

**I- Read the following text then choose the correct answer a, b, c or d : (60 marks)**

Biomedical engineering is concerned with studying the body from an engineering point of view, in order to design suitable artificial limbs, organs, or other medical devices. Medical technology engineering helps doctors define their tasks and facilitates their work more, so the medical device has become an essential assistant for the doctors in all steps, starting from diagnosis, to the end of the treatment course. Medical devices can be divided into three categories. Firstly, we have simple devices such as bandages, body temperature meters and others. There are also more complex devices that require a certain amount of caution, such as those that emit X-rays. Finally, there are those which require a deep study before their use, such as the valves used in the artificial heart, in addition to the artificial joints. In short, it is certain that this new branch of engineering has improved healthcare to a great extent. Furthermore, the design process is better as a result of new technology with 3D printing being the most favoured new tool.

- The main focus of Biomedical Engineering is on .....
  - designing buildings for hospitals
  - studying the body to create medical devices
  - developing new medications
  - performing surgery
- Biomedical Engineering assist doctors .....
  - by defining their personalities
  - by defining their tasks and making their work easier
  - by replacing doctors
  - by only focusing on diagnoses
- ..... is not a task facilitated by medical devices.
  - Diagnosis
  - Treatment
  - Accounting
  - Doctor's assistance
- ..... is one example of a simple medical device.
  - Ultrasound machine
  - Artificial heart valve
  - Bandage
  - X-ray machine
- 3D printing help with the design process by .....
  - reducing the cost of paper
  - improving the design process
  - allowing for faster surgery
  - creating a more comfortable work environment
- Medical technology engineering has had ..... on healthcare.
  - no impact
  - minimal impact
  - a significant improvement
  - negative impact

**II- Read the following text then decide if the sentences are true or false: (60 marks)**

As the world moves fast towards renewable sources of energy, engineers are facing a big challenge. How can we store electricity to be used at times when the wind is not blowing and the sun is not shining? In some cases the answer will be batteries; but in other cases it could come from a variety of different solutions – starting with gravity. Gravity is the biggest source of power on Earth. It is everywhere.... literally everywhere. It's always been everywhere, since the beginning of time. Nobody knew about it until around 1700, when Isaac Newton saw an apple fall from a tree in his garden. Newton asked himself the question: "Why did that apple fall to the ground?" And he soon worked out the answer. Everything will fall to the ground if it can do so, because there is a big force that pulls things towards the centre of the earth. Newton decided to call this force "gravity", a word that then just meant "weight". Engineers have used gravity as a source of power for centuries, long before Newton first explained it. In particular they used gravity to move water from one place to another, to irrigate fields and bring water to cities.

- The main challenge for renewable energy sources is storing energy.
- Gravity is a new discovery used only in modern renewable energy solutions.
- Engineers hadn't used gravity for power generation before Newton explained it.
- The passage is about the benefits of sun power.
- Engineers are looking for ways to use gravity to store energy.
- The force of gravity pulls objects towards the outer edges of the Earth.

**III- Choose the correct answer ( a, b, c or d): (130 marks)**

- The opposite of unjust is .....
  - fair
  - artificial
  - natural
  - alive
- My elder brother is a ..... in designing artificial limbs.
  - specialisation
  - specialist
  - specialty
  - specialise
- A ..... is a piece of equipment consisting of a wheel over which a rope or chain is pulled to lift heavy things.
  - pulley
  - gin
  - engine
  - vacuum cleaner
- I went to the ..... to try some herbal remedies.
  - dermatologist
  - pediatrician.
  - ophthalmologist
  - naturopath

الاسم:

الرقم:

المدة: ساعتان

الدرجة: 300/ ثلاثمائة

( الفرع العلمي – نظام حديث – ) - الصفحة الثانية -

اللغة الإنكليزية

(انتبه إلى رقم السؤال بحيث يتطابق مع رقم الجواب ولا تنتقل صيغة السؤال إلى ورقة الإجابة)

17. Future plans and ..... have a great importance in a person's life.  
a. decide b. decisive c. decisions d. decisively
18. Children love ..... parcels at Christmas time.  
a. disconnecting b. loading  
c. unwrapping d. disproving
19. After a long season of hard work, getting an extra week off is .....  
a. just what the doctor ordered b. at death's door  
c. on the mend d. an act of God
20. The police officer told the suspect to stop ..... and to tell him exactly where he was the night before.  
a. assembling the case b. beating around the bush  
c. going under the knife d. taking a turn for the worse
21. The vase fell ..... the table and shattered on the floor.  
a. off b. into c. from d. to
22. She suddenly turned and crashed ..... the fence.  
a. off b. into c. from d. out of
23. The rich have to ..... the poor.  
a. keep up with b. follow through  
c. get into d. reach out to
24. When I travelled to Spain, I tried hard to ..... the locals.  
a. keep up with b. follow through  
c. fit in with d. get into
25. Look, the bus .....  
a. is coming b. had come  
c. was coming d. would come
26. When her daughter got older, she often ..... out to visit her friends after school.  
a. had gone b. went  
c. is going d. goes
27. The robbery happened at four o'clock while they .....  
a. had slept b. are sleeping  
c. have slept d. were sleeping
28. I ..... this film before. I don't want to see it again now.  
a. have seen b. had seen  
c. see d. will see
29. Carol ..... the guitar since she was six.  
a. plays b. had been playing  
c. played d. has been playing
30. When Mozart was born, five of his siblings .....  
a. already died b. had already died  
c. already die d. have already died
31. We ..... for a long time when the bus finally came.  
a. had been waiting b. have been waiting  
c. have waited d. will wait
32. This time next week, I ..... my exams.  
a. have done b. did  
c. have been doing d. will be doing
33. Ben isn't going to build that wall himself. He .....  
a. isn't going to have it built  
b. is going to have built it  
c. is going to have it built  
d. is going to build it
34. The evidence ..... when the lights went out.  
a. was examining b. was being examined  
c. has been examined d. is examined
35. The word that has the final \id\ sound is .....  
a. talked b. recorded c. screamed d. phoned
36. The word that has a final voiced sound is .....  
a. mistake b. laugh c. ash d. young
37. A: My perfect house would be high in the mountains.  
B: .....  
a. Don't you think you'd feel isolated?  
b. Could this have an impact on the price of petrol?  
c. That's very kind of you.  
d. You're embarrassing me.
38. A: Emily, you're always coming late to work.  
B: .....  
a. I don't agree that anyone could have done it.  
b. If I were you, I would quit smoking.  
c. They're a splendid group of young people.  
d. Please accept my excuse, sir.
- A- Ask about the underlined words: (12 marks)**  
39. The bridges will be built over the river.  
40. My father is an engineer.  
41. He visits Aleppo every week.  
42. The weather was terrible last night.
- B- Choose the wrong part a, b, c or d: (8 marks)**  
43. We went to a café on Sunday when was very nice.  
a b c d  
44. You can take the day of if you want to.  
a b c d  
45. Excuse me. Has someone left this mobile here.  
a b c d  
46. I only eight a sandwich at eight before I went to bed.  
a b c d
- C- Composition: (30 marks)**  
Write a composition of no more than 80 words about the following topic:  
"your dream job"  
Include the following:  
• What attracts you to this job?  
• Who inspired you to choose it?  
• Job requirements.  
• What do you hope to accomplish through your job?

انتهت الأسئلة