

Level 3 : Cube award in CCTV Installation - Test 17 -



CQ:

Candidates answer on the Question Paper

Other Materials Required: A calculator may be used

Duration: 45 minutes

INSTRUCTIONS TO CANDIDATES

There are 12 questions, which have a total of 15 marks. In order to gain a pass mark you must achieve 60% of the total marks (9 marks). You will also have needed to complete successfully an observation of your skills for this award by your tutor to achieve certification.

The numbers of marks in the brackets following a question equates to the number of answers you must give, e.g. 2 marks = 2 answers. Each question links to the award standard (e.g. 1.1).

On successful completion of this questionnaire along with your observation you will receive a certificate of achievement from the awarding organisation, NCFE. You are expected to complete this on your own and any plagiarism of any kind will be subject to the Centre's Malpractice Policy.

1. Use black or blue ink. HB pencil may be used for graphs and diagrams only.
2. Complete the boxes below with your name, signature, date of birth and date of training.
3. Answer all the questions.
4. Write your answer to each question in the space provided. (If you require an additional sheet, please attach a separate sheet, and be sure to include the question number and your surname.)
5. Do not write in bar codes.
6. Do not use your mobile phones.

INFORMATION FOR CANDIDATES

1. The total number of marks for this paper is 15 and you should score at least 9 to pass.
2. The number of marks for each question is given in brackets [] at the end of the question or part question.

Assessment checked and approved by the: Ferdinand Joseph (IQA)

AF Reginold

02/08/2020

First name (please use capital letters):	
Last name:	
Signature:	
Date of birth:	
Date of training:	

For office use only

	PRINT NAME	SIGNATURE	DATE OF ACTION
TRAINER			
ASSESSOR			
IQA			

Marks achieved for the assessment paper...../15

PASS YES / NO

Please answer all questions:

1. List three advantages of a digital camera signal over an analogue camera signal? (1.2.2)	Marks [1 mark]
Comments: (To be completed by the assessor.)	

2. What are C and CS mounts in a CCTV lens? (3.2.5)	Marks [1 mark]
Comments:(To be completed by the assessor.)	

3. What is the difference between DC (direct current) and AC (alternating current)? ((2.1.1, 2.1.2, 2.1.3)	Marks [1 mark]

Comments: (To be completed by the assessor)	
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4.How much voltage is extra low voltage in accordance with the BS7671? (2.5.2)	Marks [1 mark]
Comments: (To be completed by the assessor)	

5. What are the considerations you should give to the power requirements of the CCTV system? (List at least two) (2.5.3)	Marks [1 mark]
Comments: (To be completed by the assessor)	

6. If cameras are to be mounted on towers or brackets what environmental considerations should be made? (List at least two factors) (3.2.1, 3.2.2)	Marks [1 mark]
Comments:(To be completed by the assessor)	

7. What is the use of DHCP? (Dynamic Host Control Protocol) (5.1.3, 5.2.1, 5.2.1)	Marks [1 mark]
Comments:(To be completed by the assessor)	

8. What is the use of P2P in CCTV applications? (5.2.2, 5.2.4)	Marks [1 mark]
Comments: (To be completed by the assessor)	

9. What is the relationship between frames per second and recording resolution? (3.2.1, 3.2.2)	Marks [1 mark]
Comments	

10. How does an auto Iris work in a CCTV camera lens (3.1.1, 3.1.2)	Marks [1 mark]
Comments: (To be completed by the assessor)	

11. Please calculate the voltage drop, cable resistance 0.036 Ohms per m (cable pair), distance = 100m, camera requires = 8 Watts and camera power requirement = 12V DC 25% + or - (Please show all your work for full marks, use extra paper if necessary) (2.1.3, 2.1.4)	Marks [2.5 mark]
Comments	

12. Please calculate the correct focal lens size in mm, required field of view width is 2m, distance from camera to object is 25m, sensor size is $\frac{1}{3}$ " (4.8 x 3.6 mm) (Please show all your work for full marks, use extra paper if necessary) (3.1.2, 3.1.3, 3.1.4)	Marks [2.5 mark]
Comments: (To be completed by the assessor)	

The End