

Paper Code: M-EPA-EEPSIEW3001

Level 3

Electrical, Electronic Product Service and Installation Engineer EPA Mock Multiple Choice Test - White 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 D **ANSWER COMPLETED CORRECTLY**

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

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

01 A B C D **DO NOT** use ticks or crosses
ANSWER COMPLETED INCORRECTLY

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

01 A B C D **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

The Electricity at Work Regulations requires that:

- A. all portable electrical equipment must undergo portable appliance testing (PAT) every 12 months
- B. all portable electrical equipment must undergo portable appliance testing (PAT) by an electrician
- C. employers replace electrical equipment every 7 years
- D. all electrical systems shall be maintained so as to prevent danger

2

Who is responsible under the Waste Electrical and Electronic Equipment (WEEE) regulations 2013?

- A. Customers
- B. Businesses, public and third-party organisations
- C. Local government
- D. The European Union

3

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

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

4

All vehicles transporting isobutane (R600a) refrigerant **must** have a:

- A. red flammable gas warning sticker
- B. gas safe sticker
- C. suitable ventilation system
- D. waste carrying licence

5

Carrying out a systematic risk assessment and controlling the risks identified can:

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

6

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

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

7

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 stays the same
- B. It increases
- C. It reduces
- D. The severity increases but the likelihood reduces

8

If an appliance needs to be installed in a bathroom, it is required to meet:

- A. IP10
- B. IPX4
- C. IP2X
- D. IPX2

9

For a laundry product to begin a cycle, what **must** the appliance confirm?

- A. That suitable detergent has been added
- B. That the door is closed
- C. That clothes are loaded
- D. The drum is in good condition

10

What would the **most** likely impact of a short circuit thermostat fault be on a 90-degree wash?

- A. Residual current device (RCD) trip
- B. No heat
- C. The programme won't start
- D. Poor wash results

11

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

- A. A lapse in concentration
- B. A wet kitchen floor
- C. A noisy saw in a joinery workshop
- D. Late arrival for work due to transport problems

12

Within what voltage range would a UK designed appliance be suitable?

- A. 220-240vDC
- B. 210-230vAC
- C. 220-240vAC
- D. 210-230vDC

13

To protect themselves from hazards, an employee should:

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

14

No action is required, and no documentary records need to be kept if the risk is evaluated as:

- A. intolerable
- B. substantial
- C. trivial
- D. moderate

15

When considering ambient temperatures, where is the **least** appropriate place for a fridge to be located?

- A. Kitchen
- B. Utility room
- C. Living room
- D. Garage

16

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

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

17

Tools should be checked whether they are fit for purpose by:

- A. doing an insulation test on the handle to the metal part of a screwdriver once a year
- B. testing them to destruction
- C. visually ensuring the safe condition of the insulation and all other parts prior to use
- D. ensuring that they meet the ISO8573 standard

18

What would be the **most** likely impact of an element open circuit fault on a fan-assisted appliance?

- A. An increase in noise
- B. No heat generated
- C. Intermittent heat
- D. Overheating

19

To safely isolate a cooker, you should turn off the:

- A. double pole isolation switch
- B. double pole isolation switch and lock it off
- C. miniature circuit breaker (MCB) for the cooker, lock it off and test for dead
- D. residual current device (RCD) for the cooker

20

A **human** factor related to the use of a machine that requires a significant physical effort to operate is the:

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

21

What is the **first** operation on a standard washing machine?

- A. Fill
- B. Agitate
- C. Heat
- D. Drain

22

The **main** reason for having a circuit breaker on an electrical system is to:

- A. protect electrical equipment from damage
- B. stop the flow of electricity if there is a fault
- C. enable additional appliances to be used in the circuit
- D. govern the amount of electricity used

23

To obtain a reliable earth continuity reading you need:

- A. the meter leads to have a high resistance
- B. fused meter leads
- C. a good bond from the earth wire of the mains lead to the chassis of the appliance
- D. to conduct a visual inspection of the connections inside the moulded plug

24

Flammable chemicals **must** be stored:

- A. in a cool, dry place away from heat and sunlight
- B. in an upright position
- C. near tools
- D. in the same containers as other hazardous wastes

25

Which washing machine cycle requires the highest water level?

- A. Cottons
- B. Synthetics
- C. Woolens
- D. Quick wash

26

Insulation resistance testing of an appliance will tell you if:

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

27

A class 1 appliance that is **not** earthed:

- A. may not power on
- B. will fail an insulation resistance test
- C. will trip the residual current device (RCD)
- D. may become live and produce a shock hazard

28

Having a holiday mode, automatic drying sensors and lower temperature washes are all examples of:

- A. old technology
- B. energy-saving features
- C. settings that complete tasks faster
- D. selectable programmes on freezers

29

Where available, what mode can be used to isolate components?

