7 o/c 4 - Which of the following items does not offer 'basic' protection:
a a circuit protective conductor.
b a socket outlet.
c a lampholder.
d equipotential bonding conductors.

8 18 o/c4 - Class II equipment is used as a measure of:
a overvoltages.
b indirect protection.
c basic protection.
d fault protection.

9 o/c4 table 41.3 - Maximum earth fault loop impedance, according to BS 7671:2008, for 6A Type B circuit breakers giving compliance to 0.4s disconnection time will be:
a 7.67 ohms.
b 8.00 ohms.
c 8.52 ohms.
d 16.4 ohms.

10 o/c4 table 41.1 - All final circuits supplied at 230V and not exceeding 32A shall have a maximum disconnection time not exceeding:
a 0.2s.
b 0.4s.
c 0.8s.
d 5.0s.

12 o/c 4 Which is a method of fault protection
1 out of reach
2 Reinforced insulation
3 Obstacles
4 Insulation of live parts

12 Oc4 **An undervoltage device has operated and restoring the supply may cause danger. The reclosure of this device should be**
a automatic when under the supervision of a competent person
b manually operated
c possible only with the use of a key or tool
d automatic with time delay.
Answer b See Part 4: Protection for safety, Regulation 445.1.5.

13 o/c4 **In locations with increased risks of fire, motors which are automatically or remotely controlled, or which are nolt continuously supervised, shall be protected against excessive temperature by**
a a protective device that is automatically reset
b a protective device with manual reset
c electronic monitoring equipment that resets
d electronic monitoring equipment that restarts the motor.

422.3.7

14 o/c 5 - Circuits feeding fixed equipment used in highway power supplies shall have a maximum disconnection time of:
a 0.2 seconds.
b 0.4 seconds.
c 2.0 seconds.
d 5.0 seconds.

15 o/c 5 - A main switch must be capable of withstanding:
a the prospective short circuit current at that point.
b twice the earth loop fault current.
c twice the prospective short circuit current.
d twice the maximum demand.

16 o/c5 **A wiring system is to be installed between a safety source and a main distribution board. The risks required to be reduced to a minimum do <u>not</u> include**
a short-circuit
b earth fault
c ageing
d fire.
Answer c See Part5: Selection and erection of equipment, Regulation 560.8.3.

17 o/c5 514.4.2 - Single core protective conductors coloured green and yellow shall have one of the colours cover the surface at least and at most:
a 30% and 70%.
b 20% and 80%.
c 50% and 50%.
d 40% and 60%.

18 o/c5 **A plug and socket-outlet may be used for switching off for mechanical maintenance as long as it does not have aurating exceeding**
a 13A
b 16A
c 32A
d 45A.
537.3.2.6

19 **oc5 Where more than one firefighter's switch is installed on any one building, each switch must be**
a not more than 3.75m from the ground
b in a locked location to prevent nuisance operation
c electrically linked -
d clearly marked.
537.6.3

20 **o/c6 A simple method to allow for measured values of loop impedance to be effectively compared with tabulated maximum values is to correct these maximum values by multiplying them by**

a 0.75
b 0.8
c 1.2
d 1.8.

Answer b See Part 6: Inspection and testing, Regulation 612.9, and Appendix 14.

21 **oc6 When completing an Electrical Installation Certificate, the person who does noj have to sign the certificate would be the**

a tester
b client
c constructor
d designer.
632.3

22 o/c7 - Which one of the following protective measures is not applicable to equipment in Zone 2 of a swimming pool:

a individual protection by electrical separation.
b protection by obstacles.
c SELV.
d protection by an RCD in accordance with Regulation 415.1.1.

23 o/c7 **Within a conducting location with restricted movement, supplies to 110 V mobile equipment must provide protection against electric shock by the use of**

a electrical separation
b Class II protection
c obstacles
d PELV.

Answer a See Part 7: Special installations or locations, Regulation 706.410.3.10.

24 o/c7 The minimum cross sectional area for a cable carrying up to 25A in a caravan shall be:

a 2.5mm2.
b 4mm2.
c 6mm2.
d 10mm2.

25 o/c 7 - In marinas, equipment installed above a jetty and where it might be subject to water splashes shall have a degree of ingress protection to at least:

a IPX4.
b IPX5.
c IPX6.
d IPX7.

26 o/c 7 - If cleaning by use of water jets in a room containing a sauna heater electrical equipment shall have a degree of protection against ingress of at least:
a IP5X.
b IP X5.
c IP4X.
d IPX4.

27 o/c 7 - In agricultural premises an RCD may be used for protection against fire. The current rating should not exceed:
a 30 mA.
b 100 mA.
c 300 mA.
d 500 mA.

28 **oc7 Electrical equipment in a circus installation must have a degree of protection of at least**
a IP33
b IP4X
c IP44
d IPX8.
740.512.2

29 o/c 8 app7 - The positive and negative conductors in two-wire unearthed d.c. power circuits are identified by the colours:
a red and black.
b red and blue.
c brown and grey.
d brown and black.

30 **oc8 A 2.5 mm^2 thermoplastic insulated and sheathed flat cable with protective conductor is laid in a ceiling beneath thermal insulation 80 mm thick in contact with the ceiling board, as shown in the figure below. What is its installed rating?**
a 17 A
b 20A
c 21A
d 27 A
app4 table 4A2 method 100 and table 4D5