



UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

**FINAL EXAMINATION
SEMESTER I
SESSION 2021/2022**

COURSE NAME : COMPUTER TECHNOLOGY AND
MULTIMEDIA

COURSE CODE : DAE 10403

PROGRAMME CODE : DAE

EXAMINATION DATE : JANUARY / FEBRUARY 2022

DURATION : 3 HOURS

INSTRUCTION : 1. ANSWER **ALL** QUESTION IN
PART A AND PART B
2. THIS FINAL EXAMINATION IS AN
ONLINE ASSESSMENT AND
CONDUCTED VIA **OPEN BOOK**

THIS QUESTION PAPER CONSISTS OF **TEN (10)** PAGES

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PART A : MULTIPLE CHOICE QUESTIONS

(1 mark each)

Q1. Which invention replaced vacuum tube and made computer much smaller (2nd generation of modern computer)?

- A. Random Access Memory (RAM)
- B. Read Only Memory (ROM)
- C. Transistor
- D. Transformer

Q2. This invention started the 3rd generation of modern computer

- A. Random Access Memory (RAM)
- B. Solid State Drive (SSD)
- C. Integrated Circuit (IC)
- D. Central Processing Unit (CPU)

Q3. What are the **four (4)** stages of computing order?

- A. Input, output, storage, processing
- B. Input, processing, storage, output
- C. Input, processing, output, storage
- D. Input, storage, processing, output

Q4. This invention started the 4th generation of modern computer.

- A. Microprocessor
- B. Solid State Drive (SSD)
- C. Integrated Circuit (IC)
- D. Central Processing Unit (CPU)

Q5. What is the common material used in fabricating microprocessor?

- A. Silicon
- B. Copper
- C. Aluminum
- D. Quartz

Q6. Which of these statements is **TRUE** about RAM?

- A. Volatile memory
- B. Permanently store the data
- C. Non-Volatile memory
- D. Faster than cache memory

Q7. Unit for decoding and execution of instructions rapidly, one after another is called

- A. AL unit
- B. Backup device
- C. Keyboard
- D. Control unit

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Q8. Input and Output devices such as monitors, and keyboards are classified as

- A. Arithmetic units
- B. Control unit devices
- C. Peripheral devices
- D. Main store devices

Q9. Magnetic tape unit is classic example of

- A. Storage devices
- B. Backup storage devices
- C. Online devices
- D. Offline devices

Q10. Resolution of display card is

- A. The number of pixels
- B. The number of colours
- C. The number of dots per inch
- D. The amount of memory

Q11. Which of the following are types of application software?

- I Disk Management
- II Spreadsheet
- III Presentation Graphic
- IV Word Processing

- A. I, II & III
- B. I, III & IV
- C. II, III & IV
- D. All of the above

Q12. Wi-fi uses which frequency?

- A. 2.4 GHz
- B. 5 GHz
- C. 2.4 GHz and 5 GHz
- D. None of the above

Q13. Below is advantages of Software Suites **EXCEPT**

- A. Likely to require significant effort for stuff
- B. Identical or very similar GUI
- C. Less cost rather than buying individual package.
- D. Designed to interface with each other

Q14. What is Spreadsheet?

- A. Documents containing a group of numbers and other data organized into rows and columns.
- B. Documents containing a group of visual and image can be used as printed
- C. Documents containing written documents such letters, contracts, and manuscripts.
- D. Documents containing a group of video and image can be represented as live

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Q15. All statements below are **TRUE** regarding utility programs **EXCEPT**

- A. Using certain utility program, user are able to restore operating system back to default installation
- B. Utility programs enable user to manage and maintain file in the computer
- C. Utility program is only stand alone software and built in program with operating system.
- D. Search tool is one of the utility program.

Q16. Computer on a network is uniquely identified by

- A. Username
- B. IP Address
- C. Login
- D. Computer Brand

Q17. Bluetooth is an example of

- A. Personal Area Network
- B. Wide area network
- C. Metropolitan area network
- D. Virtual private network

Q18. What is the use of Bridge in Network?

- A. To separate LANs
- B. To connect LANs
- C. To stop networking
- D. To control Network Speed

Q19. The _____ is the physical path over which a message travel

- A. path
- B. medium
- C. protocol
- D. route

Q20. Data communication system within a building or campus is _____

- A. Wide area network
- B. Local Area Network
- C. Integrated Circuit (IC)
- D. Internet

Q21. A video consists of a sequence of

- A. Frames
- B. Signals
- C. Packets
- D. Slots

Q22. Streaming stored audio/video, files are compressed and stored on a

- A. IP
- B. Server
- C. Domain
- D. Internet

Q23. In Real Time Interactive Audio Video, Jitter is introduced in real-time data by delay between
A. Frames
B. Layers
C. Pixels
D. Packets

Q24. In Real Time Interactive Audio Video, data are stored in buffer at a possibly variable
A. Pixels
B. Packets
C. Rates
D. Bytes

Q25. A smaller version of an image is called a:
A. Clipart
B. Bitmap
C. Portable network graphic
D. Thumbnail

Q26. The slide _____ controls text characteristics, background color and special effects, such as shadowing and bullet style.
A. presentation
B. master
C. show
D. sorter

Q27. Designed to create a particular look, a _____ contains colour schemes, slide and title masters with custom formatting and font's styles.
A. template
B. presentation
C. slide
D. background

Q28. _____ is the special effect used to introduce each slide in a slide presentation.
A. Animation
B. Bulleting
C. Transition
D. Mapping

Q29. A _____ displays a list of commands and usually appears in the toolbar at the top of the screen.
A. view
B. menu
C. kit
D. list

Q30. A _____ can be added to your presentation and then used to go to a variety of locations, for example, a web address, an e-mail address, or document, just to name a few.