- A. Service mode
- B. Programming mode
- C. Calibration mode
- D. Customer mode

30

The **first** principle of safe movement is to:

- A. pick up the load to test its weight
- B. pick up the load to test its stability
- C. adopt a stable base
- D. stop and think

31

Which one of the following factors can affect insulation resistance testing?

- A. A cooker that needs to go through a 'drying out' procedure
- B. Using liquid detergent in a washing machine
- C. A dishwasher being used in a soft water area
- D. A tumble dryer that has a humidity sensing program

32

A warehouse uses numerous forklift trucks for picking stock and putting deliveries away. Staff from production may also come into the warehouse to collect items. Risk assess the severity and likelihood of an accident occurring.

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

33

To isolate components when running a functional test, it is **best** to:

- A. run the appliance on engineer service mode
- B. run through a full programme
- C. complete a live test
- D. run the test alongside a similar specification appliance

34

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

- A. 0.5 watts
- B. 1 watt
- C. 2 watts
- D. 5 watts

35

A voltage pen or voltage stick is sometimes used to help confirm an appliance is isolated from the mains supply. To ensure this is fit for purpose you should:

- A. put the device near the supply cable of the isolated appliance and ensure it does not emit a light or a sound
- B. change the batteries in the device prior to using it
- C. test the voltage pen or stick on the metal cabinet of the appliance, if it does not emit a light or a sound
- D. test the voltage pen or stick near a supply cable of an appliance that is connected to the mains, if it emits a light or a sound this proves it is working and can be used

36

The **least** likely result of a single component failure is:

- A. normal operation
- B. complete breakdown
- C. less efficient working
- D. partial breakdown

37

Which of the following **best** describes a fail-safe device?

- A. If there is a fault the equipment remains safe
- B. If a fault develops the equipment may be dangerous to use
- C. The equipment has a switch that can be operated if a fault occurs
- D. Only persons that have been trained can use the equipment

38

Where available, what can an appliance store internally that will aid with diagnostics?

- A. Programme options
- B. Fault codes
- C. Recent history
- D. Smart programmes

39

A common user-induced variable responsible for a fault is:

- A. incorrect loading
- B. water fill level
- C. insufficient damping
- D. overheating

40

A requirement of employees under health and safety law is to:

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

41

On replacing a singular component it is good practice to:

- A. only inspect associated components when reported faulty
- B. replace associated components regardless of the fault
- C. inspect associated components for breakdown due to the fault
- D. take no action with any associated components

42

Who should be consulted when carrying out risk assessments?

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

43

You must ensure that any waste you produce as a result of your business operations is:

- A. documented and labelled
- B. stored safely, treated and collected or recycled
- C. separated into individual sections
- D. disposed of by any means possible

44

Upon notification of a fault, the appropriate diagnostic step to take **first** would be to:

- A. question the user
- B. order spares immediately
- C. disconnect the appliance
- D. write off the appliance

45

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

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

46

Failure to reduce a full load from the washing machine when transferring it into a dryer is **most** likely to result in:

- A. the residual current device (RCD) tripping
- B. poor drying results
- C. overheating
- D. leaks

47

Where a component is suspected to be faulty, the **most** appropriate programme to select to eliminate potential causes is a:

- A. random programme
- B. programme that uses all components
- C. programme that only uses that component
- D. programme that does not use that component

48

Since 2012, all new refrigeration appliances must legally have a rating of at **least**:

- A. A+
- B. A
- C. B
- D. G

49

An alarm installation company is risk assessing falls from height when staff are using ladders. The hazard is injury falling from height; the likelihood is high because of the frequency with which this operation occurs. Which is the **most** effective control to reduce the likelihood of the hazard being realised?

- A. Introduce mobile elevated work platforms to minimise ladder work
- B. Train the staff in the safe use of ladders and ensure their inspection prior to use
- C. Introduce fall arrest equipment
- D. Always have 2 people for each task requiring ladders – one to act as a footer

50

If an appliance is being used in a damp cellar, the **most** likely result of this is:

- A. a high insulation resistance reading
- B. a low insulation resistance reading
- C. the earth continuity reading to be too low
- D. the supply voltage will rise by 10%









Level
3

Highfield Qualifications

Highfield House
Heavens Walk
Lakeside
Doncaster
South Yorkshire
DN4 5HZ
United Kingdom

01302 363277
info@highfield.co.uk
www.highfieldqualifications.com