

Society for Promotion of Vocational & Technical Education [SOVTECH]

Recruitment for the Post of BMS Engineer (SDC)

Date of Examination: 04/01/2025

Exam Time: 02:00 PM - 02:30 PM

Exam Slot: A4

ANSWER KEY

#	Question	Answer Key	Remarks
1	<p>What is the primary function of an Access Control System?</p> <p>A. Provide surveillance B. Control unauthorized access C. Increase network speed D. Encrypt data</p>	B	
2	<p>Which component is essential for biometric access control?</p> <p>A. RFID tags B. Fingerprint scanner C. Keypad D. Magnetic stripe card</p>	B	
3	<p>Which of the following ensures secure access to sensitive areas?</p> <p>A. Firewalls B. Biometric authentication C. CCTV monitoring D. Encryption algorithms</p>	B	
4	<p>Which of the following is NOT an element of an access control system?</p> <p>A. Authentication B. Authorization C. Encryption D. Auditing</p>	C	
5	<p>What does RFID stand for in access control systems?</p> <p>A. Radio Frequency Identification B. Remote Field Identification C. Radio Frequency Integrated Device D. Remote Frequency Interaction Device</p>	A	
6	<p>What does PTZ stand for in CCTV cameras?</p> <p>A. Pan-Tilt-Zoom B. Point-Tilt-Zoom C. Pivot-Turn-Zoom D. Pan-Turn-Zoom</p>	A	
7	<p>What does CCTV stand for?</p> <p>A. Centralized Circuit Television B. Closed-Circuit Television C. Compact Circuit Television D. Continuous Circuit Television</p>	B	
8	<p>Which of the following is NOT a component of a basic CCTV system?</p> <p>A. Camera B. Display Monitor C. Microphone D. Video Recorder</p>	C	
9	<p>Which CCTV system uses the internet for video transmission?</p> <p>A. Analog CCTV B. IP Camera C. Coaxial CCTV D. Wireless Analog CCTV</p>	B	

10	<p>What does DVR stand for in a CCTV system?</p> <p>A. Digital Video Recorder B. Data Visual Recorder C. Dual Video Router D. Display Video Recorder</p>	A	
11	<p>What does VESDA stand for?</p> <p>A. Very Early Smoke Detection Apparatus B. Variable Energy Smoke Detection Apparatus C. Very Efficient Smoke Detection Apparatus D. Variable Efficiency Smoke Detection Apparatus</p>	A	
12	<p>What type of cooling method is typically used in precision air conditioners?</p> <p>A. Evaporative cooling B. Direct expansion (DX) cooling C. Natural ventilation D. Radiant cooling</p>	B	
13	<p>Which of the following is a common application of diesel generators?</p> <p>A. Powering small household appliances B. Providing backup power for hospitals C. Charging electric vehicles D. Running solar panels</p>	B	
14	<p>What is the primary function of a VESDA system?</p> <p>A. To extinguish fires B. To detect smoke at an early stage C. To provide ventilation D. To regulate temperature</p>	B	
15	<p>Which of the following is a common cause of UPS failure?</p> <p>A. Overcharging of the batteries B. Proper ventilation C. Regular maintenance D. Use of correct cables</p>	A	
16	<p>What frequency range is typically used in ultrasonic rodent repellents?</p> <p>A. 1-10 Hz B. 20-60 Hz C. 20-60 kHz D. 100-200 kHz</p>	C	
17	<p>What is a key consideration when placing an ultrasonic rodent repellent in a room?</p> <p>A. It should be placed near windows B. It should be placed in a corner where sound waves can disperse effectively C. It should be placed near food sources D. It should be placed in the center of the room</p>	B	
18	<p>Which of the following is the primary method used by ultrasonic rodent repellents?</p> <p>A. Emitting high-frequency sound waves B. Releasing chemical odors C. Producing vibrations in the floor D. Generating heat to deter rodents</p>	A	

19	<p>What is a major limitation of using ultrasonic rodent repellent systems?</p> <p>A. They are ineffective at high frequencies B. They are only effective in open spaces C. Rodents may become accustomed to the sounds over time D. They cause harm to pets</p>	C	
20	<p>Which component is crucial for generating ultrasonic waves in a rodent repellent system?</p> <p>A. Piezoelectric transducer B. Inductor C. Thermistor D. Electromagnetic coil</p>	A	
21	<p>What is a significant security challenge associated with smart racks?</p> <p>A. Unauthorized physical access B. High maintenance costs C. Vulnerability to cyberattacks on IoT sensors D. Difficulty in managing multiple devices</p>	C	
22	<p>Which technology is commonly used in smart racks for environmental monitoring?</p> <p>A. RFID sensors B. Infrared cameras C. IoT sensors D. Ultrasonic sensors</p>	C	
23	<p>What is the role of RFID in smart racks?</p> <p>A. Power monitoring B. Tracking assets and inventory management C. Managing cooling systems D. Securing the physical environment</p>	B	
24	<p>How do smart racks improve energy efficiency in data centers?</p> <p>A. By automatically shutting down idle servers B. By monitoring and optimizing power distribution and cooling C. By providing remote access to IT equipment D. By using renewable energy sources</p>	B	
25	<p>What is the primary function of a smart rack in a data center?</p> <p>A. Provide physical security B. Manage cable organization C. Monitor and optimize power, cooling, and space utilization D. Store hardware components securely</p>	C	
26	<p>In an ultrasonic water level detection system, what does the sensor measure?</p> <p>A. Water pressure B. Time of flight of sound waves C. Electrical conductivity D. Water temperature</p>	B	
27	<p>What is the primary advantage of using a capacitive water level sensor?</p> <p>A. Low power consumption B. Non-contact measurement C. Easy to clean D. Works well with saline water</p>	B	
28	<p>In industries, which water level detection system is most commonly used for precise liquid level control?</p> <p>A. Float-based system B. Resistive sensor system C. Ultrasonic level transmitter D. Pressure transducer system</p>	C	

29	Which sensor works based on the change in resistance with water presence? A. Ultrasonic sensor B. Conductive sensor C. Optical sensor D. Capacitive sensor	B	
30	What is the function of a relay in a water level control circuit? A. To sense water level B. To amplify the signal C. To switch the water pump ON or OFF D. To protect the circuit	C	