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(1\_606384) - الرؤية الحاسوبية -

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202120205\_رغد سعيد جبريل الهندي\_DS&amp;AI

**Status** Finished**Started** Wednesday, 21 January 2026, 11:45 AM**Completed** Wednesday, 21 January 2026, 12:55 PM**Duration** 1 hour 10 mins**Grade** 25.67 out of 40.00 (64.17%)

Question 1

Correct

Mark 1.00 out of 1.00

Thresholding converts a grayscale image into:

- a. Binary image 
- b. Edge image
- c. Double image
- d. Color image

Your answer is correct.

The correct answer is: Binary image

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 11:46:31	Saved: Binary image	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

Question 2

Incorrect

Mark 0.00 out of 1.00

Why is Canny edge detection preferred?

- a. It handles noise well
- b. It is fastest
- c. It works on color images
- d. It produces thick edges ✘

Your answer is incorrect.

The correct answer is: It handles noise well

Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:10:57	Saved: It is fastest	Answer saved
3	21/01/26, 12:12:58	Saved: It produces thick edges	Answer saved
4	21/01/26, 12:55:37	Attempt finished	Incorrect

Question 3

Correct

Mark 1.00 out of 1.00

An image of size 200 × 300 stored as a grayscale image contains how many intensity values?

- a. 60,000 ✓
- b. 200
- c. 180,000
- d. 300

Your answer is correct.

The correct answer is: 60,000

Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:10:57	Saved: 60,000	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

Question 4

Incorrect

Mark 0.00 out of 1.00

In `cv2.resize(img, (200,200))`, the values represent:

- a. Rows then columns ✗
- b. Height then width
- c. Width then height
- d. Scale factors

Your answer is incorrect.

The correct answer is: Width then height

Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 11:48:03	Saved: Rows then columns	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Incorrect

Question 5

Correct

Mark 1.00 out of 1.00

Histogram equalization may reduce image contrast if the original image already has a well-distributed range of intensity values

- True ✓
- False

The correct answer is 'True'.

Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:11:45	Saved: True	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

Question 6

Incorrect

Mark 0.00 out of 1.00

Adaptive thresholding uses a single global threshold value.

- True ✗
- False

The correct answer is 'False'.

Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 11:48:03	Saved: True	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Incorrect

Question 7

Correct

Mark 1.00 out of 1.00

Why do many algorithms prefer grayscale images?

- a. They reduce computation cost ✓
- b. They contain more color information
- c. They enhance contrast automatically
- d. They increase image resolution

Your answer is correct.

The correct answer is: They reduce computation cost

Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:14:17	Saved: They contain more color information	Answer saved
3	21/01/26, 12:19:47	Saved: They reduce computation cost	Answer saved
4	21/01/26, 12:55:37	Attempt finished	Correct

Question 8

Correct

Mark 1.00 out of 1.00

Histogram equalization helps to:

(Note: this is an MAQ)

- a. Improve contrast ✓
- b. Spread pixel intensities ✓
- c. Remove noise
- d. Detect edges

Your answer is correct.

The correct answers are: Improve contrast, Spread pixel intensities

### Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 11:51:29	Saved: Improve contrast ; Spread pixel intensities	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

## Question 9

Incorrect

Mark 0.00 out of 1.00

Which operator detects edges in both directions at once?

- a. Sobel
- b. Laplacian
- c. Gaussian ✘
- d. Canny

Your answer is incorrect.

The correct answer is: Laplacian

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 11:51:29	Saved: Gaussian	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Incorrect

## Question 10

Correct

Mark 1.00 out of 1.00

Which filter assigns the average of neighboring pixels?

- a. Gaussian Blur
- b. Median Blur
- c. Averaging Blur ✔
- d. Sharpening

Your answer is correct.

The correct answer is: Averaging Blur

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 11:53:29	Saved: Averaging Blur	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

## Question 11

Correct

Mark 1.00 out of 1.00

Which operations help clean noisy binary images?

(Note: this is an MAQ)

- a. Closing ✘
- b. Opening ✔
- c. Sharpening
- d. Erosion ✔

Your answer is correct.

The correct answers are: Erosion, Opening

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 11:53:29	Saved: Erosion	Answer saved
3	21/01/26, 11:54:15	Saved: {\$a}	Not yet answered
4	21/01/26, 12:25:04	Saved: Closing ; Opening ; Erosion	Answer saved
5	21/01/26, 12:55:37	Attempt finished	Correct

## Question 12

Correct

Mark 1.00 out of 1.00

Brightness adjustment changes pixel intensity uniformly across the image.

- True ✔
- False

The correct answer is 'True'.

