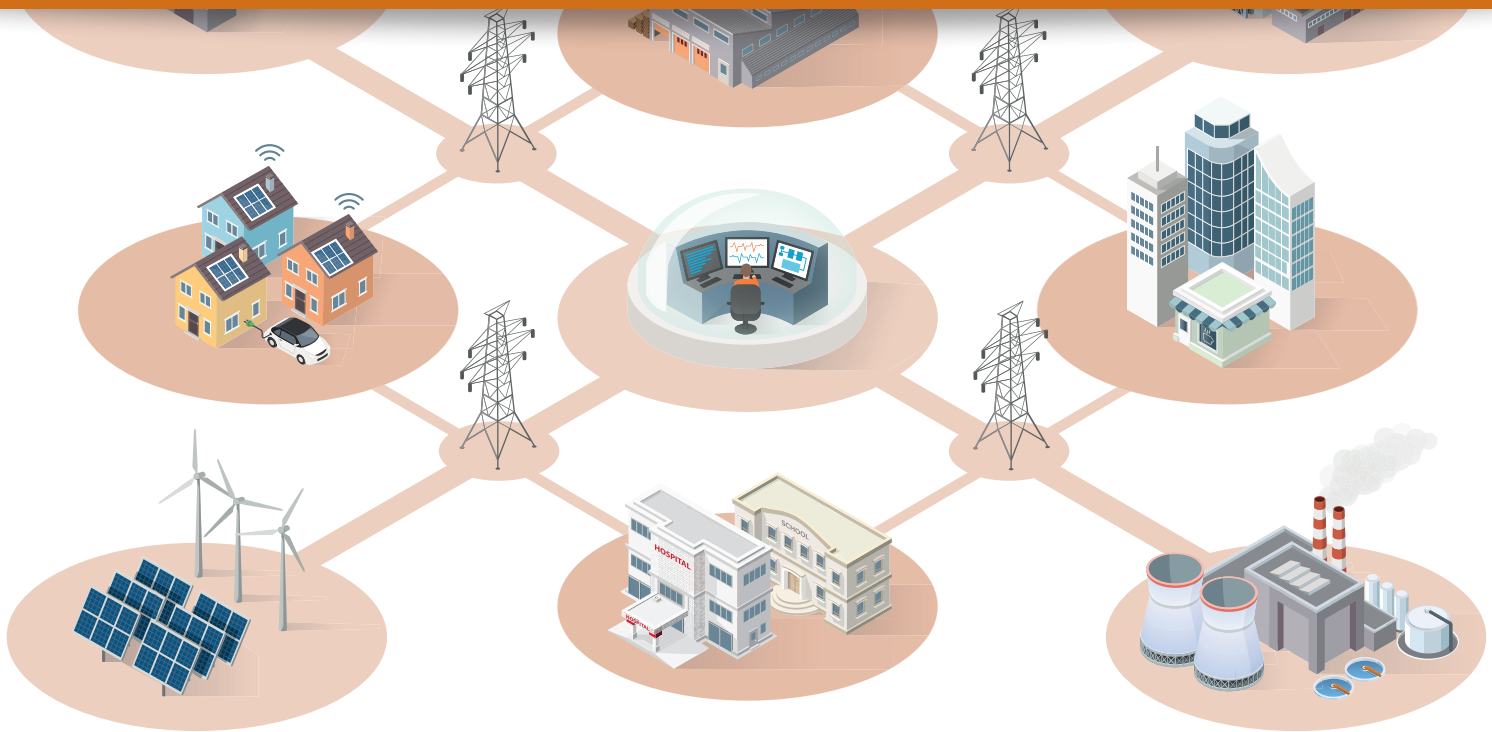
EDA ELECTRICAL DISTRIBUTORS' ASSOCIATION

PRINCESS ROYAL TRAINING AWARD 2025

EXEMPLAR END OF MODULE ASSESSMENT

Part of the EDA Electrotechnical Product Knowledge Programme

GUIDANCE ON HOW TO ANSWER THE QUESTIONS



In partnership with:

City & Guilds ACCREDITED

CPD CERTIFIED The CPD Certification Service

V4: 1/6/26

Introduction

The EMA is an open-book assessment. Learners can use the electronic course, textbook, the internet, ask colleagues, or refer to any technical material or catalogues to inform their answers. The answers must be in the learner's own words. Please refer to our Malpractice Policy which you can find on our website: www.eda.org.uk.

The EMA is made up as follows:

1. Ten multiple choice questions, all with 4 choices of answer.
2. Five short questions requiring free form text answers.
3. Two long questions requiring free form text answers.

There is no time limit for completing the EMA, but it must be completed and uploaded/returned within the 10-week course period.

