

Paper Code: M-EPA-EEPSIEB3002**Level 3**

Electrical, Electronic Product Service and Installation Engineer EPA Mock Multiple-choice Test - Brown Goods

Information for registered centres

The seal on this examination paper must only be broken by the candidate at the time of the examination.
Under no circumstances should a candidate use an unsealed examination paper.

Information for candidates

Under no circumstances should you, the candidate, use an unsealed examination paper.

This examination consists of 50 multiple-choice questions.

The exam is worth 100 marks, with a Pass being 66 marks, Merit 76 marks, and Distinction 90 marks.

The duration of this examination is 90 minutes.

You are **NOT** allowed any assistance to complete the answers.

You must use a pencil to complete the answer sheet - pens must **NOT** be used.

When completed, please leave the examination answer sheet (EAS) on the desk.

EXAMINATION ANSWER SHEET (EAS) INSTRUCTIONS:

For each question, fill in **ONE** answer **ONLY**.

If you make a mistake, ensure you erase it thoroughly.

You must mark your choice of answer by shading in **ONE** answer circle only.

Please mark each choice like this:

01 ☐ A ☐ B ☐ C ☒ **ANSWER COMPLETED CORRECTLY**

Examples of how NOT to mark your examination answer sheet (EAS). These will not be recorded.

01 ☐ A ☐ B ☐ C ☐ **DO NOT** partially shade the answer circle
ANSWER COMPLETED INCORRECTLY

01 ☐ A ☐ B ☒ ☒ **DO NOT** use ticks or crosses
ANSWER COMPLETED INCORRECTLY

01 ☐ A ☐ B ☐ C ☐ **DO NOT** use circles
ANSWER COMPLETED INCORRECTLY

01 ☐ A ☐ B ☐ C ☐ **DO NOT** shade over more than one answer circle
ANSWER COMPLETED INCORRECTLY

All candidates **MUST** sign the Examination Answer Sheet (EAS) in the bottom right-hand corner of the page before leaving the examination room.

1

What is safe isolation defined as?

- A. Disconnecting the installation from the live electrical supply
- B. Ensuring there is stored energy within the installation
- C. Erecting barriers around the installation
- D. Preventing access to the installation

2

Which of the following is **not** encouraged by the current Waste Electrical and Electronic Equipment (WEEE) Regulations?

- A. Incineration
- B. Recovery
- C. Recycling
- D. Reuse

3

The hazard from using an extension lead is electricity and the likelihood of harm is increased if the cable is damaged. What happens to the severity?

- A. It increases
- B. It is neutralised
- C. It reduces
- D. It stays the same

4

Bad sectors are found on a hard drive. Which of the following will this typically result in?

- A. Loss or corruption of data on the hard drive
- B. More storage capacity on the hard drive
- C. The hard drive overheating
- D. The hard drive using more power

5

What does an engineer need to ensure to obtain a reliable earth continuity reading on a desktop personal computer?

- A. That the computer case is plastic
- B. That the meter leads are fused
- C. That the meter leads used have a high resistance
- D. That the power cable is not damaged

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The Waste Electrical and Electronic Equipment (WEEE) Regulation logo, which is required to be on all electronic equipment, is a:

- A. laptop with a circle around it
- B. television in a skip
- C. television with a cross through it
- D. wheelie bin with a cross through it

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Which of the following is a **human** factor in the cause of accidents?

- A. A lapse in concentration
- B. A noisy computer fan in a workplace
- C. A wet kitchen floor
- D. Late arrival for work due to transport problems

8

What are error codes in computers designed to indicate?

- A. Basic operational settings
- B. Enhanced performance modes
- C. Maintenance schedules
- D. Specific faults

9

An appliance in the dark green efficiency label category can be described as:

- A. having a high water consumption
- B. having high CO2 emissions
- C. not very energy efficient
- D. very energy efficient

10

Conducting a systematic risk assessment and controlling the risks identified can:

- A. increase the likelihood of accidents and ill health
- B. increase the severity of injury
- C. reduce the amount of documentation required
- D. reduce the likelihood of accidents

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Which of the following is a **human** factor to consider when a significant physical effort is needed to operate a machine?

- A. The condition of the workplace where the machine will be used
- B. The individual strength of the operator
- C. The position in the workplace where the machine will be used
- D. The time that the machine is used on a daily basis

12

EU regulations specify that non-networked electrical devices sold after 2013 cannot have a standby power greater than:

- A. 0.5 watts
- B. 1.5 watt
- C. 2.5 watts
- D. 3.5 watts

13

Which of the following connection methods will **not** support full HDMI when connecting a laptop to a monitor?

