

## International Institute of Health Management Research (IIHMR), New Delhi

## PGDM (HOSPITAL AND HEALTH MANAGEMENT)

## (Batch 2022-2024)

# RE\_SUPPLEMENTARY EXAM (4<sup>th</sup> Term) SUPPLEMENTARY EXAM (5<sup>th</sup> & 6<sup>th</sup> Term)

## HIT 717-Telehealth and Mhealth

Date: June 25, 2024 Timing & Duration: 10:30 A.M.-01:30 P.M. (3 Hrs.) Max. Marks: 100

### Instructions:

- Budget your time as per the marks given for each question and write your answer accordingly.
- Don't write anything on the Question Paper except writing your Registration No.
- Mobile Phones are not allowed even for computations.

### Part A: Q.1 to Q.10 (All are compulsory)

### (10 questions\*2 marks = 20 marks)

### Match the following:

S.No.	Column X	S.No.	Column Y
1	Store and Forward Example	A	health care providers use telecommunication technology to deliver and receive training,
2	Realtime	B	Tele dermatology
3	Teleophthalmology	С	remote dermatology support for medical conditions like acne, skin cancer, and allergic reactions.
4	Telecardiology	D	transmission of symptom scores, physiological data to care providers either via automated electronic means or by web- based or phone-based data entry.
5	Tele pathology	E	allows diagnosing disease processes like age-related macular degeneration, glaucoma, and hypertensive retinopathy
6	Tele dermatology	F	transfer images at a long distance to facilitate diagnosis
7	Tele radiology	G	Remote monitoring
8	Tele monitoring	H	Interpretation of all noninvasive imaging studies
9	Tele mentoring	Ι	continuing education programmes to rural health-care professionals
10	Tele education	J	as part of the management of a cardiac pathology (treatment or diagnosis

#### Part B: Q.11 to Q.15 (4 questions \*5 Marks = 20 Marks) Attempt any four.

- 11. What is tele radiology? What are the benefits?
- 12. Give an example how Telehealth can be used to monitor Parkinson patients
- 13. Mortif Eye Care is interested in using Telehealth for monitoring NCD in the community? What should be planning steps it should adopt?
- 14. How are the standards used in Telehealth?
- 15. Can VR and AR be used in Telehealth. Explain with an example?

#### Part C: Long Questions (Answer any three)

#### $(3 \times 20 = 60)$

- 16. Emertus hospital is keen on extending its dermatology services to the rural areas through Tele dermatology. What type of modes of teleconsultation with the community can be envisaged?
- 17. In 2020, Sanchez family all become symptomatic with COVID-19 pandemic following an exposure to Mr Sanchez at the restaurant where he works. Mr Sanchez is an undocumented immigrant in US. Mrs Sanchez and his mother-in-law have their green cards. Mr Sanchez children are US citizens. The family was asked to do home isolation and given video consultation with Nurse practitioner. The nurse became frustrated when Mr Sanchez was unavailable at the portal despite reminders and messages, and she had to resort to telephone. Finally, through his son who spoke English she understood that they were not aware of patient portal and did not have a primary care physician for their family. Mr Sanchez did not wish to worry his family how serious he was and did not reveal the actual symptoms. Nurse cannot assess him properly as the video, or home blood pressure, pulse oximeter readings were not available. The seriousness was known when he was too tired unable to walk and ambulance had to be called.

What are the potential benefits and concerns do you perceive in the above case.

- 18. Considering the rise in NCD disease, how can Telecardiology be used for surveillance of NCD related diseases.
- 19. Can AI and ML based applications be adopted in Telehealth services? How can they help in the identification of outbreaks?
- 20. If a Telemedicine centre is to be set up in a 3-tier city, write briefly on the infrastructure to be established?