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STUDENT NAME		CLASS	9th
PAPER CODE	106292	SUBJECT	Computer
TIME ALLOWED		TOTAL MARKS	
Paper Date		Paper Type	

Choose the correct answer.

1. What is the primary function of the buses in a computer's memory system?

(A) Control memory operations

(B) Display graphics

(C) Transmit data between components

(D) Perform arithmetic operations

2. Which memory type uses laser beams to read and write data?

(A) RAM **(B)** Optical memory **(C)** Cache memory **(D)** ROM

3. In which network topology is data transmission unidirectional, like radio or television broadcasts?

(A) Star Topology **(B)** Bus Topology **(C)** Mesh Topology **(D)** Ring Topology

4. Which data communication standard is used for transferring web pages and related data in the World Wide Web?

(A) TCP/IP **(B)** HTTP **(C)** FTP **(D)** SMTP

5. What is the primary function of the Presentation Layer on the OSI model?

(A) Establishing connections between computers

(B) Converting data into a standard format

(C) Deciding the physical path of data

(D) Sending data in both directions simultaneously

6. Which component of the microprocessor controls the working of input/output devices and storage devices?

(A) Arithmetic Logic Unit (ALU)

(B) Control Unit (CU)

(C) Memory Address Register (MAR)

(D) Data Register (DR)

7. What computing machine was capable of taking input from punch cards and storing data in memory?

(A) Abacus **(B)** Analytical Engine **(C)** Tabulating Machine **(D)** Differential Analyzer

8. Which computer generation introduced the use of Integrated Circuits (Ics)?

(A) First Generation **(B)** Second Generation **(C)** Third Generation **(D)** Fourth Generation

9. What is the main purpose of Cache memory?

(A) Store program instructions

(B) Provide high-speed storage

(C) Control input/output devices

(D) Perform arithmetic operations

10. What is the smallest unit of memory in a digital computer?

(A) Kilobyte

(B) Bit

(C) Byte

(D) Megabyte

11. Which type of memory retains data even when the computer is turned off?

(A) RAM

(B) ROM

(C) Cache

(D) Register

12. Which of the following is an example of a natural system?

(A) Telephone network

(B) Human body

(C) Database

(D) Automobile

13.
Which network architecture requires each computer to act as either a server or a client but not both simultaneously?

(A) Client/Server Network

(B) Peer-to-Peer Network

(C) Metropolitan Area Network (MAN)

(D) Wide Area Network (WAN)

14. What technology replaced vacuum tubes in second-generation computers?

(A) Transistors

(B) Integrated Circuits (Ics)

(C) Microprocessors

(D) Magnetic tapes

15. The eight queens puzzle is the problem of:

(A) Sorting

(B) Searching

(C) Counting

(D) Both a and b

16.
Following are types of computing problems. (I) Counting Problems (II) Search Problems (III) Decision Problems

(A) I and II

(B) I and III

(C) II and III

(D) I and II and III

17. Finding the location of the element with a given value is:

(A) Search

(B) Traversal

(C) Sort

(D) None of above

18. In IPO Charts, we have:

(A) Input, Plan, Output

(B) Input, Program, Output

(C) Input, Process, Output

(D) Input, Proceed, Output

19. Computational thinking is

(A) Programming   **(B)** Thinking like a computer   **(C)** Coding   **(D)** Logically solving problems

20. To solve Search problems, we need to:

(A) Provide the moves.   **(B)** Provide start state   **(C)** Provide the end state.   **(D)** a, b and c

21.
For a problem, we face in real world situations. In what sequence we follow the steps. (I) make some solution. (II) understand the real-world problem. (III) instruct the computer to behave accordingly.

(A) I, II, III   **(B)** I, III, II   **(C)** II, I, III   **(D)** II, III, I

22.
_____ is the graphical representation of data through use of common charts, plots, infographics and animations.

(A) Data cleaning   **(B)** Missing values   **(C)** Data visualization   **(D)** Data hiding

23. _____ is a method of collecting information from individuals.

(A) Survery   **(B)** Data hiding   **(C)** Data visualization   **(D)** Data finding

24.
_____ is a structured or processed collection of data usually associated with a unique body of work.

(A) Data base   **(B)** Data set   **(C)** Data and Information   **(D)** Information

25.
_____ is subset of machine learning, with emphasis on the simulation or imitation of human brain's behavior by using artificial neutral network.

(A) Data visualization   **(B)** Computer vision   **(C)** Deep learning   **(D)** Big Data

26.
Customer satisfaction level such as satisfied, dissatisfied, and neutral are examples of _____ data type.

(A) Ordinal data   **(B)** Continuous data   **(C)** Numerical data   **(D)** Discrete data

27.
_____ includes the data which can only take certain values and cannot be further subdivided into smaller units.

(A) Statistical data   **(B)** Continuous data   **(C)** Ordinal data   **(D)** Referral data

28. _____ is the use of data to predict future trends and events based on historical data.

