

**Health sciences – Term 1 (2022 – 2023)****Revision – Unit 3 (Technology in healthcare)****Teacher: Arwa Abdelmoneim Elsir**

1.	How has technology improved healthcare?	
	(A)	People are dying younger
	(B)	Patient recovery times are slower
	(C)	Human doctors are no longer needed
	(D)	Patients are being diagnosed quicker
2.	The Al Hosn app uses GPS and Bluetooth to carry out contact tracing. What is the purpose of contact tracing?	
3.	Explain the benefit of using AR and VR for medical training.	
4.	Which of the following mobile apps or e-services can a doctor apply for their licence to practice?	
	(A)	Shefaa portal
	(B)	Al Hosn
	(C)	MoHAP website e-services
	(D)	COVID-19 UAE app
5.	Which of the following is a benefit of using artificial intelligence in healthcare?	
	(A)	It increases the risk of spreading or contracting infectious diseases
	(B)	It can review diagnostic tests faster and more accurately than humans
	(C)	It increases a patient's healthcare costs
	(D)	All of the above
6.	Virtual clinics are a type of_____.	
	(A)	virtual reality
	(B)	telemedicine
	(C)	augmented reality
	(D)	smart medical device

7.	Which of the following can be treated via telemedicine?	
	(A)	Broken bones
	(B)	Major blood loss
	(C)	Headache and fever
	(D)	Surgery to remove a minor organ

8.	Explain one reason why someone may choose to use telemedicine instead of visiting their doctor in person.	

9.	Name two items of health information that can be tracked on a fitness tracker or smart watch.	
	i.	_____
	ii.	_____

10.	How can 5G enhance healthcare?	
	(A)	It increases the number of patients in a hospital
	(B)	Doctors can monitor patients outside of the hospital in real-time
	(C)	It slows down the process of finding and diagnosing diseases
	(D)	All of the above

11.	Which of the following technologies are used in healthcare today?	
	(A)	Robotic surgery
	(B)	Artificial organs
	(C)	Medical wearables
	(D)	All of the above

12.	Which of the following describes virtual reality?	
	(A)	Changing parts of the real world by adding videos or graphics to it
	(B)	Creating a new world where the person enters a completely digital environment
	(C)	A computer's ability to think, behave and learn like a human
	(D)	Using a robotic device to perform operations on real-life patients

13.	List one use of AI in healthcare.	

14.	Health-related online services such as booking appointments and paying medical bills on the internet are called_____.	
	(A)	e-services
	(B)	contact tracing
	(C)	augmented reality
	(D)	medical wearables

15.	Name a smart medical wearable device.	

16.	Which of the following mobile applications is the official app for COVID-19 test results and vaccine certificates in the UAE?	
	(A)	E-services
	(B)	Al Shefaa
	(C)	Al Hosn
	(D)	DHA

17.	Why might a patient choose to contact a doctor through telemedicine rather than in person?	
	(A)	The patient wants to reduce their risk of contracting COVID-19
	(B)	The patient might live far away from the hospital
	(C)	The patient cannot get transport to the healthcare facility
	(D)	All of the above

18.	List one condition that can be treated via telemedicine.	

19.	What is 5G?	
	(A)	The fifth generation of wireless technology
	(B)	A scale to measure how fast patients can be treated
	(C)	The five advances in technology in healthcare
	(D)	The fifth generation of virtual reality

20.	How have advances in medical technology benefited healthcare?	
	(A)	They have reduced staff productivity
	(B)	They have increased patients' recovery time
	(C)	They have increased the rate of patient diagnosis
	(D)	They have increased the overall cost of medicine

21.	Describe one way that virtual reality and augmented reality are currently used within healthcare.

22.	Which of the following describes augmented reality?
	(A) Changing parts of the real world by adding videos or graphics to it
	(B) Simulating the real world by creating an entirely digital environment
	(C) Using a robotic device to perform operations on real-life patients
	(D) A computer's ability to think, behave and learn like a human

23.	Name one smart medical device or wearable and describe how it can benefit health.

24.	Which smart medical device can filter out background noise or focus on specific sound sources?
	(A) Smart watches
	(B) Smart hearing aids
	(C) Wearable ECG monitors
	(D) Wearable biosensors

25.	Explain the difference between augmented and virtual reality.

26.	What is a benefit of using health-related apps and e-services?
	(A) Users must take time out of their day to attend a healthcare facility
	(B) Applications are complex and time consuming to use
	(C) Personal information is shared with private companies
	(D) Patients can access e-services from anywhere in the world

27.	What is a mammogram?
	(A) A wearable biosensor that measures heart rate
	(B) A surgical robot which can complete operations alone
	(C) A screening tool used to detect breast cancer
	(D) The UAE's most popular health-related app of 2021

