VIT
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)
CHENNAI

Continuous Assessment Test (CAT) – II- APRIL 2024

Programme	:	MCA	Semester	:	Winter 23-24
Course Code & Title	:	PMCA506L & Cloud Computing	Class Nbr	:	CH2023240501395
Faculty	:	Dr. Anusooya G	Slot(s)	:	F2+TF2
Duration	:	1½ Hours	Max. Marks	:	50

Answer all questions

Q. No	Description	Marks
1.	The National Digital Library of India (NDLI), ndli.ac.in, serves 300,000 members and receives close to 3.5 million hits per day from the entire country, with 34 million papers downloaded per month. NDLI's priority was to modernize this important educational and research tool. The NDLI online library is core to the educational experience which enables many research projects that provide external funding to many Universities. a. Explain a suitable light-weight model with a suitable architecture. **(8 Marks)** b. What are the best practices that NDLI can use to handle huge loans? Explain the appropriate scheduling architecture. **(7 Marks)**	15
2.	Discuss the step-by-step process of MapReduce for the election voting system using the input file given below. AITC　BSP　BJP　CPI AIADMK　BJP　DMK　AAP DMK　IUML　AIMM　TRS YSR　DMK　AIMM　TRS YSR　AIADMK　DMK　CPI	10
3.	Assume that you were running a small business a decade ago and that you were handling the IT along with your team. In the present situation your business has the attention of a huge customer base and you are forced to handle different kinds of requests to keep your market high. a. Identify and explain a suitable model to scale up and down according to the market status of your business. **(5 Marks)** b. Explain the role of control plane components along with the communications appropriate for the above scenario. **(10 Marks)**	15
4.	Explain the conceptual arrangement of software on a conventional computer that results when a user runs a hypervisor application and creates two VMs with a suitable diagrammatic representation. Also explain the phases of live VM migration.	10

**********All the best ***********