(A) Statistical analysis   **(B)** Predictive analysis   **(C)** Graphical analysis   **(D)** Deep learning

29. _____ is limitation of big data.

(A) Statistical data   **(B)** Unlimited growth of data   **(C)** Data visualization   **(D)** Predictive maintenance

30. _____ is the fast rate at which data is received and acted on.

(A) Volume   **(B)** Velocity   **(C)** Variety   **(D)** Vision

31.
_____ refers to the process of carefully examining and studying data to identify patterns, draw conclusions, or make the data meaningful.

(A) Data analytics   **(B)** Data predictions   **(C)** Data set   **(D)** Data base

32. The AI tool used for correcting spelling and grammar mistakes is.

(A) ChatGPT   **(B)** Lovo ai   **(C)** Grammarly   **(D)** Virtual assistant

33. Instant answers to website visitors questions through text or voice interaction are provided by.

(A) Robot   **(B)** Chatbot   **(C)** Cloud computing   **(D)** Expert system

34.
The technology concerned with performing specific tasks with little or no human intervention using computer controlled machine is called.

(A) Computer vision   **(B)** Computer intelligence   **(C)** Robotics   **(D)** Virtual technology

35.
The technology concerned with training the computer to understand spoken and written words and to take action is known as.

(A) Virtual assistant   **(B)** Natural language processing   **(C)** Language analysis   **(D)** Virtual training

36.
The process of taking known data set as input to train the algorithm to create a model for prediction is known as.

(A) Natural Language Processing   **(B)** Expert system   **(C)** Supervised Machine Learning   **(D)** Unsupervised Machine Learning

37.
The AI technology that enables computer systems to obtain meaningful information from digital images videos is called.

(A) Image recognition   **(B)** Speech recognition   **(C)** Snanner   **(D)** Computer Vision

38. The AI tool that converts text to speech is.

(A) ChatGPT   **(B)** Grammarly   **(C)** Alexa   **(D)** Love ai

39.

The technology used in self-driving cars is called.

(A) Natural language processing

(B) Chatbot

(C) Computer vision

(D) Virtual assistant

40.
Cloud computing model in which resources are owned by and used inside a single organization is called.

(A) Private cloud

(B) Public cloud

(C) Hybrid cloud

(D) Remote cloud

41. Virtual assistant that belong to Apple Inc. is.

(A) Siri

(B) Alexa

(C) Google assistant

(D) Cortana

42. How does computing contribute to economic practices?

(A)
It increases manual labor jobs

(B)
It has no impact on job markets

(C)
It automates tasks, leading to job displacement but also creating new job apportunities

(D)
It primarily benefits large corporations, neglecting small businesses

43. Which of the following is an example of inappropriate-software use?

(A)
Using licensed software for personal projects

(B)
Respecting software copyrights and licenses

(C)
Modifying software code without permission from the developer

(D)
Updating software regularly to improve its performance

44. Which of the following is a personal benefit of computing in healthcare?

(A)
Reduced access to medical information

(B)
Increased medical errors

(C)
Improved telemedicine and healthcare accessibility

(D)
Lower healthcare costs

45. In what way can social networking platforms positively impact businesses and entrepreneurs?

(A)
By decreasing the reach and visibility of business

(B)
By providing a platform for marketing, customer engagement and networking

(C)
By limiting customer engagement and feedback

(D)
By increasing operational costs and inefficiencies

46. What is an ethical concern related to computing?

(A)
Increased accessibility to information

(B)
Enhanced cybersecurity measures

(C)
Privacy breaches and data misuse

(D)
Improved healthcare through telemedicine

47. What does responsible use of hardware entail?

(A)	(B)	(C)	(D)
Using outdated software	Treating computer equipment with care and respect	Ignoring software updates	Sharing passwords with friends

48. Safe use of digital platforms includes

(A)	(B)	(C)	(D)
Sharing personal formation with anyone online	Using strong, unique passwords for each online account	Downloading files from unknown sources without scanning for malware	Accepting friend requests from strangers without verifying their identify

49. What is a cultural impact of computing?

(A)	(B)	(C)	(D)
Preservation of traditional cultural practices and customers	Homogenization of global culture with a single dominant culture	Elimination of the need for cultural preservation efforts	Reduced cultural diversity and innovation

50. Which of the following is an example of appropriate use of software?

(A)	(B)	(C)	(D)
Downloading and using cracked software	Regularly updating software to the latest version	Sharing software licenses with multiple users	Disabling antivirus software for faster performance

51. Which of the following is a potential harmful effect of social networking?

(A)	(B)	(C)	(D)
Promoting social awareness and activism	Facilitating cyberbullying and harassment	Fostering offline community engagement	Enhancing critical thinking skills

52. What is one potential beneficial effect of social networking platforms?

(A)	(B)	(C)	(D)
Enhanced personal privacy	Improved offline communication skills	Increased connectivity and networking opportunity	Reduced exposure to diverse viewpoints

