Name: Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2022

Course: Data Management Technologies **Semester: 2**
Program: M.Sc Clinical Research **Time: 03 hrs.**
Course Code: Program Elective **Max. Marks: 100**

Instructions: All questions are compulsory

Q.No	Section A Short answer questions/ MCQ/T&F	(20Q x1.5M= 30 Marks)	COs
Q	Statement of question		
1.	Define a clinical trial.		CO1
2.	Write about the basic structure of SAS.		CO3
3.	List Common data entry features in case of software selection.		CO2
4.	Define distributed computing.		CO2
5.	Define the role of Study Principal Investigator.		CO1
6.	Discuss different types of distributed computing models.		CO2
7.	Define CLOSE-OUT-OF Trial.		CO1
8.	Identify the challenges in Distributed Computing		CO2
9.	Explain the role of Database Administrator.		CO1
10.	Enumerate the benefits of Distributed Computing.		CO2
11.	List tasks required for DB Closure.		CO2
12.	Explain Vertical Scaling .		CO2
13.	CRF format should be designed with three functions in mind. List the same.		CO1
14.	Describe Horizontal Scaling.		CO2

15.	Explain the role of System Analyst.		CO1
16.	Define the the purpose of case report forms.		CO1
17.	Differentiate between Offline and Online data entry.		CO1
18.	Identify the disadvantages of a poorly designed CRF.		CO1
19.	Explain the advantages of Hospital Management Software.		CO3
20.	Give 5 examples of latest HMS in the present market.		CO3
	Section B	**(4Qx5M=20 Marks)**	CO
Q	Statement of question		
1.	Discuss the different types of clinical trials	5	CO1
2.	The secondary checks can be by visual review of the data forms against the data entered or by developing computer checks of value ranges, field data types, and logical relationships between data items. Explain each of them.	5	CO2
3.	Enumerate the different SAS products.	5	CO3
4.	List Database management Sytem features.	5	CO2
	Section C	**(2Qx15M=30 Marks)**	
Q	Statement of question (Case studies)		CO
1.	Discuss the features expected in a good hospital management software in present times.	15	CO3
2.	Explain the different activities involved in the process of Clinical Data Management.	15	CO2
	Section D	**(2Qx10M=20 Marks)**	
Q	Statement of question**s**		CO
1.	When completing case report forms for a clinical trial, there are procedures that should be followed to comply with Good Clinical Practice. Explain.	10	CO2

2.	Enumerate and explain the different types of common errors encountered while maintaining CRF data.	10	CO2