

UNIT 3

TECHNOLOGY IN HEALTHCARE



SOLUTION PAPER

by Abd Alrahman Basim

SECTION 1: THE ROLE OF TECHNOLOGY IN HEALTHCARE

SECTION 2: SMART MEDICAL DEVICES AND WEARABLES

SECTION 3: MOBILE APPLICATIONS AND E-SERVICES

SECTION 4: AUGMENTED REALITY (AR) AND
VIRTUAL REALITY (VR)

SECTION 5: ARTIFICIAL INTELLIGENCE (AI)

SECTION 6: TELEMEDICINE

SECTION 7: 5G



This file is provided by



UNIT 3 REVISION PAPER

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. 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

3. 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

4. Virtual clinics are a type of _____.
 - a) virtual reality
 - b) **telemedicine**
 - c) augmented reality
 - d) smart medical device

5. 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

UNIT 3 REVISION PAPER

6. 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
7. The Al Hosn app uses GPS and Bluetooth to carry out contact tracing. What is the purpose of contact tracing?
- a) To identify people who have been in contact with a healthy person
 - b) To identify people who have been in contact with an infected person**
 - c) To identify people who have been in contact with a good person
 - d) To identify people who have been in contact with a bad person
8. What is the benefit of using AR and VR in medical training?
- a) Perform high-precision operations
 - b) Overcome high levels of pain and have faster recovery
 - c) Placing the patient in a safe and calm environment
 - d) It allows medical students to practice difficult medical procedures without making real-life mistakes**
9. Why someone may choose to use telemedicine instead of visiting their doctor in person?
- a) To reduce the chances of catching an infectious disease
 - b) If a patient lives far away from a medical facility
 - c) If a patient cannot get transport to a medical facility
 - d) All of the above**
10. Which of the following cannot be tracked on a fitness tracker or smart watch.
- a) Stress monitoring
 - b) Mental health tracking
 - c) Posture**
 - d) Sleep tracking

UNIT 3 REVISION PAPER

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. Which is not a use of AI in healthcare?

- a) Keeping well
- b) End of life care
- c) Decision making
- d) **Reduced risk of spreading infections**

14. Health-related online services such as booking appointments any paying medical bills on the internet are called _____.

- a) **e-services**
- b) contact tracing
- c) augmented reality
- d) medical wearables

15. Which is not a smart medical wearable device?

- a) Wearable biosensors
- b) Smart hearing aids
- c) **ECG**
- d) Sleep monitors

UNIT 3 REVISION PAPER

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. Which condition cannot be treated via telemedicine?

- a) Coughs and colds
- b) Asthma
- c) Broken bones**
- d) Allergies

18. 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

19. How can using telemedicine reduce the spread of infectious diseases?

- a) It allows patients to visualise their symptoms in a digital environment
- b) Patients can receive medical care without visiting a clinic that may have infectious diseases**
- c) Medical professionals who provide care through telemedicine are specialised in infectious disease
- d) It involves patients receiving in-person treatment

20. 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 think and act like a robot

UNIT 3 REVISION PAPER

21. 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

22. Identify two features that fitness trackers have in relation to health.

- a) Take blood tests
- b) Filter out background noise
- c) **Track sleep**
- d) **Measure heart rate**
- e) Test for COVID-19
- f) Contact tracing

23. 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

24. 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

25. 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

UNIT 3 REVISION PAPER

26. 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

27. How have improvements in technology affected healthcare?

- a) It takes more time to diagnose patients
- b) People are dying at a younger age
- c) Healthcare facilities have improved**
- d) Diseases are being spread quicker

28. What is telemedicine?

- a) Technology that allows patients to enter an entirely digital environment
- b) Technology that allows doctors to speak to and diagnose patients from a 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

29. What is 3D bio printing?

- a) Drones that can deliver medical supplies to hospitals
- b) Tiny robots can deliver medication and treat diseases
- c) The printing of bone tissue, organ tissues and skin**

30. What is nanotechnology?

- a) Drones that can deliver medical supplies to hospitals
- b) Tiny robots can deliver medication and treat diseases**
- c) The printing of bone tissue, organ tissues and skin

UNIT 3 REVISION PAPER

31. What is a wearable ECG monitor?

- a) **Track heart rhythm and rate**
- b) Send the wearer notifications
- c) Filter out background noises

32. What can biosensors measure?

- a) Heart rate
- b) Respiratory rate
- c) Skin temperature
- d) Posture
- e) **All of the above**

33. How are AR and VR used in health care?

- a) Medical training
- b) Robotic surgery
- c) Physical therapy
- d) Mental health treatment
- e) Personalized treatment
- f) **All of the above**



34. How can AR and VR improve patient experience?

- a) Make them not aware of what is happening to their body
- b) Doesn't show patients before and after surgery results
- c) **Self-guided treatments**
- d) All of the above

35. Which of the following may be referred to telemedicine services?

- a) **A person who has muscle pain**
- b) A person who is in anaphylactic shock
- c) A person who needs blood tests
- d) A person who is in cardiac arrest

UNIT 3 REVISION PAPER

36. Which smart medical device can filter out background noise and focus on specific sounds?

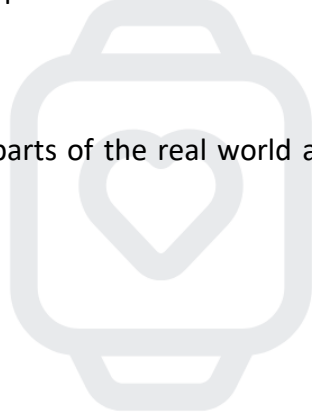
- a) Fitness trackers
- b) Smart hearing aids**
- c) Wearable biosensors
- d) Wearable ECG monitors

37. What is a benefit of using health-related applications or e-services?

- a) People must attend a doctor's office to receive medical help
- b) People can access the services at any time of day**
- c) People must pay a subscription fee to access healthcare
- d) Technology increases the spread of infectious diseases

38. Technology that can change parts of the real world and add additional data to it is called

- a) augmented reality**
- b) virtual reality
- c) digital environment
- d) robotics



UNIT 3

TECHNOLOGY IN HEALTHCARE

R E V I S I O N P A P E R

Resources

- G12 – Term 1 – Unit 3: Technology in Healthcare

THIS FILE IS FOR EDUCATIONAL PURPOSES ONLY.

This file is under Fair Use:

Copyright Disclaimer under section 107 of the Copyright Act of 1976, allowance is made for "fair use" for purposes such as criticism, comment, news reporting, teaching, scholarship, education and research. Fair use is a use permitted by copyright statute that might otherwise be infringing.

All rights and credit go directly to its rightful owners. No copyright infringement Intended.

Related Files:

Health Science Unit 3 Summary 2022-2023

[<https://t.me/InLibrary/1329>]

Chemistry Student Book EN Term 1 2022-2023

[<https://t.me/InLibrary/1045>]

Chemistry Teacher Guide EN Term 1 2022-2023

[<https://t.me/InLibrary/1113>]

Chemistry Student Book AR Term 1 2022-2023

[<https://t.me/InLibrary/1041>]

Chemistry Teacher Guide AR Term 1 2022-2023

[<https://t.me/InLibrary/1100>]

Copyright © 2022 InLibrary. All rights reserved.