

Paper ID: WD004

Course Code: DWAD-04T

Examination (January - 2024)
Certificate/ Diploma (Semester-II)
Programme in Web Application Development

Digital Imaging

Time Allowed: 2 Hours**Max. Marks: 70****Instructions for the Students**

1. The question paper shall consist of 70 Multiple Choice questions.
2. All questions are compulsory. Each question carries 1 mark.
3. There will be no negative marking.

<p>Q1. Aspect Ratio can be defined as -</p> <ol style="list-style-type: none"> a) The ratio of the vertical points to horizontal points b) Number of pixels in the image c) Both (a) & (b) d) None of the above 	<p>Q6. Which of the following uses the Beam penetration method?</p> <ol style="list-style-type: none"> a) Raster scan system b) Random scan system c) Both (a) & (b) d) None of the above
<p>Q2. Which of the following is not the pattern of line?</p> <ol style="list-style-type: none"> a) Dotted line b) Dashed line c) Dark line d) All of the above 	<p>Q7. The video device with reduced volume, power consumption and weight is -</p> <ol style="list-style-type: none"> a) CRT b) Flat-panel display c) Portable display d) None of the above
<p>Q3. Which of the following transformation is used for altering the object's size?</p> <ol style="list-style-type: none"> a) Translation b) Scaling c) Rotation d) None of the above 	<p>Q8. A binary image contains how many values?</p> <ol style="list-style-type: none"> a) 2 b) 5 c) 6 d) 1
<p>Q4. Which is not the input device?</p> <ol style="list-style-type: none"> a) Impact printers b) Trackball c) Mouse d) Keyboard 	<p>Q9. 24 bit color format also known as?</p> <ol style="list-style-type: none"> a) True color format. b) red color format c) both a) and b) d) Null
<p>Q5. Random scan systems are used for -</p> <ol style="list-style-type: none"> a) Color drawing application b) Pixel drawing application c) Line drawing application d) None of the above 	<p>Q10. Digitizing the coordinate values of a continuous image is called</p> <ol style="list-style-type: none"> a) Compression b) Quantization c) Sampling d) Segmentation

<p>Q11. Which of the following is the first and foremost step in Image Processing?</p> <p>a) Image acquisition b) Segmentation c) Image enhancement d) Image restoration</p>	<p>Q21. Which of the following file formats is an example of lossy compression only?</p> <p>a) GIF b) PNG c) JPEG d) TIFF</p>
<p>Q12. Which of the following image processing approaches is the fastest, most accurate, and flexible?</p> <p>a) Photographic b) Electronic c) Digital d) Optical</p>	<p>Q22. PNG stands for_____.</p> <p>a) Portable Node Graphics b) Picture Node Graphics c) Portable Network Graphics d) Pure Node Graphics</p>
<p>Q13. Among the following image processing techniques which is fast, precise and flexible.</p> <p>a) Optical b) Digital c) Electronic d) Photographic</p>	<p>Q23. Compressed image can be recovered back by</p> <p>a) image enhancement b) image decompression c) image contrast d) image equalization</p>
<p>Q14. _____ determines the quality of a digital image.</p> <p>a) The discrete gray levels b) The number of samples c) discrete gray levels & number of samples d) None of the mentioned</p>	<p>Q24 Information is the _____.</p> <p>a) data b) meaningful data c) raw data d) Both A and B</p>
<p>Q15. An image is considered to be a function of $a(x,y)$, where a represents:</p> <p>a) Height of image b) Width of image c) Amplitude of image d) Resolution of image</p>	<p>Q25. Which of these image file formats do not scale very well?</p> <p>a) TIFF b) GIF c) JPEG d) BMP</p>
<p>Q16. Which of the following is the abbreviation of JPEG?</p> <p>a) Joint Photographic Experts Group b) Joint Photographs Expansion Group c) Joint Photographic Expanded Group d) Joint Photographic Expansion Group</p>	<p>Q26. Reducing the data required referred to</p> <p>a) image enhancement b) image compression c) image contrast d) image equalization</p>
<p>Q17. What is pixel?</p> <p>a) Pixel is the elements of a digital image b) Pixel is the elements of an analog image c) Pixel is the cluster of a digital image d) Pixel is the cluster of an analog image</p>	<p>Q27. Which of the following comes under the application of image blurring?</p> <p>a) Image segmentation b) Object motion c) Object detection d) Gross representation</p>
<p>Q18. The digitization process, in which the digital image comprises M rows and N columns, necessitates choices for M, N, and the number of grey levels per pixel, L. M and N must have which of the following values?</p> <p>a) M have to be positive and N have to be negative integer b) M have to be negative and N have to be positive integer c) M and N have to be negative integer d) M and N have to be positive integer</p>	<p>Q28. PNG File format is best for_____</p> <p>a) High Quality prints b) Archival copies c) Scans d) Web images</p>
<p>Q19. Which of the following tool is used in tasks such as zooming, shrinking, rotating, etc.?</p> <p>a) Filters b) Sampling c) Interpolation d) None of the Mentioned</p>	<p>Q29. The range of values spanned by the gray scale is called:</p> <p>a) Dynamic range b) Band range c) Peak range d) Resolution range</p>
<p>Q.20. The effect caused by the use of an insufficient number of intensity levels in smooth areas of a digital image is _____.</p> <p>a) False Contouring b) Interpolation c) Gaussian smooth d) Contouring</p>	<p>Q30. Which is a colour attribute that describes a pure colour?</p> <p>a) Saturation b) Hue c) Brightness d) Intensity</p>