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:25:04	Saved: True	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

## Question 13

Correct

Mark 1.00 out of 1.00

Histogram equalization is applied to:

- a. Binary images
- b. RGB images directly
- c. Color histograms only
- d. Grayscale images ✓

Your answer is correct.

The correct answer is: Grayscale images

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 11:57:18	Saved: Grayscale images	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

## Question 14

Correct

Mark 1.00 out of 1.00

Which method detects keypoints and computes binary descriptors?

- a. HOG
- b. ORB ✓
- c. Harris
- d. Contours

Your answer is correct.

The correct answer is: ORB

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:19:59	Saved: ORB	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

## Question 15

Correct

Mark 1.00 out of 1.00

Which operations are mainly used for visualization and debugging?

(NOTE: this is a MAQ)

- a. Adding text ✓
- b. Saving images
- c. Drawing rectangles ✓
- d. Thresholding ✗

Your answer is correct.

The correct answers are: Drawing rectangles, Adding text

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 11:57:18	Saved: Saving images ; Drawing rectangles	Answer saved
3	21/01/26, 12:41:21	Saved: Adding text ; Drawing rectangles ; Thresholding	Answer saved
4	21/01/26, 12:55:37	Attempt finished	Correct

## Question 16

Incorrect

Mark 0.00 out of 1.00

Sobel operator computes intensity changes separately along X and Y directions.

- True ✗
- False

The correct answer is 'False'.

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 11:58:05	Saved: True	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Incorrect

Question 17

Incorrect

Mark 0.00 out of 1.00

Sharpening filters reduce noise in images.

- True ✘
- False

The correct answer is 'False'.

Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 11:58:05	Saved: True	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Incorrect

Question 18

Incorrect

Mark 0.00 out of 1.00

Which OpenCV feature makes it suitable for real-time applications?

- a. Optimized algorithms
- b. GUI support ✘
- c. Cloud integration
- d. Built-in datasets

Your answer is incorrect.

The correct answer is: Optimized algorithms

Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 11:58:05	Saved: Cloud integration	Answer saved
3	21/01/26, 12:36:10	Saved: GUI support	Answer saved
4	21/01/26, 12:55:37	Attempt finished	Incorrect

## Question 19

Correct

Mark 1.00 out of 1.00

Which smoothing filter best removes salt-and-pepper noise?

- a. Gaussian
- b. Laplacian
- c. Median ✓
- d. Averaging

Your answer is correct.

The correct answer is: Median

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 11:59:40	Saved: Gaussian	Answer saved
3	21/01/26, 12:27:51	Saved: Median	Answer saved
4	21/01/26, 12:55:37	Attempt finished	Correct

## Question 20

Correct

Mark 1.00 out of 1.00

Corners are considered stable image features.

- True ✓
- False

The correct answer is 'True'.

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:27:51	Saved: True	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

## Question 21

Correct

Mark 1.00 out of 1.00

HOG mainly captures:

- a. Color distribution
- b. Texture noise
- c. Edge orientation patterns ✓
- d. Pixel intensity values

Your answer is correct.

The correct answer is: Edge orientation patterns

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 11:59:40	Saved: Edge orientation patterns	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

## Question 22

Incorrect

Mark 0.00 out of 1.00

Google Colab requires manual installation of OpenCV before use.

- True ✗
- False

The correct answer is 'False'.

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:01:26	Saved: True	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Incorrect

## Question 23

Incorrect

Mark 0.00 out of 1.00

Which preprocessing step is MOST suitable for data augmentation?

- a. Flipping
- b. ROI cropping
- c. Histogram equalization ✘
- d. Grayscale conversion

Your answer is incorrect.

The correct answer is: Flipping

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:01:26	Saved: Histogram equalization	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Incorrect

## Question 24

Correct

Mark 1.00 out of 1.00

A histogram with most values near 0 indicates the image is:

- a. Bright
- b. Dark ✔
- c. Overexposed
- d. Balanced

Your answer is correct.

The correct answer is: Dark

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:01:49	Saved: Dark	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

## Question 25

Incorrect

Mark 0.00 out of 1.00

Which model is considered a simple baseline classifier?

- a. Logistic Regression ✘
- b. SVM
- c. CNN
- d. KNN

Your answer is incorrect.

The correct answer is: KNN

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:03:43	Saved: Logistic Regression	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Incorrect

## Question 26

Incorrect

Mark 0.00 out of 1.00

Which task belongs to the pre-processing stage of Computer Vision?

- a. Decision-making ✘
- b. Object classification
- c. Image thresholding
- d. Face recognition

Your answer is incorrect.

