

Section A:

Q1: Animation is considered as captured media. ~~x~~ synthesis

Q2: Antivirus software is categorized as system software. ✓ → Operating system / antivirus software / utilities software

Q3: Multimedia authoring process consists of 3 stages which are pre-authoring, authoring and post authoring. ✓

Q4: Adobe Audition is a software that is used for image editing. ~~x~~ audio editing

Q5: Storyboards can be used as a communication tools. ✓

Q6: Vector graphics are the computer drawing that consists of pixels elements. ~~x~~ → form using polygonal shape / mathematical → raster image

Q7: Most of the multimedia applications that are available in the market till year 2022 are linear based multimedia. ~~x~~ Non-linear (Interactive)

Q8: Lossy compression for images does not guarantee exact reproduction of the original after decompression. ✓ (JPEG / MP3 use lossy)

Q9: Sans serif fonts are suitable to be used for newspaper printing. ~~x~~ serif

Q10: Multimedia programmers integrated all the multimedia elements of a project into a seamless whole using authoring system or programming language. ✓

TRUE/ FALSE (10 marks)

Q1	False ✓	Q6	False ✓
Q2	True ✓	Q7	False ✓
Q3	True ✓	Q8	True ✓
Q4	False ✓	Q9	False ✓
Q5	True ✓	Q10	True ✓

(10)

Section B: (20 marks)

Q1: Storyboard serves the purpose of capturing an idea quickly.

Thumbnails / Rough Storyboards

Q2: The testing of multimedia application before launching in the market usually performed in post-authoring stage.

Q3: Interactivity empowers the end users by letting them control the content and flow of information.

Q4: Image Editing Software are available for creating and manipulating bitmap images.

Vector Graphics

Q5: Graphic Editing Software provide an elegant way of constructing digital images whose representation is compact, scalable, resolution independent and easy to edit.

Q6: Multimedia is defined as combination of two or more media elements (multimedia building block), such as text, graphics, audio, video and animation integrated using a computer.

Video Specialists

Q7: Video Producer hold the responsibility in managing all phases of video production, from concept to final edit.

Q8: When using the text media element, to avoid the "ransom-note effect" that is a busy and difficult to read design resulting from extensive use of fonts and type styles on one screen.

Q9: JPEG uses lossy compression which means that some image quality is lost when the data is compressed and saved, and this quality can never be recovered.

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Q10: colour depth is the number of bits used to indicate the color of a single pixel.

Section C: (15 marks)

Q1: Given the resolution of 24 bits image is 800 X 600. Calculate the following:

(a) Number of possible colors

(2 marks)

$$2^{24} = 16777216 \text{ possible colours}$$

2

(b) File size in KB

(3 marks)

$$\begin{aligned} \text{Image File size} &= \text{width} \times \text{height} \times (\text{colour depth} / 8) \text{ bytes} \\ &= 800 \times 600 \times (24 / 8) \\ &= 1440000 \text{ bytes} \\ &= 1440000 / 1024 \\ &= 1406.25 \text{ KB} \end{aligned}$$

$$8 \text{ bits} = 1 \text{ byte}$$

$$1 \text{ KB} = 1024 \text{ bytes}$$

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Q2: List any **TWO (2)** examples for continuous media.

(2 marks)

Audio and Video

2

2-D animation

3-D animation

Q3: Differentiate between raster image and vector graphics by illustrating any **TWO (2)** characteristics for each. (4 marks)

Raster Image

- Photo realistic
- Bigger file size than vector graphic
- Made up of little squares, known as pixels
- When enlarged, edges become jagged

Vector Graphic

- Non photo realistic
- Smaller file size than raster image
- Made up of lines, arcs and shapes that have mathematical relation
- When enlarged, edges are clean

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Q4: Briefly discuss any **TWO (2)** activities that normally performed during pre-authoring stage. (4 marks)

User requirements gathering: Development team will discuss with users about their requirements to ensure the mutual understanding among development team and clients. good!

Storyboarding design: Development team will create storyboards which helps show the overview of the entire project. storyboard also act as a communication tool for development team and client / third party / investors

Media elements preparation: All media elements required to produce multimedia project are prepared (text / image / video / audio) editing

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ALL THE BEST ☺