<p>Q31. Color model is also named as (another name):</p> <p>a) Color space b) Color gap c) Color space & color system d) Color system</p>	<p>Q41. A typical size comparable in quality to monochromatic TV image is of size.</p> <p>a) 256 X 256 b) 512 X 512 c) 1920 X 1080 d) 1080 X 1080</p>
<p>Q32. What do you mean by the term pixel depth?</p> <p>a) It is the number of bits used to represent each pixel in RGB space b) It is the number of bytes used to represent each pixel in RGB space c) It is the number of units used to represent each pixel in RGB space d) It is the number of mm used to represent each pixel in RGB space</p>	<p>Q42. The number of grey values are integer powers of:</p> <p>a) 4 b) 2 c) 8 d) 1</p>
<p>Q33. How many bit RGB color image is represented by full-color image?</p> <p>a) 32-bit RGB color image b) 24-bit RGB color image c) 16-bit RGB color image d) 8-bit RGB color image</p>	<p>Q43. _____ is a type of digital painting and 2d animation software , also known as a raster graphics editor.</p> <p>a) Krita b) Abode c) Paint d) Notepad</p>
<p>Q34. What is the equation used to obtain S component of each RGB pixel in RGB color format?</p> <p>a) $S = 1/3 \cdot (R+G+B)$ [min (R,G,B)]. b) $S = 1/3 \cdot (R+G+B)$ [max (R,G,B)]. c) $S = 1-3/(R+G+B)$ [max (R,G,B)]. d) $S = 1-3/(R+G+B)$ [min (R,G,B)].</p>	<p>Q44. Which of the following is the advantage of Krita?</p> <p>a) It is open-source software so it has large community support. b) It comes with a large number of brushes which help in creating complex digital artwork. c) It allows 2D animation and image editing in an easy manner. d) All of the above</p>
<p>Q35. A file with the EXR file extension is an _____ bitmap file.</p> <p>a) OpenEXR b) Extension c) Extra d) OpenCV</p>	<p>Q45. In krita files are save with the _____ extension.</p> <p>a) .kra b) .kera c) .csv d) .krax</p>
<p>Q36. _____ is the most widely used term to denote the elements of a digital image.</p> <p>a) Pixel b) Number c) Coordinates d) None</p>	<p>Q46. _____ can be understood as a vector image-creating software which produces SVG images.</p> <p>a) Inkscape b) Photoshop c) Paint d) Photo editor</p>
<p>Q37. GIF stands for</p> <p>a) Graphics Interchange Format b) Graphical Interface Format c) Graphical Interface Function d) Graphics Integrated Format</p>	<p>Q47. Inkscape is available in nearly _____ languages.</p> <p>a) 90 b) 7 c) 4 d) 2</p>
<p>Q38. Print resolution is measured in _____.</p> <p>a) Pixels per inch (PPI). b) Dots per inch(DPI) c) Lines per inch d) None of the above</p>	<p>Q48. _____ does not support android systems.</p> <p>a) Krita b) Inkscape c) Both a and b d) None of the above</p>
<p>Q39. Which of the following color models are used for color printing?</p> <p>a) RGB b) CMY c) CMYK d) CMY and CMYK</p>	<p>Q49. Full form of SVG is</p> <p>a) Scalable Vector Graphic b) Small Vector Graphic c) Scale Vector Grid d) All of the above</p>
<p>Q40. Which gives a measure of the degree to which a pure colour is diluted by white light?</p> <p>a) Saturation b) Hue c) Intensity d) Brightness</p>	<p>Q50. _____ retains image quality on the zooming.</p> <p>a) Krita b) Inkscape c) Both a and b d) None of the above</p>
<p>Q51. GIMP is an _____ image editing tool.</p>	<p>Q61. What is Digital Image Processing?</p>

