

## Quiz

**Note:** It is recommended that you save your response as you complete each question.

### Question 1 (5 points)



What is the non-drop code that represents the 99th frame in a video with frame rate being 25?

- ☐ 00:00:03:24
- ☐ None of the above
- ☐ 00:00:00:99
- ☐ 00;00;03;24
- ☐ 00;00;00;99

Save

### Question 2 (5 points)



To achieve 50% compression just using YUV color subsampling, which of the following should be used?

- ☐ 2:2:2
- ☐ 4:0:0
- ☐ 4:4:4
- ☐ 4:2:2
- ☐ 4:1:1

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### Question 3 (5 points)



Which of the following is the television broadcast standard for US and Japan?

- ☐ NTSC
- ☐ PAL
- ☐ None of the above
- ☐ SECAM

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### Question 4 (5 points)



Which of the following compression methods achieves higher compression for videos without much motion difference such as for talking

heads?

- ☐ spatial compression
- ☐ temporal compression
- ☐ lossless compression
- ☐ asymmetric compression

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### Question 5 (5 points)



Given a 10 second video which is 100Mega Bytes in size, if you paly this video on a device that can handle a 7MB/s data rate, the playback of the video will be \_\_\_\_\_.

- ☐ choppy
- ☐ unknown, depending on the type of computer the video is played on.
- ☐ All of the above
- ☐ smoothy

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### Question 6 (5 points)



For a GOP of a video with the structure IBBBBPBBBBPBBBBPBBBB, what are the values for the N parameter and the M parameter, respectively?

- ☐ 20, 5
- ☐ 15, 5
- ☐ 20, 3
- ☐ None of the above
- ☐ 15, 3

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### Question 7 (5 points)



\_\_\_\_ is the least compressed among the following frame types.

- ☐ P-frame
- ☐ B-frame
- ☐ I-frame
- ☐ Q-frame
- ☐ X-frame

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**Question 8 (5 points)**

In the YUV color model, the Y-component is the \_\_\_\_\_, the U-component is the \_\_\_\_\_, and V-component is the \_\_\_\_\_.

- ☐ chrominance; luminance; luminance
- ☐ chrominance;chrominance;luminance
- ☐ luminance;luminance;chrominance
- ☐ luminance; chrominance; luminance
- ☐ luminance; chrominance; chrominance

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**Question 9 (5 points)**

Which of the following is true?

- ☐ For streaming video, the file usually remains on the user's hard disk after playback, for example, in their Web browser's cache.
- ☐ There is no sampling and quantization involved in capturing the motion in digital video.
- ☐ The timecode representing the 35th frame is either 00:00:00:35 or 00;00;00;35.
- ☐ Pixel aspect ratio means the ratio of a pixel's width to its height.

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**Question 10 (5 points)**

A frame size of a video refers to the video's \_\_\_\_\_.

- ☐ resolution
- ☐ frame aspect ratio
- ☐ pixel aspect ratio
- ☐ dpi
- ☐ ppi

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**Question 11 (5 points)**

HDTV is in \_\_\_\_\_ format.

- ☐ MPEG-4
- ☐ AVI
- ☐ MPEG-2
- ☐ MPEG-1
- ☐ QuickTime

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**Question 12** (5 points)



For a TV with frame aspect ratio being 16:9 and frame size being 1440:1080, what is the pixel aspect ratio for this TV?

- ☐ 1.2
- ☐ 0.9
- ☐ 1.0
- ☐ 1.5
- ☐ 1.333

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**Question 13** (5 points)



What is the data rate for a video with file size of 2GB and lasting 10 minutes? Choose the closest one.

- ☐ 3.3 MB/second
- ☐ 6.7 MB/second
- ☐ 2.5 MB/second
- ☐ 1 MB/second
- ☐ 20 MB/second

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**Question 14** (5 points)



The frame rate for the NTSC system is \_\_\_\_\_ fps.

- ☐ 28.97
- ☐ 25
- ☐ 24
- ☐ 29.97
- ☐ 30.97

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**Question 15** (5 points)



If a given uncompressed video is 640 by 480 in frame resolution, 25 frames per second in frame rate, use 24 bit color depth, 10 seconds in duration, what is its file size in MB. Choose the closest one.

- ☐ 230MB
- ☐ 330MB
- ☐ 30MB
- ☐ 130MB
- ☐ 430MB

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### Question 16 (5 points)



If a frame with pixel aspect ratio 1.2 is displayed on a device using pixel aspect ratio of 1.0, the image will be \_\_\_\_\_.

- ☐ stretched horizontally
- ☐ stretched vertically
- ☐ cropped at the left and right edges
- ☐ cropped at the top and bottom
- ☐ displayed correctly

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### Question 17 (5 points)



Several high definition video camcorders are available to record 720p and 1080i formats. The letters "p" and "i" in each format name stand for \_\_\_\_\_ and \_\_\_\_\_ respectively.

- ☐ proprietary; infrastructure
- ☐ progressive; interlaced
- ☐ ppi;ppi
- ☐ pixels;inches

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### Question 18 (5 points)



\_\_\_\_\_ refers to the type of the compression method that exploits the repetitious image content over time.

- ☐ lossy compression
- ☐ temporal compression
- ☐ spatial compression
- ☐ lossless compression
- ☐ asymmetric compression

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**Question 19** (5 points)

Which of the following support the DVD-video, HDV, and HDTV standards?

- ☐ AVI
- ☐ MPEG-4
- ☐ QuickTime
- ☐ MPEG-2
- ☐ MPEG-1

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**Question 20** (5 points)

For a given video, which of the following is correct?

- ☐ When the N parameter of the GOP increases, the resulting video has shorter GOPs.
- ☐ When the N parameter of the GOP increases, there are more I-frames in the resulting video.
- ☐ When the N parameter of the GOP increases, the file size of the resulting video is smaller.
- ☐ None of the above
- ☐ When the N parameter of the GOP increases, the quality of the resulting video is better.

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Save All Responses

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