- A. Display port cable
- B. HDMI cable
- C. USB-C cable
- D. VGA cable

14

What will loss of power during a BIOS upgrade typically cause?

- A. No sound from the system
- B. Slow system performance
- C. The system to become unstable
- D. The system to become unusable

15

What level of risk evaluation requires no action and no documentary records to be kept?

- A. Intolerable
- B. Moderate
- C. Substantial
- D. Trivial

16

BS EN 50361 is the British standard for which measurement related to the use of mobile phones?

- A. Specific absorption rate related to human exposure to electromagnetic fields
- B. The quality of design and functionality to meet accessibility and inclusion requirements
- C. The secure storage and disposal of sensitive materials and devices
- D. The use of lithium cells and batteries for portable applications

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Which of the following makes a laptop less efficient?

- A. Disconnecting all peripheral devices
- B. Enabling power-saving mode
- C. Shutting down the computer when not in use
- D. Using a charger regardless of battery power level

18

A suitable and sufficient risk assessment of the workplace can benefit the **employer** by demonstrating that:

- A. all staff have received relevant training
- B. members of the public cannot trespass on the premises
- C. opportunities for civil claims will be limited
- D. the workplace is safe as far as is reasonably practicable

19

What is the **maximum** POE (Power Over Ethernet) voltage?

- A. 6V
- B. 12V
- C. 24V
- D. 48V

20

What is the **most** likely outcome if the earth wire on an appliance has a loose connection?

- A. The appliance will use more electricity than normal
- B. The fuse in the plug top may fail prematurely
- C. The resistance reading of the earth wire will decrease
- D. The resistance reading of the earth wire will increase

21

A projector connected via HDMI has abruptly lost its picture and is now only displaying source detect. What would be the **first** step to finding the fault?

- A. Checking projector lamp hours
- B. Checking the HDMI connection
- C. Checking the laptop is still on
- D. Checking the projector is on

22

An alarm installation company is risk assessing falls from height when staff are using ladders. The hazard is injury falling from height, where the likelihood is high because of the frequency of ladder use. Which of the following is the **most** effective control to introduce?

- A. A-frame or shorter ladders
- B. Fall arrest equipment
- C. Mobile elevated work platforms
- D. Training for staff

23

Which program is an example of ransomware that can prevent access to files on a personal computer?

- A. BitLocker
- B. CryptoLocker
- C. CryptoVault
- D. File Vault

24

To protect themselves from hazards, an **employee** should:

- A. always have safety clothing and colleagues nearby
- B. be aware of personal safety and avoid taking risks
- C. complete the task assigned regardless of hazards
- D. only use fire safety rules when required

25

Which computer component usually drains the **most** energy?

- A. The graphics processing unit (GPU)
- B. The optical drive
- C. The random-access memory (RAM)
- D. The solid state drive (SSD)

26

How are tools checked to ensure they are fit for purpose?

- A. By comparing them with another worker's tools once a year
- B. By ensuring that they meet the ISO8573 standard
- C. By testing them until they break
- D. By visually ensuring the safe condition of the insulation and parts

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Which of the following will typically cause occasional picture breakup while watching an online streaming service on a television?

- A. A drop in internet bandwidth
- B. A loose network cable
- C. Atmospheric
- D. The television software being out of date

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Who should be consulted when conducting risk assessments?

- A. A health and safety consultant
- B. Employees and their representatives
- C. The Health and Safety Executive
- D. The local authority

29

What is the appropriate way to deal with any waste produced as a result of business operations?

- A. Waste must be disposed of by any means possible
- B. Waste must be disposed of without separation
- C. Waste must be stored outside, put in any bin or burned
- D. Waste must be stored safely, treated and collected, or recycled

30

What does insulation resistance testing of an appliance tell an engineer?

- A. If a component has a connection from live to earth or neutral to earth
- B. If a component has gone open circuit on the live to neutral path
- C. If there is a poor earth connection on the appliance
- D. If there is a short circuit on the earth connection to the chassis of the unit

31

Which of the following is required for a mobile phone to cast to a television when they both have compatible casting capabilities?

