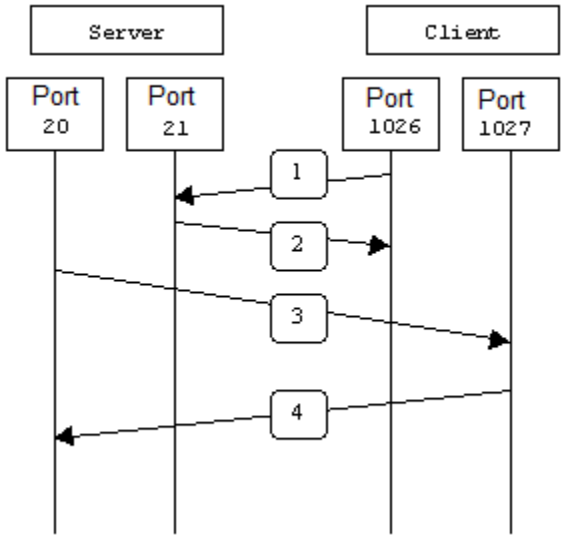
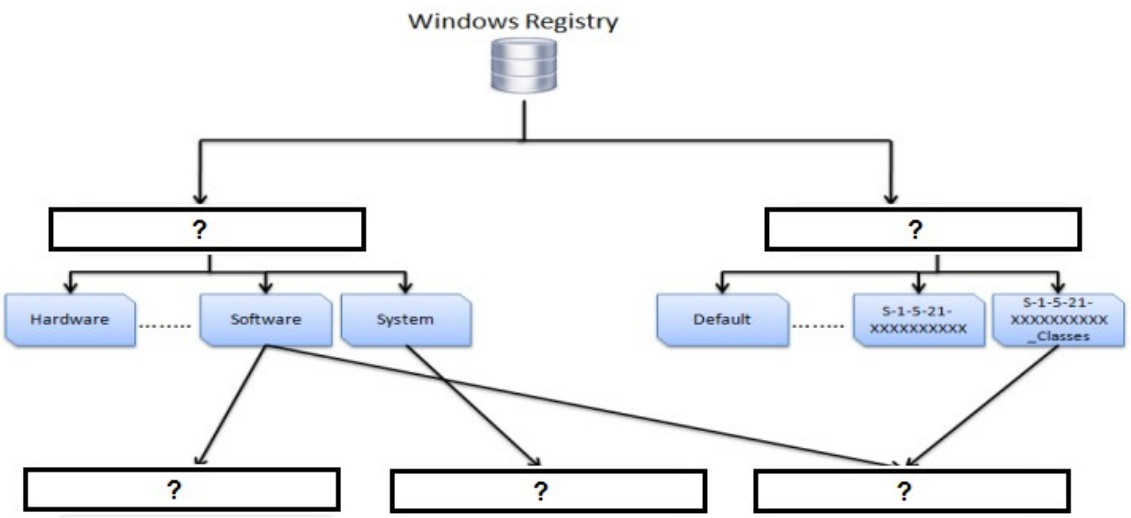
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, April/May 2018

Course: Forensic Computing (CSCS7003) **Semester: II**
Program: M.Tech CSE
Time: 03 hrs. **Max. Marks: 100**

SECTION A

S. No.		Marks	CO
1	Write description for following file directories in Linux File System: a. / b. /bin c. /etc d. /home	**4**	**CO1 ,CO 2**
2	Express your views about following (maximum 15 words for each): a. Admissible Evidence b. Section 3 of Evidence Act	**4**	**CO1 ,CO 4**
3	Write the port numbers for HTTPS, SMTP, TELNET and FTP	**4**	**CO1 ,CO 2**
4	Answer TRUE or FALSE with respect to registries in Windows OS: a. When a program is installed, a new sub key containing settings like a program's location, it's version, and how to start the program, are all added to the Windows Registry. b. Registry contains user who is currently logged into Windows and their settings. c. Registry contains list of startup programs. **d.** Registry records every SSID of every wireless network.	**4**	**CO1 ,CO 2**
5	Map the stages and their steps which are given in jumbled order: **Stages:** Investigation Preparation, Analysis of Evidence, Evidence Acquisition, Results dissemination **Steps:** identify resources required, preserve digital evidence, process data, interpret analysis results, present findings, report findings, identify source of digital evidence, identify the purpose of investigation, and identify tools and techniques to be used. ***Note***: Each stage may have multiple steps; your answer should have stages and steps in correct order.	**4**	**CO1 ,CO 4,C O3**
	SECTION B		
6	Identify the process in the figure below (max 20 words). Explain the steps 1 to 4 in brief	**10**	**CO1 ,CO**

	(max. 40 words).  		**2,CO3**
7	Let's say that the pixels before the insertion are: *10000000.10100100.10110101, 10110101.11110011.10110111, 11100111.10110011.00110011* What will be pixel values after the insertion of an 'A' using LSB Algorithm?	**10**	**CO1,CO5**
8	There are five logical root keys in the Windows Registry which are: 1. HKEY_CLASSES_ROOT. 2. HKEY_CURRENT_USER. 3. HKEY_LOCAL_MACHINE. 4. HKEY_USERS. 5. HKEY_CURRENT_CONFIG. Fit them in the blank boxes to show relationship between windows registry root keys.	**10**	**CO1,CO2**

			
9	Explain the working of ***Message/Mail User Agent (MUA)*** , ***Message/Mail Store (MS)*** , ***Message/Mail Submission Agent (MSA)*** , ***Message/Mail Transfer Agent (MTA)*** and ***Message/Mail Delivery Agent (MDA)*** with respect to the Email Architecture.	**10**	**CO1 ,CO 2,C O3, CO4**
	SECTION-C		
10	Consider the following snapshot and answer the required questions: 02/07/2018 10:07 AM 210 $I00TWXY.pdf 01/31/2018 12:28 PM 196 $I08SUCB 07/16/2017 06:11 PM 116 $I09GBWC.m3u 01/31/2018 10:26 AM 108 $I0CTANU.docx 02/14/2018 01:29 AM 378 $I0G7VCW.jpg 08/28/2017 02:35 PM 114 $I0HD066.pptx 01/31/2018 01:36 AM 186 $I0HVTFY.docx 02/07/2017 10:14 AM 42,374 $R00TWXY.pdf 05/07/2016 07:01 PM <DIR> $R08SUCB 07/02/2017 06:17 PM 57 $R09GBWC.m3u 01/31/2018 09:40 AM 15,387 $R0CTANU.docx 02/14/2018 01:28 AM 31,321 $R0G7VCW.jpg 08/23/2017 11:21 AM 304,947 $R0HD066.pptx 01/31/2018 01:23 AM 3,628,528 $R0HVTFY.docx 1. What is shown in the snapshot above? 2. How will you receive the list same as above in D: drive in your computer having windows 10 OS through command line? Write the command. 3. Why there are 2 copies of every file in the snapshot? Is there any difference in $I and $R files? (maximum 40 words)	**20**	**CO1 ,CO 2,C O3, CO4**

	4. What does the six characters after every $I and $R means? (maximum 30 words) 5. Write the $I format for Windows 10 OS? (answer in tabular format)		
11	Consider a DC signal that is a constant 100 for domain [0, 7]. Calculate F (0) and F (1) for 1D DCT.	**20**	**CO1 ,CO 2,C O3, CO4**