<ul style="list-style-type: none"> a) Open source b) Proprietary c) Shareware d) None of the above 	<ul style="list-style-type: none"> a) It's an application that alters audios. b) It's a software that allows altering digital pictures c) It's a system that manipulates digital medias d) It's a machine that allows altering digital images
<p>Q52. The _____ tool in GIMP allows you to select a drawing with the free-hand.</p> <ul style="list-style-type: none"> a) Fuzzy Selection b) Lasso c) Text d) Bucket Fill 	<p>Q62. Which of the following process helps in Image enhancement?</p> <ul style="list-style-type: none"> a) Digital Image Processing b) Analog Image Processing c) Both a and b d) None of the above
<p>Q53. Shift+C is the short cut to _____ the image in GIMP.</p> <ul style="list-style-type: none"> a) Duplicate b) Delete c) Copy d) Crop 	<p>Q63. Among the following, functions that can be performed by digital image processing is?</p> <ul style="list-style-type: none"> a) Fast image storage and retrieval b) Controlled viewing c) Image reformatting d) All of the above
<p>Q54. GIMP's basic palette, consists of _____ colours.</p> <ul style="list-style-type: none"> a) Three b) Two c) One d) Many 	<p>Q64. Which of the following is an example of Digital Image Processing?</p> <ul style="list-style-type: none"> a) Computer Graphics b) Pixels c) Camera Mechanism d) All of the mentioned
<p>Q55. It is the most important part of the image window where the image is displayed.</p> <ul style="list-style-type: none"> a) Canvas b) Window c) Scale d) Size 	<p>Q65. What are the categories of digital image processing?</p> <ul style="list-style-type: none"> a) Image Enhancement b) Image Classification and Analysis c) Image Transformation d) All of the mentioned
<p>Q56. Visual effects, also called VFX, enable _____ to enhance a story by bringing to life believable characters, worlds, and stunts.</p> <ul style="list-style-type: none"> a) Filmmakers b) Teachers c) Doctors d) Students 	<p>Q66. What is gamma correction?</p> <ul style="list-style-type: none"> a) A process to remove power-law transformation response phenomena b) A process to remove log transformation response phenomena c) A process to correct log transformation response phenomena d) A process to correct power-law transformation response phenomena
<p>Q57. _____ is the blanket term used to describe digitally-created VFX in film and television.</p> <ul style="list-style-type: none"> a) Chroma Keying b) Computer-generated imagery c) Performance Capturing d) None of the above 	<p>Q67. Log transformation is generally used in which of the following device(s)?</p> <ul style="list-style-type: none"> a) Cathode ray tube b) Scanners and printers c) All of the mentioned d) None of the mentioned
<p>Q58. A _____ is an image, created using digital or traditional painting techniques, to create a representation of a scene that would be impossible for filmmakers to deliver in real life.</p> <ul style="list-style-type: none"> a) Matte painting b) Master piece c) Royal Painting d) All of the above 	<p>Q68. For a continuous image $f(x, y)$, how could be Sampling defined?</p> <ul style="list-style-type: none"> a) Digitizing the coordinate values b) Digitizing the amplitude values c) All of the mentioned d) None of the mentioned
<p>Q59. The higher number of pixels gives us a _____ image</p> <ul style="list-style-type: none"> a) Better b) Worst c) Smaller d) None of the above 	<p>Q69. The two most common 2D graphic file formats used on the web are?</p> <ul style="list-style-type: none"> a) GIF & BMP b) JPG & BMP c) GIF & JPG d) JPG & TIF
<p>Q60. Which one of the following is the widely used output device?</p> <ul style="list-style-type: none"> a) Video monitor b) Scanner c) Speaker d) Printer 	<p>Q70. What are the categories of digital image processing?</p> <ul style="list-style-type: none"> a) Image Enhancement b) Image Classification and Analysis c) Image Transformation d) All of the mentioned