

زبان تخصصی، زبان تخصصی مهندسی پزشکی، زبان تخصصی و اصطلاحات پزشکی

Reading 1 (1-6)

P1: Vital signs are a group of the 4 to 6 most important signs that indicate the status of the body's vital (life-sustaining) functions. These measurements are taken to help assess the general physical health of a person, give clues to possible disease, and show progress toward recovery.

P2: Temperature recording gives an indication of core body temperature which is normally tightly controlled (thermoregulation) as it affects the rate of chemical reactions. Temperature can be recorded in order to establish a baseline for the individual's normal body temperature for the site and measuring conditions.

P3: the pulse or heart rate is the rate at which the heart beats while pumping blood through the arteries. its rate usually measured either at the wrist or the ankle and is recorded as beats per minute. the pulse commonly taken is from the radial artery at the wrist. At birth, the heart can beat as fast as 220 beats per minute. Each year thereafter, the maximum heart rate declines by one beat

P4: Blood pressure (BP) is the pressure of circulating blood on the walls of blood vessels. when used without further specification, "blood pressure" usually refers to the pressure in large arteries of the systemic circulation. Blood pressure is usually expressed in terms of the systolic pressure (maximum during one heart beat) over diastolic pressure (minimum in between two heart beats) and is measured in millimeters of mercury (mmHg), above the surrounding atmospheric pressure.

1-The writer has written this passage to

- 1. introduce vital signs to the reader
- 2. compare blood pressure with body temperature
- 3. encourage the reader to be a doctor
- 4. introduce EEG and ECG

2-Which of the following statements is NOT true according to the passage

- 1. the pulse or heart rate is the rate at which the heart beats while pumping blood through the arteries
- 2. "blood pressure" usually refers to the pressure in large arteries of the systemic circulation
- 3. Temperature recording gives an indication of core body temperature
- 4. Temperature can be recorded in order to establish a baseline for the individual's abnormal body temperature

3-The word "this" in line 2 at P1 refers to

- 1. vital signs
- 2. body's vital
- 3. physical
- 4. disease

4-According to the passage, At birth, the heart can beat beats per minute.

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| 1. 90 | 2. 210 | 3. 220 | 4. 200 |
|-------|--------|--------|--------|

5-According to the passage, vital means:

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|--------------|----------|-------------|----------------|
| 1. necessary | 2. signs | 3. pressure | 4. measurement |
|--------------|----------|-------------|----------------|

6-The word " it " in line 5 at P1 refers to

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|---------------------|----------------|
| 1. thermoregulation | 2. core body |
| 3. sign | 4. Temperature |

Reading 2: (7-10)

P1: Prominent biomedical engineering applications include the development of biocompatible prostheses, various diagnostic and therapeutic medical devices ranging from clinical equipment to micro-implants, common imaging equipment such as MRIs and EEGs.

P2: This field of medical engineering will include a wide range, but in a short definition, bioelectric is science of using electric, magnetic and electromagnetic principles for medical science. The main infields where a engineer can operate include: 1- critical signal processing 2- Modeling biological systems 3- Registration and vital signal monitoring systems for hospital 4- Design and construction of health systems and medical laboratory.

P3: A biosignal is any signal in living beings that can be continually measured and monitored. The term biosignal is often used to refer to bioelectrical signals, but it may refer to both electrical and non-electrical signals. the usual understanding is to refer only to time -varying signals, although spatial parameter variations are sometimes subsumed as well

P4: An electrode is an electrical conductor used to make contact with a nonmetallic part of a circuit. the word was coined by William Whewell at the request of the scientist Michael Faraday from the

7-What can be the best title for the passage:

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|---------------------------|---------------------------------|
| 1. the best electrode | 2. the application of Biosignal |
| 3. Biomedical Engineering | 4. signal processing |

8-According to the passage, what William Whewell found:

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|--------------|-------------------------|
| 1. electrode | 2. electrical conductor |
| 3. signal | 4. circuit |

