

<b>Name:</b>	 <b>UPES</b> UNIVERSITY WITH A PURPOSE
<b>Enrolment No:</b>	

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**

**End Semester Examination, May 2019**

**Course: Mainframe Clustering**  
**Program: B.Tech. (CSE)Mainframe Technology**  
**Course Code: CSIB 354**

**Semester: VIII**  
**Time 03 hrs.**  
**Max. Marks: 100**

**Instructions:**

**SECTION A**

S. No.		Marks	CO
1.	Describe the term Continuous availability and factors that impact continuous availability.	<b>4M</b>	<b>CO1</b>
2.	Explain the role of different elements of CSS.	<b>4M</b>	<b>CO2</b>
3.	Explain the use of Sysplex couple data sets with suitable example.	<b>4M</b>	<b>CO3</b>
4.	Explain Sysplex failure management policy.	<b>4M</b>	<b>CO4</b>
5.	Describe the use of SETXCF START command.	<b>4M</b>	<b>CO5</b>

**SECTION B**

6.	Exemplify the use of dynamic workload balancing and cloning in respect of Parallel Sysplex.	<b>10M</b>	<b>CO2</b>
7.	Illustrate the role of PR/SM in respect of creation and execution of LPARs.	<b>10M</b>	<b>CO3</b>
8.	Write short note on following: a. I/O supervisor b. Channel Program	<b>10M</b>	<b>CO3</b>
9.	Discuss the role of HiperSockets in respect of communication within server. Write the benefits of using Hipersockets function.	<b>10M</b>	<b>CO5</b>

**SECTION-C**

10.	i. Justify “Sysplex policies plays an important role in Mainframe environment”. Explain how to define and activate policies.	<b>10M</b>	<b>CO4</b>
	ii. Describe the use of ESCON channels and ESCON director in respect of communication among channels and control units.	<b>10M</b>	<b>CO2</b>
	(OR)		
	iii. Explain different couple system parameters and uses of them.	<b>10M</b>	<b>CO4</b>
11.	iv. Describe the use of FICON channels and FICON conversion mode in respect of communication among channels and control units.	<b>10M</b>	<b>CO2</b>
	i. Illustrate the use of following Sysplex services: a. Recovery Services	<b>10M</b>	<b>CO5</b>
	b. Client /Server Services	<b>10M</b>	<b>CO1</b>
	ii. Illustrate the role of Coupling facility, coupling link, and server time protocol as part of Sysplex.		

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<b>Name of Examination</b> <small>(Please tick, symbol is given)</small>	:	MID		END	H	SUPPLE	
<b>Name of the School</b> <small>(Please tick, symbol is given)</small>	:	SOE		SOCS	H	SOP	
<b>Programme</b>	:	B.Tech.(CSE)Mainframe Technology					
<b>Semester</b>	:	VIII					
<b>Name of the Course</b>	:	Mainframe Clustering					
<b>Course Code</b>	:	CSIB 354					
<b>Name of Question Paper Setter</b>	:	Neeraj Chugh					
<b>Employee Code</b>	:	40000453					
<b>Mobile &amp; Extension</b>	:	9897263888					
<b>Note: Please mention additional Stationery to be provided, during examination such as Table/Graph Sheet etc. else mention "NOT APPLICABLE":</b>							
<b>FOR SRE DEPARTMENT</b>							
<b>Date of Examination</b>	:						
<b>Time of Examination</b>	:						
<b>No. of Copies (for Print)</b>	:						

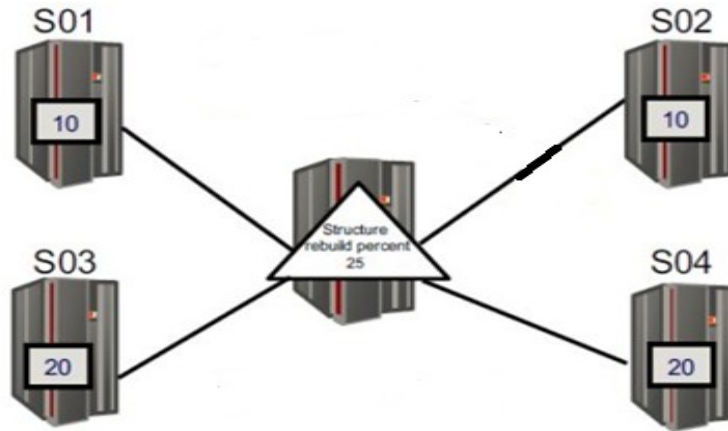
**Note: - Pl. start your question paper from next page**

**Model Question Paper (Blank) is on next page**

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iii. As per the given picture, calculate loss of connectivity and find out whether rebuild will be automatic or not if SFM policy connectivity failure occurs corresponding to S02.



10M CO5

iv. Explain different options available for communicating within server.

10M CO2

11. i. Explain “client/server services “and “status monitoring services” in respect of XCF communication services.

10M CO5

ii. Describe different characteristics of Sysplex.

10M CO3