Electronic Module

The EMA will be on their dashboard at the same time as their course. The assessment can be started at any time. It does not need to be completed in one go. The multiple choice test is marked straight away by the computer. However, the learner is required to download a booklet for their short and long answer questions. All text and pictures can be added to the booklet. Once complete it should be uploaded on the EDA Academy.

Textbook Module

The EMA is ordered by the Manager and sent out by email (the EMA is not sent out automatically). It can be ordered at a time to suit the individual, so long as it's returned within the 10 weeks. This means, if you wish to order the EMA as the workbook is started, you can. The submission date will remain the same as identified in the welcome letter. The EMA is returned to the us by email.

Results are issued within six weeks. City & Guilds registers the grade and issues the certificate.

This assessment guidance document will explain the requirements of the End of Module Assessment.

Multiple Choice Test

The multiple-choice test consists of 10 questions in a standard multiple-choice format of one question with 4 possible answers. Candidates are required to select one answer. The electronic course and textbook can be used to help to select the correct answer.

An example of a multiple-choice question ***(Wiring Devices and Controls)***:

No	Question	Answer
	What does the "IP" mean when used in the electrical context of rating and/or code. A: Internet Protocol B: Ingress Protection C: Intellectual Property D: Immersible Pump	Select answer A ○ B ● C ○ D ○

The total mark for the multiple-choice test is 10.

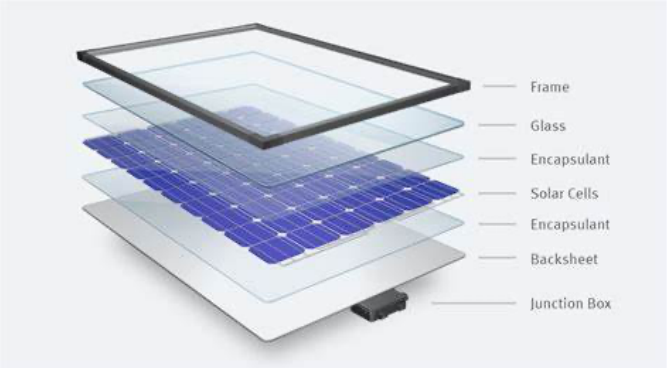
If you are completing the multiple choice test on the EDA Academy you will receive your marks as soon as you submit.

Short Answer Questions *(Renewables)*

The short answer questions can be answered using the contents of the electronic course and/or the textbook. They require free form text answers, possibly enhanced by information from other sources such as manufacturer's technical information.

Each short answer question has a maximum of 5 marks.

An example of a question and possible answer showing how the marks would be achieved: ***Renewables (including EV Charging)***

Question:
Explain what a PV cell is and identify the material make-up of a solar module.
Answer:
PV means photovoltaic **(1 mark).** A PV system or a solar power system, is an arrangement of components designed to absorb and convert sunlight into electricity **(1 mark).** A PV module is created by sandwiching together glass, encapsulate and solar cells. A junction box is placed on the back **(1 mark).** The electrical connections to the module are provided by a pair of connecting cables that exit via a junction box that is mounted on the laminate rear surface. Polarized plug and socket-outlet connectors are fixed onto the cable ends. **(1 mark)**    **(1 mark)**

Marks are allocated as follows:

0 mark	**1 mark**	**2 marks**	**3 marks**	**4 marks**	**5 marks**
You have not submitted an answer or your answer does not demonstrate any part of the question	You have only demonstrated part of the answer	You have demonstrated most of the answer	You have demonstrated a good level of knowledge however you have not demonstrated a higher-level response	You have demonstrated a good level of knowledge including some higher-level response	You have demonstrated a higher level of knowledge meeting and exceeding that required by the question.

Long Answer Questions

The long answer question requires the learner to research information from other sources, such as the internet, other reference manuals and manufacturer's technical information as well as using the electronic course and/or textbook. It is important that you answer the question in full so as not to lose any marks.

Each question has a maximum of 15 marks.

An example of a question and possible answer showing how the marks would be achieved: ***(Introduction to the Principles of Electricity)***

Question:

With regards to Electrical Safety Legislation:
a) Explain why we have legislation for Electrical Safety (2 marks)
b) Briefly describe the purpose and objectives of the following regulations:

- Electrical Safety, Quality and Continuity Regulations 2002 (2 marks)
- Electrical Equipment (Safety) Regulations 2016 (2 marks)
- Plugs and Sockets etc (Safety) Regulations 1994 (2 marks)
- Electricity at Work Regulations 1989 V (2 marks)
- The Provision and Use of Work Equipment Regulations 1998 (PUWER) (2 marks)
- Construction Products Regulations 2013 (2 marks)

c) List two other pieces of Legislation that exist for electrical equipment (1 mark in total)

