Kerala) CEP EXAMINATION-JUNE 2019 Subject: Operating System PGDCA I

Register No. Time: 3 Hours

Maximum Marks:100

I.Fill in the blanks. Answer ALL questions.	$(10 \times 1 = 10)$
In batch system common input devices are card reader and	
2 is a collection of related information defined by its user.	
3. A is a collection of independent computers.	
4. A program in execution is known as	
5. An illusion of an extremely large memory is known as	
6 is the operating system that reads and reacts in terms of act	ual time.
7. SJF stands for	
8. PCB stands for	
9. Disk platters divided into concentric of storage.	
10. MBR stands for	
II.Explain briefly. Answer any TEN questions.	$(10 \times 4 = 40)$
1. Briefly explain the uses and advantages of virtual machine.	
2. Write advantages of multiprocessor system.	
3. Write a short note on operating system services.	
4. Briefly explain about file operations.	
5. Describe about concurrent process.	
6. Write a short note on file protection.	
7. Briefly explain about precedence graph.	
8. What do you mean by critical section problem?	
9. Write a short note on segmentation.	
10. Briefly explain the advantages of virtual memory.	
11. Discuss about swapping.	
12. Briefly explain the architecture of hard disk.	
13. Write a short note on disk controller.	

III. Answer any FIVE questions. Explain in detail.

 $(5 \times 10 = 50)$

- 1. Explain In detail about system components.
- 2. Explain the kernel and layered structure approach of operating system.
- 3. Explain the following
 - a) Time sharing system
- b) Real time system
- 4. Explain in detail about directory structure.
- 5. Explain in detail about file allocation methods.
- 6. What do you mean by thread? Explain in detail.
- 7. What do you mean by deadlock? Explain in details about its detection and recovery.