- A. menulink
- B. hyperlink
- C. toollink
- D. slidelink

Q31. Which disk read the data by reflecting pulses of laser beams on the surface:

- A. Magnetic disk
- B. Hard disk
- C. Floppy disk
- D. Optical disk

Q32. Which parameter defines number of times electron beam scans screen in a second:

- A. Refresh rate
- B. Data transfer rate
- C. Pitch rate
- D. All of above

Q33. Which is considered as semi-conductor memory , which is made up of static RAM?

- A. Primary memory
- B. Cache memory
- C. Both A & B
- D. None of above

Q34. Which is not the browser?

- A. Internet Explorer
- B. Opera
- C. Mozilla Firefox
- D. Google

Q35. TCP/IP is a:

- A. Network Hardware
- B. Network Software
- C. Protocol
- D. None above

Q36. TCP/IP mainly used for:

- A. File Transfer
- B. Email
- C. Remote Login Service
- D. All above

Q37. Which IP address is reserved for loop back or local host:

- A. 192.168.0.0
- B. 127.0.0.0
- C. 127.0.0.1
- D. None above

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Q38. Who provide internet connection:

- A. TCP
- B. ISP
- C. FTP
- D. HTTP

Q39. URL stands for:

- A. Universal Resource Locator
- B. Uniform Resource Locator
- C. Uniform Radio Locator
- D. None of above

Q40. In HTTPS 'S' is stands for:

- A. Simple
- B. Secured
- C. Server
- D. None of above

Q41. What do you call a computer on a network that requests files from another computer?

- A. A client
- B. A host
- C. router
- D. A web server

Q42. Hardware devices that are not part of the main computer system and are often added later to the system.

- A. Peripheral
- B. Clip art
- C. Highlight
- D. Execute

Q43. Which is not an Internet protocol?

- A. HTTP
- B. FTP
- C. STP
- D. IP

Q44. What does EPROM stand for?

- A. Electric Programmable Read Only Memory
- B. Erasable Programmable Read Only Memory
- C. Evaluable Philotic Random Optic Memory
- D. Every Person Requires One Mind

Q45. In computer jargon, RAM refers to

- A. Read Only Menu
- B. Random Access Memory
- C. Random Accent Memory
- D. Read Access Memory

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Q46. What is the difference between the Internet and an intranet?

- A. One is public, the other is private
- B. One is safer than the other
- C. One can be monitored, the other can't
- D. None of the above

Q47. To select text by shading as you drag the mouse arrow over the text is known as:

- A. Clip art
- B. To highlight
- C. To fetch
- D. To decode

Q48. Which was the computer conceived by Babbage?

- A. Donald Knuth
- B. Arithmetic machine
- C. Analytical engine
- D. All of the above

Q49. CPU is an abbreviation for

- A. Central processing unit
- B. Computer processing unit
- C. Control processing unit
- D. Command processing unit

Q50. The binary system uses powers of

- A. 2
- B. 10
- C. 8
- D. 16

Q51. Interactive multimedia is

- A. where a user can interact with system
- B. where a user cannot interact with system
- C. where output depends on user's request
- D. both (A) and (C)

Q52. The combination of text, graphics art, sound, animation and video delivered by computer or other electronic devices is called:

- A. Multimedia
- B. Hyper media
- C. Visual media
- D. None

Q53. The people who weave multimedia into meaningful tapestries are called :

- A. Programmers
- B. Multimedia developers
- C. Software engineers
- D. Hardware engineers

Q54. One of the disadvantages of multimedia is

- A. Cost
- B. Adaptability
- C. Usability
- D. Relativity

Q55. Which image files are lossy format?

- A. GIF
- B. MPEG
- C. JPEG
- D. PNG

Q56. Which files creates a perfect reproduction of the original images?

- A. Shockwave
- B. Nx View
- C. GIF
- D. JPG

Q57. A series of slides displayed in a particular sequence is called.

- A. Placeholder
- B. Template
- C. Layout
- D. Slide show

Q58. Which of the following is a technique to blend two or more images to form a new image ?

- A. Modeling
- B. Morphing
- C. Animating
- D. Warping

Q59. A video consists of a sequence of

- A. Frames
- B. Signals
- C. Packets
- D. Slots

Q60. In computer graphics, pictures or graphics objects are presented as a collection of discrete picture elements called _____

- A. Dots
- B. Pixels
- C. Coordinates
- D. Points

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PART B : STRUCTURED QUESTIONS

- Q61 (a)** What is a network topology (4 marks)
- (b)** Briefly discuss the characteristic of the following **four (4)** types of networks topologies.
- i. Bus topologies (4 marks)
 - ii. Mesh Topologies (4 marks)
 - iii. Star Topologies (4 marks)
 - iv. Ring topologies (4 marks)
- Q62 (a)** Discuss the difference between Virtual Reality (VR) and Augmented Reality (AR) in term of its concept and give **ONE (1)** example application for each one. (6 marks)
- (b)** Explain why compression is needed for video and audio source. (4 marks)
- (c) (i)** A video stream with 30 frames per second playback. If each frame consists of 160 X 120 pixels of 24-bit colours depth. Calculate the total storage required to store the above video file for ten minutes. (6 marks)
- (ii)** A typical, uncompressed high-quality audio file has a sample rate of 44,100 samples per second, a bit depth of 16 bits per sample and 2 channels of stereo audio. Calculate the bitrate and the file size if it's run for 4 minutes long. (4 marks)

-END OF QUESTIONS -

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