9-We can understand from the passage that

1. The main infield of biomechanical engineering can be signal processing
2. the development of biocompatible prosthesis can be the main biomedical engineering application
3. An electrode is an electrical conductor used to make contact with a metallic part of a circuite
4. Biosignal may refer to only electrical signals

10-what subfield of biomedical engineering is refered by Paragraph 2 :

1. biomechanical engineering
2. bioelectrical engineering
3. biomaterial engineering
4. clinical engineering

11-which option is not a vital sign:

1. BT
2. BP
3. HR
4. FS

12-Rigid bronchoscopy is used for

1. endoscopy of the larynx
2. visualizing the inside of airway
3. retrieving foreign objects
4. endoscopy of the urinary bladder

13-which option do not have same meaning with "physical examination"

1. medical examination
2. clinical examination
3. check up
4. overall health

14-respiratory rate is a vital sign, "respiratory rate" means:

1. breathing rate
2. pulse
3. heart rate
4. oxygen saturation

15-symptom means

1. stem
2. reduction
3. sign
4. membrane

16-Routine physicals are physical examinations performed on

1. symptomatic patients for medical screening purposes
2. asymptomatic patients for medical screening purposes
3. symptomatic patients for surguring
4. symptomatic patients for the tratment plan

17-the pupil is and enlarged by drugs

- 1. narrow
- 2. dilated
- 3. contract
- 4. compress

18-Laryngoscopy refers to

- 1. endoscopy of the larynx, a part of the throat
- 2. endoscopy of visualizing the inside of the airways for diagnostic
- 3. ear exam that can find problems in the ear canal
- 4. a test that can see inside the fundus of the eye

19-physician means

- 1. physical
- 2. engineer
- 3. chemist
- 4. doctor

20-Massive hemoptysis, defined as loss of >600 ml of blood in 24 hours in this passage, massive means

- 1. extremely bad
- 2. small
- 3. very large
- 4. little

21-CPR is abbrivation for

- 1. CPR stands for cardiopulmonary resuscitation
- 2. Damage to the central nervous system
- 3. a neurological disorder called central pain syndrome
- 4. A collection of disease information resources

22-which test is crucial in determining the health of the retina, optic disc

- 1. ophthalmoscopy
- 2. othoscopy
- 3. laryngoscopy
- 4. bronchoscopy

23-laparoscopy is an operation performed in the

- 1. heart
- 2. abdomen
- 3. large bowel
- 4. urinary bladder

24-..... is a neurological test that uses an electronic monitoring device to measure electrical activity in the brain

- 1. EEG
- 2. EMG
- 3. ECG
- 4. EOG

25-which options is a key tool in the diagnosis and management of epilepsy and other seizure disorders

- 1. EEG
- 2. EMG
- 3. EOG
- 4. MMG

26-when we compare the level of a desired signal to the level of background noise, in fact, we calculate:

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|--------------------------|------------|
| 1. signal to noise ratio | 2. CT scan |
| 3. MRI | 4. TNM |

27-which option is not indications for performing electrocardiography

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|------------------------------------|---------------------------------|
| 1. seizures | 2. suspected pulmonary embolism |
| 3. suspected myocardial infarction | 4. diagnostic of coma |

28-pacemaker is related to

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|----------|---------|----------|------------------|
| 1. heart | 2. head | 3. ankle | 4. urinary tract |
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29-hyperkalemia in assessing severity of electrolyte abnormalities, means

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|---|-------------|
| 1. cardiac murmur | 2. collapse |
| 3. abnormally high potassium level in blood | 4. seizure |

30-percieved cardiac dysrhythmias, in this passage, cardiac is related to

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|-----------|----------|----------|---------|
| 1. muscle | 2. blood | 3. heart | 4. cell |
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شماره سوال	پاسخ صحیح
1	الف
2	د
3	الف
4	ج
5	الف
6	د
7	ج
8	الف
9	ب
10	ب
11	د
12	ج
13	د
14	الف
15	ج
16	ب
17	ب
18	الف
19	د
20	ج
21	الف
22	الف
23	ب
24	الف
25	الف
26	الف
27	د
28	الف
29	ج
30	ج