- A. Mobile phone and television are on different networks
- B. Mobile phone and television are on the same network
- C. Mobile phone is plugged into the television
- D. Mobile phone is within two metres of the television

32

A warehouse uses forklift trucks for picking stock and putting deliveries away. Staff from production may also come into the warehouse to collect items. How is a risk assessment of the severity and likelihood of an accident occurring calculated?

- A. Likelihood high x severity low
- B. Likelihood low x severity low
- C. Severity high x likelihood high
- D. Severity high x likelihood low

33

Which component stores the time and date settings of a personal computer?

- A. BIOS chip
- B. CMOS chip
- C. CPU socket
- D. RAM chip

34

Using PowerShell, what cmdlet would an engineer run to find an IP address of a website?

- A. Get-NetIPConfiguration
- B. Nslookup
- C. Resolve-DnsName
- D. Test-NetConnection

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What is the **first** principle of safe movement?

- A. Adopt a stable base
- B. Pick up the load to test its stability
- C. Pick up the load to test its weight
- D. Stop and think

36

If the random-access memory (RAM) is faulty on a customer's desktop personal computer this will typically cause:

- A. faster battery drain
- B. high levels of fan noise
- C. no sound from the speakers
- D. random system crashes

37

What is the **main** reason for having a circuit breaker on an electrical system?

- A. To enable additional appliances to be used in the circuit
- B. To govern the amount of electricity used
- C. To improve the efficiency of the system
- D. To stop the flow of electricity if there is a fault

38

Where **must** flammable chemicals be stored?

- A. In a cool, dry place away from heat and sunlight
- B. In an area with tools and equipment
- C. In an upright position, hidden from view
- D. In the same containers as other hazardous wastes

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Which of the following is an environmental factor that will typically impact insulation resistance testing?

- A. Excessive moisture
- B. Extreme dust
- C. Low lighting
- D. Poor ventilation

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When replacing a traditional external security camera with a wireless smart camera, what is the **key** thing to check before commencing installation?

- A. That the bracket and cabling can be re-used
- B. That the live video streams can be shared with the rest of the family
- C. That the smart camera can be set with the correct level of motion sensitivity
- D. That there is a sufficient Wi-Fi connection where the smart camera will be installed

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What does PAT testing involve?

- A. Checking the efficiency of appliances
- B. Cleaning and repairing appliances
- C. Inspecting the physical appearance of appliances
- D. Performing visual and electrical tests on appliances

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A voltage pen or stick is sometimes used to confirm an appliance is isolated from the mains supply. To ensure the voltage pen is working, an engineer should:

- A. change the batteries in the device prior to using it
- B. switch off the socket and place the voltage pen nearby and ensure it stays off
- C. test the voltage pen on a known working device, such as a kettle
- D. test the voltage pen on the customer's sink and ensure it stays off

43

Which of the following components are required for a computer to POST (Power On Self Test)?

- A. CPU, video card and power supply
- B. Motherboard, RAM, CPU and power supply
- C. Power supply, hard drive, motherboard and RAM
- D. Power supply, motherboard and CPU

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Which of the following is a requirement of **employees** under health and safety law?

- A. To cooperate with their employer
- B. To pay for additional required training
- C. To provide their own safety equipment
- D. To sign a disclaimer in case of an accident

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High temperature and humidity will typically impact insulation-resistant testing by:

- A. fluctuating the resistance
- B. increasing the resistance
- C. lowering the resistance
- D. resetting the resistance to zero

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In order to protect an electrical product from the ingress of moisture during transportation, it **must** be:

- A. packed in an ambient storage container
- B. packed with shock indicators
- C. wrapped in corrugated board
- D. wrapped in plastic film

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A user complains that their games console will not power on. What would be the **first** step in the fault finding process?

- A. Ask the user what code was displayed last
- B. Check the product is plugged into the mains
- C. Clean the fan
- D. Remove the disc

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Which of the following groups are **employers** liable for in terms of health and safety?

- A. Contractors, customers and unauthorised visitors
- B. Customers, employees and contractors
- C. Employees, friends and on-site visitors
- D. Employers, employees and their families

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What is meant by the phrase rebooting the computer?

- A. Installing a program on the computer
- B. Restarting the computer
- C. Scanning the computer
- D. Turning the computer off

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Which of the following **always** applies to a fail-safe device if a fault develops?

- A. The equipment becomes live
- B. The equipment has a manual switch
- C. The equipment operates without power
- D. The equipment remains safe

Level 3

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