MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
(A constituent unit of MAHE, Manipal)

DEPARTMENT OF CSE

V SEMESTER B.TECH.(Computer Science and Engineering)

End Semester

SUBJECT: Healthcare and Information Technology IIE 4321

Time: 4:00PM – 4:50PM   Date: 1/1/2022   MAX.MARKS: 50

PART A -30M

Q. No.	Questions	M	CLO	AHEP LO	Blooms Taxonomy level
1.	Q 1 Radiology Technique is a) Ultra Sound b) BP Reading c) Sugar Reading d) Complete Blood Count Reading. Ans a)	1 1	3 4	2 4	2 4
	Q 2 Rehabilitation Medicine is a) Treating Small Kids b) Surgery c) Obstetrics d) Improving Quality of Life Ans d)	1	4	4	4
	Q 3 VA capacity has a) 151 centers b) 0 centers c) 200 centers d) 400 centers Ans a).	1	4	4 3	4
	Q 4 Primary Care Crisis is due to a) Bad Infrastructure b) Lack of Physicians c) Wrong Infrastructure d) Decreased Cost of Healthcare.	1	3		2

Ans b)

Question	1			
Q 5 One of the principle of Canada Health Act is a) Urology b) Medical Administration c) Universality d) Psychology Ans. c)	1	3	3	2
Q 6 Electronic Data Interchange should have a) Transaction Set b) Transform Set c) Fourier Set d) Laplace Set Ans. a)	1	3	3	2
Q 7 Charge Capture requires a) Charge Description Master b) Address Master c) Slave Master d)Stroke Master Ans. a)	1	4	4	2
Q 8 Health Information Technology contains a) Telemedicine b) Forensics c) Toxicology d) Respiratory Medicines Ans. a)	1	4	4	3
Q 9 CMS-Medicare, is for a) People over 65 years of age b) People under 15 years of age c) Children under 5 years of age d) People below 25 years of age Ans. a)	1	3	3	2
Q 10 A Qualified EHR provides a) Clinical Decision Support b) Ambulance Support c) Pharmacy Support d) Nurse Support Ans. a)	1	2	3	2
Q 11 Current trends in Health Informatics is a) E Health b) Pulmonary Support c) Eye Support d) Cardiac Support	1	3	3	2

Ans. a)

Q 12 EHRs support a) Follow up information for patients b) Complete Cure c) Diabetic Cure d) Hypertension Cure	1	3	3	2

Ans. a)

Q 13 NwHIN helps to achieve goals of a) HITECH b) Cardiology c) HIV centers d) COVID-19 centers	1	2	2	3

Ans a)

Q 14 In Tech Stack, User Interface is designed using a) JAVA b) C++ c) C d) HTML	1	3	3	2

Ans. d)

Q 15 Medical Device Integration requires a) Connector b) Switch c) Rail d) Automatic Objects	1	4	3	2

Ans. a)

Q 16 One of the advantage of Enterprise Messaging System is a) Security b)Node c) Security and Node d) General Data	1	3	3	2

Ans. a)

Q 17 Service Oriented Architecture ensures a) Functional Consistency across Applications b)Resources for all Applications c) Software d) Hardware	1	3	3	2

Ans. a)

Q 18 Knowledge base in Healthcare requires a) Clinical Knowledge b) Veterinary Knowledge c) General Knowledge d) Technical Knowledge	1	3	3	2

Ans. a)				
Q 19 Inference Engine in Health Care contains	1	4	3	2
a) Patient Centric Information b) All Information c) Ambulance Information d) Medical Student Information				
Ans. a)				
Q 20 Tele health is	1	4	3	2
a) Remote access of Health Care b) Central Health Care c) City Health Care d) Providing Medicines				
Ans. a)				
Q 21 Interactive Health Communication is	1	4	3	2
a) E Health b) Insurance c) Surgery d) Nursing				
Ans. a)				
Q 22 Personal Health Record is for	1	4	3	2
a) Personal Identification b) Family Identification c) Pharmacy Identification d) Nurse Identification				
Ans. a)				
Q 23 Effective HIT is for	1	4	3	2
a) Early Detection of Outbreaks b) Adaptable Health c) Pandemics d) General Health Problem				
Ans. a)				
Q 24 Machine Learning usually is	1	4	3	2
a) Supervised b) Unsupervised c) Supervised and Unsupervised d) Machine Independent				
Ans. c)				
Q 25 Feature Extraction for Health Care projects is	1	4	3	2
a) Shape Based b) Texture Based c) Shape Based and Texture based d) Not Possible				

Ans. c)

	1	4	3	2

Q 26 Classifiers in Healthcare are for

a) Categories of Health   b) Pharmacy   c) Nursing   d) Pharmacy and Nursing

Ans. a)

Q 27 Clustering is

a) Unsupervised   b) Supervised   c) Supervised and Unsupervised   d) Label Based

Ans. a)

Q 28 AI depends on

a) Machines   b) Algorithms   c) Machine learning and Artificial Neural Networks and Deep Learning   c) Models

Ans. c)

Q 29 Feature Engineering is a method in

a) Machine Learning   b) Algorithms   c) Compilers   d) System Programs

Ans. a)

Q 30 Confusion Matrix comes in

a) Model Evaluation b) Any Method c) Physics Problems   d) Chemistry Problems

Ans. a)

Q	1	4	3	2
Q 26	1	4	3	2
Q 27	1	4	3	2
Q 28	1	4	3	2
Q 29	1	4	3	2
Q 30	1	4	3	2

PART B -20M

Time : 2:20-3:35PM

Q. No.	Questions	M	CLO	AHEPLO	Blooms Taxonomy level
1.	Q 1 a) Show with a general case study, health and health care. What are the significances of health and healthcare? Show through a Case study, what Primary Health Care can contribute to? How does radiology Services help in Health Care and Information Technology? (5 M)	05	3	2	3
	b) Show with a case Study, how does Evidence based Medicine work. How does Medicare work? Give a Case Study. How do you make Clinical Decision Support systems? (3 M)	3	3	2	3
	c) What are different accreditations for Healthcare? Explain with an example. Give Case Study for Health Care Informatics and Health Care Information Systems. Give a Case Study for Patient Monitoring System, for HCIT. (2 M)	2	3	2	3
	Q 2 a) How does Social Media make Health Care and Information Technology? What are significances of EHR and EMR, and how does it help HCIT? (5 M)	5	3	2	3
	b) How do you define Healthcare Work flows depending on Cerner Healthcare? Give all possible Work Flows. (3 M)	3	3	2	3
	c) Give examples of GUI in Health Care Information Technology, and explain how they are made. Explain AI and ML strategies in HCIT. (2 M)	2	2	3	3

QUESTION PAPER ANALYSIS