28.	Should a patient who is showing mild symptoms of COVID-19 use telemedicine services?

29.	Why is contact tracing important in stopping the spread of COVID-19?	
	(A)	It allows patients to receive medical care without attending a medical facility
	(B)	It can identify people who have been in contact with an infected person
	(C)	It can identify people who have been vaccinated against COVID-19
	(D)	It allows patients to track any signs or symptoms of COVID-19 digitally

30.	Improvements in technology used in healthcare have _____.	
	(A)	reduced the speed of patient diagnosis
	(B)	increased patient recovery times
	(C)	helped people to live longer
	(D)	increased the risk of injuries

31.	Which of the following is a benefit of artificial intelligence used in healthcare?	
	(A)	It increases the risk of spreading or contracting infectious diseases
	(B)	It can review diagnostic tests faster and more accurately than humans
	(C)	It increases a patient's healthcare costs
	(D)	All of the above

32.	List two pieces of health information that can be tracked using a fitness tracker or smart watch.

33.	How can virtual reality be used in healthcare?	
	(A)	To detect diseases faster and more accurately than humans
	(B)	To track people who have been in contact with COVID-19
	(C)	To allow doctors to practice operations without making real-life mistakes
	(D)	To arrange medical appointments without talking to a person

34.	Why is 5G important in delivering healthcare?

35.	Which of the following cases may be treated via telemedicine?	
	(A)	A person who has a cough
	(B)	A person who is in anaphylactic shock
	(C)	A person who is needs a blood test
	(D)	A person who has a life-threatening condition

36.	How can using telemedicine reduce the spread of infectious diseases?	
	(A)	It allows patients to visualize symptoms in a digital environment
	(B)	Patients can receive medical care without visiting a clinic that may have infectious diseases
	(C)	Health care professionals who provide care through telemedicine are specialized in infectious disease
	(D)	It involves patients receiving in-person treatment

37.	What is artificial intelligence?	
	(A)	A simulated digital environment
	(B)	A computer that can think and act like a human
	(C)	Digital graphics placed over reality
	(D)	A human's ability to act like a robot

38.	What is the purpose of smart hearing aids?	
	(A)	To filter out background noise
	(B)	To track heart rhythm
	(C)	To communicate with doctors
	(D)	To record changes in temperature

39.	Identify two features that fitness trackers have in relation to health?	
	(A)	Take blood tests
	(B)	Track sleep
	(C)	Filter out background noise
	(D)	Test for COVID-19
	(E)	Measure heart rate
	(F)	Contact tracing

40.	In relation to COVID-19 what is the purpose of contact tracing?	
	(A)	To identify people who have been in contact with a person infected with COVID-19
	(B)	To increase the spread of COVID-19 by identifying who has not been vaccinated
	(C)	To allow patients to receive medical care without attending a medical facility
	(D)	To identify common signs and symptoms of COVID-19

41.	What is virtual reality?	
	(A)	A simulated digital environment
	(B)	A computer that can think like a human
	(C)	Digital graphics placed over reality
	(D)	A human's ability to think like a robot

42.	How is virtual reality used in healthcare?	
	(A)	It can be used to clean up after a surgeon has completed an operation
	(B)	It is the recovery journey from hospital' It can be used to live stream a patient
	(C)	It can be used to guide ambulance drivers to the nearest hospital when they collect a casualty
	(D)	It can allow medical students to perform operations without making real-life mistakes on human

43.	Artificial intelligence can be used to read mammograms 30 times faster than humans. How accurate are these readings?	
	(A)	25% accuracy
	(B)	55% accuracy
	(C)	80% accuracy
	(D)	99% accuracy

44.	What is wearable biosensors?	
	(A)	A sensor that can predict when a patient is hungry or need to use the bathroom
	(B)	A sensor that monitors health and can measure respiratory rate, body temperature and heart rate
	(C)	A battery found in smart watches and fitness trackers
	(D)	A device that uses artificial intelligence to filter out background noise in smart hearing aids

45.	What features do fitness trackers have in relation to health?	
	(A)	Diagnose illnesses
	(B)	Read mammograms faster than doctors
	(C)	Track heart rate
	(D)	Filter out background noise

46.	What technology is used to simulate reality and allow people to enter an entirely digital environment?	
	(A)	Augmented reality
	(B)	Virtual reality
	(C)	E-services
	(D)	Individual reality

47.	How have improvement in technology affected healthcare?	
	(A)	It takes more time to diagnose patients
	(B)	People are dying at younger age
	(C)	Healthcare facilities have improved
	(D)	Diseases are being spread quicker

48.	What is telemedicine?	
	(A)	Technology that allows patients to enter an entirely digital environment
	(B)	Technology that allows doctors to speak and diagnose patients from distance
	(C)	Technology that can think, behave and learn like a human
	(D)	Technology that is used to perform complex surgeries without any risk of harming a patient