

سری سوال : یک ۱

زمان آزمون (دقیقه): تستی : ۶۰ تشریحی : ۶۰

تعداد سوالات : تستی : ۲۰ تشریحی : ۴

عنوان درس : زبان تخصصی، زبان تخصصی برق

رشته تحصیلی / کد درس : مهندسی برق - گرایش الکترونیک، مهندسی برق - گرایش قدرت، مهندسی برق - گرایش کنترل، مهندسی برق - گرایش مخابرات ۱۳۱۹۰۲۴ - ، مهندسی برق - گرایش الکترونیک، مهندسی برق - گرایش قدرت، مهندسی برق - گرایش کنترل مهندسی برق - گرایش مخابرات ۱۳۱۹۱۴۳

1- Choose the correct answer. (جای خالی را با گزینه مناسب پر کنید)

The energy of water may be converted to work by hydraulic

1. turbines 2. generators 3. boilers 4. towers

2- In some countries, most power station coal by rail.

1. is carrying 2. are carrying 3. is carried 4. are carried

3- Pure water is heated in the to produce steam at high pressure and high temperature.

1. cooling towers 2. condensers 3. boilers 4. exchangers

4- Energy is consumed by users at a utilization voltage that may range generally from 110 to 125V and from 220 to 250V.

1. incidental 2. symmetrical 3. coastal 4. nominal

5- A surge arrester the voltage surge to ground before it can do damage to the transformer.

1. meters 2. breaks 3. converts 4. drains

6- The inrush current of the rectifier transformer is generally the factor.

1. limit 2. limited 3. limiting 4. limits

7- An electronic circuit is composed of individual electronic such as resistors, transistors, capacitors, inductors and diodes, connected by wires.

1. components 2. constructs
3. conductors 4. communications

8- A/An is continuous and varies with time to correspond to the information being represented.

1. digital signal 2. analog signal 3. digital device 4. analog device

9- The word diode from the fact that the device has two (di) electrodes (ode).

1. derive 2. drive 3. is derived 4. is driven

10- When forward biased, the diode can current, while in the opposite polarity, it will current.

1. pass - apply 2. block - apply 3. block - supply 4. pass - block

11- The difference in the size of the packages is due to the different current of the diode.

1. ratings 2. biasing 3. protection 4. operations

سری سوال: یک ۱

زمان آزمون (دقیقه): تستی: ۶۰ تشریحی: ۶۰

تعداد سوالات: تستی: ۲۰ تشریحی: ۴

عنوان درس: زبان تخصصی، زبان تخصصی برق

رشته تحصیلی/کد درس: مهندسی برق - گرایش الکترونیک، مهندسی برق - گرایش قدرت، مهندسی برق - گرایش کنترل، مهندسی برق - گرایش مخابرات ۱۳۱۹۰۲۴ - ، مخابرات ۱۳۱۹۰۲۴ - ، مهندسی برق - گرایش الکترونیک، مهندسی برق - گرایش قدرت، مهندسی برق - گرایش کنترل مهندسی برق - گرایش مخابرات ۱۳۱۹۱۴۳

12-A bipolar transistor has two P-N and is created by a single piece of semiconductor with three alternate regions.

- | | |
|---------------------------|------------------------|
| 1. junctions – depleting | 2. polarities – doping |
| 3. depletion – connecting | 4. junctions – doping |

13-The package of the transistor will provide for electrical connection among the three semiconductor regions and the three transistor

- | | |
|------------------------|---------------------|
| 1. a means – terminals | 2. mean – holes |
| 3. a meaning – pads | 4. meanings – leads |

14-A mounted on a transistor can help conduct away any heat generated by the transistor.

- | | | | |
|--------------|----------------|-----------------|-------------------|
| 1. heat sink | 2. heat source | 3. current sink | 4. current source |
|--------------|----------------|-----------------|-------------------|

15-Predictable disturbances can always be within the system.

- | | | | |
|-------------|-----------------|--------------------|------------------|
| 1. fed back | 2. generated in | 3. compensated for | 4. compared with |
|-------------|-----------------|--------------------|------------------|

16-Feedback control systems are often referred to as closed-loop control systems. Therefore, the terms feedback control and closed loop control are used

- | | | | |
|--------------|--------------------|------------------|---------------|
| 1. adversely | 2. interchangeably | 3. automatically | 4. adaptively |
|--------------|--------------------|------------------|---------------|

17-In practice all control systems have some degree of This may be caused by hysteresis, backlash, saturation, etc.

- | | | | |
|--------------|----------------|-----------------|----------------|
| 1. linearity | 2. variability | 3. nonlinearity | 4. instability |
|--------------|----------------|-----------------|----------------|

18-A time-invariant control system is one whose parameters do not with time.

- | | | | |
|---------|-------------|----------------|--------------|
| 1. vary | 2. variable | 3. variability | 4. variation |
|---------|-------------|----------------|--------------|

19-..... noise is introduced by the receiver itself.

- | | | | |
|-------------|-------------|----------|----------|
| 1. internal | 2. external | 3. space | 4. solar |
|-------------|-------------|----------|----------|

20-The transmitted signal is during transmission, therefore it should be amplified in the receiving unit.

- | | | | |
|-------------|---------------|---------------|----------------|
| 1. detected | 2. attenuated | 3. propagated | 4. demodulated |
|-------------|---------------|---------------|----------------|

تعداد سوالات: تستی: ۲۰ تشریحی: ۴

زمان آزمون (دقیقه): تستی: ۶۰ تشریحی: ۶۰

سری سوال: یک ۱

عنوان درس: زبان تخصصی، زبان تخصصی برق

رشته تحصیلی/کد درس: مهندسی برق - گرایش الکترونیک، مهندسی برق - گرایش قدرت، مهندسی برق - گرایش کنترل، مهندسی برق - گرایش
مخابرات ۱۳۱۹۰۲۴ - ، مهندسی برق - گرایش الکترونیک، مهندسی برق - گرایش قدرت، مهندسی برق - گرایش کنترل
مهندسی برق - گرایش مخابرات ۱۳۱۹۱۴۳

سوالات تشریحی

- 21-Translate the following paragraphs: (جملات زیر را به فارسی روان ترجمه کنید) نمره ۱.۷۵
- The transformer is protected from overloads and faults by fuses or so-called weak links on the high-voltage side; the latter also usually include circuit-breaking devices on the low-voltage side. These operate to disconnect the transformer in the event of overloads or faults.
- 22-Some systems are designed specifically to manage the flow of power and therefore are only electrical, while other systems are designed to manage both power and information. For example, a television contains both electrical components and circuits that manage the flow of electrical power from the wall outlet and also electronic components and circuits that manage the flow of information or TV signals from the antenna or cable. نمره ۱.۷۵
- 23-For linear systems, there exists a wealth of analytical and graphical techniques for design and analysis purposes. Nonlinear systems, on the other hand, are usually difficult to treat mathematically, and there are no general methods available for solving a wide class of nonlinear systems. نمره ۱.۷۵
- 24-Electrical noise may be defined as any undesired voltages or currents that ultimately end up appearing in the receiver output. To the listener, this electrical noise often manifests itself as static. Noise signals at their point of origin are generally very small, for example, at the microvolt level. نمره ۱.۷۵