



FESS Fire and Security Combined Pathway

Section E: Assessment of Underpinning Knowledge

Study Guide

To help candidates prepare for Section E of the FESS End Point Assessment (Fire and Security Combined Pathway), NET has compiled a series of questions which cover some of the knowledge needed for the test.

The answers are not provided for this study guide. Candidates should discuss their suggested answers with their training providers to look at where further learning or practice may be needed.

1. What is the minimum recommended standby battery time for a fire system?

- a) 48hrs
- b) 8hrs
- c) 12hrs
- d) 24hrs

2. The British Standard for Fire Alarm Systems is...?

- a) BS 7671
- b) BS 5839
- c) BS 5655
- d) BS 5266

3. Which of the answers below are types of fire detectors?

- a) Passive Infra-Red
- b) Ionization
- c) Photoelectric
- d) Microwave

4. What is the minimum mounting height for a manual call point on a fire system?

- a) 1mtr
- b) 1.2mtr
- c) 1.4mtr
- d) 0.8mtr

5. A particular sensor uses PIR (Passive Infra-Red) and Microwave elements, it is commonly called a...?

- a) Dual-Tech
- b) PIR-Micro
- c) Dual Sensing
- d) Double-Tech

- 6. An environmental classification of IV on an intruder alarm device is found, what does this mean?**
- a) Indoor
 - b) Outdoor (Sheltered)
 - c) Indoor (General)
 - d) Outdoor (General)
- 7. Complete the sentence: The term “real time recording” on a DVR means that the unit is:**
- a) Operating 24/7
 - b) Capable of capturing and recording video at 25-30fps or more
 - c) Capable of capturing and recording video at 35-45fps
 - d) Capable of capturing and recording video at 20-30fps
- 8. What type of cable should be used in industrial applications where there is a high probability of electrical noise?**
- a) Shielded or screened cable
 - b) Alarm cable
 - c) Multi core cable
 - d) LSFH cable
- 9. What current British Euro standard defines the application guidelines for access control systems?**
- a) BS EN 50131-7
 - b) BS EN 50133-7
 - c) BS EN 50136-7
 - d) BS EN 60839-11-2
- 10. What is the overall resistance value of two 2.2 KOhm resistors connected in parallel?**
- a) 1.1 KOhms
 - b) 4.4 Ohms
 - c) 1.2 KOhms
 - d) 4.4 KOhms
- 11. Where enclosures are rated for weather resistance, what does the second digit of the rating refer to?**
- a) Resistance to ingress to solids
 - b) Resistance to mechanical damage
 - c) Resistance to impact
 - d) Resistance to ingress of fluids
- 12. A cable that gives off reduced emissions can be branded as 'LSF' if...?**
- a) It conforms to British Standards
 - b) It is made of light sustainable fabric
 - c) It gives off zero emissions
 - d) It gives off reduced emissions

ADDITIONAL PRACTICE / STUDY HELP

For these additional questions you may need to go away and do some research. They're intended to help you gain the kind of knowledge you'll need for the online test.

Please note the actual online test during your assessment is completely multiple choice. You will not be presented with the style of question you find below.

Discuss the questions and your answers with your training provider.

13. The sensing element of a Heat Detector is 20mm below the ceiling, is this acceptable?

- a) Yes
- b) No

14. An Optical Beam Smoke detector is mounted at 25metres high, is this acceptable?

- a) Yes
- b) No

15. You are installing an FP200 type cable onto existing cable tray, but you only have nylon cable ties available, what should you do?

16. What level of sound would be expected through a normal door upon fire alarm activation?

17. What is SCI when associated with fire alarm components?

18. What is the effective radius coverage of a smoke detection device?

19. What must a grade 2 sensor have fitted?

20. What is the definition of a Grade 2 Intruder Alarm system?

21. What does BS EN 50131 link to?

22. What is Advanced Video Coding used for in CCTV?

23. The distance between the lens of the camera and the image sensor when the subject is in focus can be described as...?

24. When installing CCTV on a camera tower, what factor is MOST important when considering the construction of the base of the tower?

25. When requesting a civils contractor to provide underground ductwork, it is important to specify the installation of what?

26. Magnetic door locking devices should have a holding retention force of at least....?



- 27. The Control of Noise at Work Regulations provide for hearing protection to be required when the daily noise exposure reaches or exceeds how many decibels?**
- 28. What current British Euro standard defines the system and component requirements for access control systems?**
- 29. What is the final approximate resistance of the following resistors connected in parallel? 200 Ohms, 470 Ohms and 220 Ohms? Show your formula and working out**
- 30. What is the first activity that must be completed to prove a circuit is dead after isolation?**