Answer:

a) We have legislation for Electrical safety for several reasons but the most important is that faulty products or faulty installation can cause fire or accident resulting in injury or death to either the installer or the end-user. **(1 mark)** The Legislation ensures that products are manufactured to a high standard using the correct materials and that installation is appropriate and carried out by qualified people. **(1 mark)**

b) ***Electrical Safety, Quality and Continuity Regulations 2002***
These Regulations specify safety standards which are aimed at protecting the public and consumers from danger. In addition, the Regulations specify power quality and supply continuity requirements to ensure an efficient and economic electricity supply service for consumers. This Regulation places general duties on generators, distributors, suppliers, and meter operators. **(2 marks)**

Electrical Equipment (Safety) Regulations 2016
These Regulations have been updated in 2021 due to Brexit. The Regulations apply to all electrical equipment that is designed or adapted for use between 50 and 1,000 volts (in the case of alternating current) and 75 and 1,500 volts (in the case of direct current). The Regulations cover domestic electrical equipment and equipment that is intended for use in the workplace.

The obligations of manufacturers of electrical equipment include:

- Ensuring the equipment has been designed and manufactured in accordance with the principal elements of the safety objectives.
- Draw up a declaration of conformity
- Affix the UKCA marking to the equipment.
- Keep technical documentation and the declaration of conformity for 10 years after the equipment has been placed on the GB market
- Label the equipment with their name, registered trade name or registered trademark and address; the batch or serial number (or other identification); and ensure that it is accompanied by instructions which are clear, legible and in easily understandable English. Act where they have reason to believe that the electrical equipment, they have placed on the GB market is not in

conformity with the legal requirements of the 2016 Regulations or where the equipment presents a risk **(2 marks)**

Plugs and Sockets etc (Safety) Regulations 1994
These Regulations apply to electrical appliances intended for domestic use. Many of these appliances will, however, also be used in the workplace.

The Regulations are divided into 3 parts:
- Part I Approval of electrical devices;
- Part II Fitted plug provisions; and
- Part III Information requirements.

The Regulations require domestic mains powered appliances to be fitted with a standard plug conforming to BS 1363. **(2 marks)**

Electricity at Work Regulations 1989 V
The purpose of these Regulations is to require precautions to be taken against the risk of death or personal injury from electricity in work activities. The regulations impose duties on persons in respect of systems, electrical equipment and conductors and in respect of work activities on or near electrical equipment.

The Regulations expand on the rules regarding electrical safety in the Health and Safety at Work Act 1974. Employers are given duties and responsibilities to make sure that all work activity that uses or may be affected by electricity is done safely, and that all foreseeable risks are assessed and minimised as much as possible.

The regulations are not purely to prevent electric shocks, but also mean employers must consider the suitability, design, construction, and installation of electrical systems used for specific tasks in the workplace, where such systems are sited, and the protection and precautions provided for the use of such systems.

In most workplaces, the most common use of the regulations is the PAT Testing of all electrical devices. **(2 marks)**

The Provision and Use of Work Equipment Regulations 1998 (PUWER)
The Provision and Use of Work Equipment Regulations 1998 (or 'PUWER') were introduced to ensure that all the equipment you use in the workplace is suitable, safe, and operated by trained people. It sets out numerous health and safety requirements for providing and using equipment at work, which the responsible person must manage. **(2 marks)**

Construction Products Regulations 2013
These regulations came into force on 1st July 2013 and have since been updated due to Brexit.

They laid down harmonised conditions for the marketing of constructions product (trade not use); ensured reliable information on constructions products in relation to their performance (although not a declaration of quality); uniform assessment methods for performance and rules for factory production, technical specifications and using common technical language (one technical language across Europe). It also laid down the necessity to use the CE marking.

Following Brexit the Regulations have been amended and although still in line with the European directive they now require the use of the UKCA mark. **(2 marks)**

c) Two other pieces of legislation that exist for electrical equipment are:
- The Waste Electric and Electronic Equipment (WEEE) Regulations 2013; and
- BS7671 Electrical Wiring Regulations **(1 mark)**

Marks are awarded based on the table below:

0 – 5 marks	6 – 10 marks	11 - 15 marks
You have demonstrated most of the answer	You have demonstrated a good level of knowledge and some higher-level responses	You have demonstrated a higher level of knowledge meeting and exceeding that required by the question.

Overall total 65 marks, with the following grading:

(a) To pass – at least 40% in each part

i. 4 marks from Part 1, PLUS
ii. at least 10 marks from Part 2, PLUS
iii. at least 12 marks from Part 3

(b) With overall levels:

i. 52-65 marks – Distinction
ii. 46-51 marks – Credit
iii. 39-45 marks – Pass
iv. 0-38 marks - Fail