

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**  
**End Semester Examination, April/May 2018**

**Course: Fundamentals of Mainframe Skills/CSMT1001**  
**Program: B.Tech. CSE+MT**  
**Time: 03 hrs.**

**Semester: II**

**Max. Marks: 100**

**Instructions: Students are supposed to assume any missing data and has to give examples/draw diagrams wherever applicable**

**SECTION A [20 Marks]**

S. No.		Marks	CO
Q1	With a neat block diagram of Mainframe, describe its hardware components.	4	CO1
Q2	Describe the advantages of Partitioned Datasets in z/OS.	4	CO2
Q3	Why you use Job Control Language in z/OS?	4	CO3
Q4	Illustrate the role of SCLM in Mainframe Application Development.	4	CO4
Q5	Discuss z/OS Unix file system in short.	4	CO5

**SECTION B [40 Marks]**

Q6	What is a System Complex in Mainframe? Discuss the need of Sysplex/Parallel Sysplex with proper diagram.	10	CO1+ CO2
Q7	Discuss the most required skills for mainframe application development with proper explanation.	10	CO4
Q8	Explain the Job Entry sub System process with diagram and types of datasets in z/OS.	10	CO3
Q9	Compare between rlogin/Telnet and ISPF connectivity features of Mainframe for Unix System Services.	10	CO5

**SECTION-C [40 Marks]**

**Note\* Q10 is compulsory and attempt any one question from Q11 and Q12**

Q10	Explain the following: i. z/OS Datasets ii. Fixed Blocked iii. Variable Blocked iv. 3270 Emulator	20	CO2,C O3,CO 4,CO5
Q11	Explain the evolving architecture of the Mainframe and its various operating systems.	20	CO1, CO5
<b>OR</b>			
Q12	Discuss: i. SCLM ii. z/TPF iii. JCL iv. Dataset	20	CO1,C O2,CO 3,CO4, CO5

	v. HFS		
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