The correct answer is: Image thresholding

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:22:40	Saved: Decision-making	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Incorrect

Question 27

Correct

Mark 1.00 out of 1.00

Why are features extracted from images?

- a. To reduce computational complexity ✓
- b. To enhance color quality
- c. To store images efficiently
- d. To increase image size

Your answer is correct.

The correct answer is: To reduce computational complexity

Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:03:43	Saved: To reduce computational complexity	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

Question 28

Correct

Mark 1.00 out of 1.00

Machine Learning models operate directly on raw pixels in this course.

- True
- False ✓

The correct answer is 'False'.

Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:04:58	Saved: False	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

## Question 29

Correct

Mark 1.00 out of 1.00

Which thresholding method automatically selects the best cutoff value?

- a. Binary
- b. Otsu ✓
- c. Simple
- d. Adaptive

Your answer is correct.

The correct answer is: Otsu

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:04:58	Saved: Otsu	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

## Question 30

Correct

Mark 1.00 out of 1.00

Which operation fills small black holes?

- a. Opening
- b. Dilation
- c. Erosion
- d. Closing ✓

Your answer is correct.

The correct answer is: Closing

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:04:58	Saved: Closing	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

Question 31

Correct

Mark 1.00 out of 1.00

Why is Python commonly used with OpenCV?

- a. It integrates well with NumPy arrays ✓
- b. It produces faster compiled code
- c. It requires no memory management
- d. It replaces C++ implementations

Your answer is correct.

The correct answer is: It integrates well with NumPy arrays

### Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:05:52	Saved: It produces faster compiled code	Answer saved
3	21/01/26, 12:32:38	Saved: It integrates well with NumPy arrays	Answer saved
4	21/01/26, 12:55:37	Attempt finished	Correct

Question 32

Partially correct

Mark 0.67 out of 1.00

What are the valid environments mentioned for OpenCV development?

(NOTE: This is an MAQ.)

- a. Google Colab ✓
- b. Android Studio
- c. Jupyter Notebook ✓
- d. PyCharm

Your answer is partially correct.

You have correctly selected 2.

The correct answers are: Jupyter Notebook, PyCharm, Google Colab

Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:21:28	Saved: Google Colab ; Jupyter Notebook	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Partially correct

Question 33

Incorrect

Mark 0.00 out of 1.00

Resizing an image to a very large size may cause loss of details.

- True ✗
- False

The correct answer is 'False'.

Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:21:28	Saved: True	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Incorrect

## Question 34

Incorrect

Mark 0.00 out of 1.00

Which image representation stores values in the range [0, 1] by convention?

- a. RGB color image
- b. Binary image ❌
- c. uint8 grayscale image
- d. Double image

Your answer is incorrect.

The correct answer is: Double image

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:06:18	Saved: Binary image	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Incorrect

## Question 35

Correct

Mark 1.00 out of 1.00

Which operation shrinks white regions?

- a. Erosion ✔️
- b. Closing
- c. Opening
- d. Dilation

Your answer is correct.

The correct answer is: Erosion

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:06:18	Saved: Erosion	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

## Question 36

Correct

Mark 1.00 out of 1.00

Opening is defined as:

- a. Dilation → Erosion
- b. Threshold → Blur
- c. Erosion → Dilation ✓
- d. Blur → Threshold

Your answer is correct.

The correct answer is: Erosion → Dilation

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:06:18	Saved: Erosion → Dilation	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

## Question 37

Correct

Mark 1.00 out of 1.00

Morphological operations are mainly applied to binary images.

- True ✓
- False

The correct answer is 'True'.

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:07:04	Saved: True	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

## Question 38

Incorrect

Mark 0.00 out of 1.00

A binary image always occupies less memory than a grayscale image.

- True 
- False

The correct answer is 'False'.

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:07:04	Saved: True	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Incorrect

## Question 39

Correct

Mark 1.00 out of 1.00

Which are shape features?

(Note: this is an MAQ)

- a. Perimeter 
- b. Aspect ratio 
- c. Area 
- d. Histogram

Your answer is correct.

The correct answers are: Area, Perimeter, Aspect ratio

## Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:07:04	Saved: Perimeter ; Aspect ratio ; Area	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

Question **40**

Correct

Mark 1.00 out of 1.00

In the CV pipeline, Machine Learning is applied after:

- a. Image saving
- b. Feature extraction ✓
- c. Visualization
- d. Image capture

Your answer is correct.

The correct answer is: Feature extraction

### Response history

Step	Time	Action	State
1	21/01/26, 11:45:09	Started	Not yet answered
2	21/01/26, 12:07:17	Saved: Feature extraction	Answer saved
3	21/01/26, 12:55:37	Attempt finished	Correct

◀ Announcements

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