53. How can fake news be harmful in the context of computing innovations?

(A)	(B)	(C)	(D)
It encourages fact-checking and critical thinking	It can manipulate public opinion and spread misinformation	It fosters trust in credible news sources	It has no impact on society

54. A business plan is a written summary of :

(A)	(B)	(C)	(D) a, b, c
Proposed business venture	Its operational and financial details	Its marketing opportunities and strategy	

55. Entrepreneurship can the unemployment.

(A) Increase
(B) Neither increase nor decrease
(C) Decrease
(D) a, b, c

56.
An entrepreneur who introduce new idea, methods of production and discovers new market is called as:

(A) Technical entrepreneur
(B) Innovation entrepreneur
(C) Novice entrepreneur
(D) a, b, c

57. A stable and dynamic politicial enviroment play.

(A) Positive role in business growth
(B) Negative role in business growth
(C) No role in business growth
(D) None of a, b, c

58. Which is the function of an entrepreneur ?

(A) Risk bearing
(B) Innovation
(C) Organizing and managing
(D) a, b, c

59.
An entrepreneur enters in to business to improved quality product by their invention and discoveries comes under.

(A) Technical entrepreneur
(B) Innovative entrepreneur
(C) Novice entrepreneur
(D) a, b, c

60. Entreprenuership can the gross national product.

(A) Increase
(B) Decrease
(C) Neither increase nor decrease
(D) None of a, b, c

Write short answers of the following questions.

1 . What is the function and significance of Napier's Bone in early computing?

2 . What is the primary goal of fifth-generation computers?

3 . Differentiate between volatile and non-volatile memory.

4 . Why is the word size of a processor important, and how does it affect the computer's performance?

5 .
Imagine you a re building a custom computer for a friend. Give three considerations you would take into account when choosing the type and size of memory for this computer.

6 .
Your school is planning to purchase new printers for the computer lav. Give three advantages and disadvantages of impact and non-impact printers to help them make a decision.

7 .

Define simplex, half-duplex, and full-duplex modes of communication with one example each.

8 . How does a switch differ from a hub in a network?

9 . Explain the concept of peer-to-peer network and its limitations compared to a client/server network

10 . Why is mesh topology considered the most reliable but also the most expensive to implement?

11 . What is the major difference in solving simple problems and complex problems?

12 . Differentiate between Computational thinking and Logical thinking.

13 . What are the methods used to design a solution?

14 . Identify 3 computing problems from other subjects that you are studying in your class.

15 .
The telephone number usually have 9 digits. Out of these 9, the first two digits represents the area code and are it remained constant within a given area. The last 7 digits represents the number, and it cannot begin with 0. How many different telephone numbers are possible with a given area code.

16 . Define data analytics and data science. Are they similar or different? Give reason.

17 . Data Base is useful in the field of data science. Defend this statement.

18 .
What is meant by sources of data? Give three sources of data excluding those mentioned in the book.

19 . Argue about the trends, outliers, and distribution of values in a data set? Describe.

20 .
Express big data in your own words. Explain three V's of big data with reference to email data. (Hint . : An email box that contains hundreds of emails).

21 . Briefly describe the positive impact of AI on our daily life.

22 . Describe how computer visions applications help in automation of tasks.

23 .
What is robot? Mention four areas where robots can replace humans that are not mentioned in this unit.

24 . Illustrate the responsible use of computer hardware by an individual.

25 . How do you stay safe while conducting data searches online?

26 . Sketch the positive impacts of social networking in today's society.

27 . Summarize some of the adverse effects of social Networking.

28 . Examine the computing influence on personal privacy.

29 . How has the digital age changed the landscape for enterpreneurs?

30 . How does e-commerce effect entrepreneurship?

31 . What are some crucial digital tools for modern entrepreneurs?

32 . What challenges do digital entrepreneurs face?

33 . In what ways can digital analytics improve business strategies for entrepreneurs?

34 . Describe the define phase in design thinking?

35 . What are the Sustainable Development Goals?

Write detailed answers of the following questions.

1 .
Describe the evolution of computer generations from the first generation to the fourth generation, highlighting the key technological developments and their impact on computing.

2 .
Explain the characteristics and potential challenges associated with fifth-generation computers that aim to understand natural languages and possess thinking capabilities. What are the implications of such advancements in computing on society?

3 .
Describe the roles of common communication devices like hubs, switches, routers and gateways in data communication. How do they contribute to the functionality of a network?

4 .
Discuss the advantages and disadvantages of the Internet, considering factors like global connectivity, information access, privacy concern, and digital addiction

5 .
Identify whether the given problems are Decision Problem, Counting Problem or Search Problem. Write your answer in front of following problem given below. (a) Does a given binary string have an even number of zeros?

6 .
Identify whether the given problems are Decision Problem, Counting Problem or Search Problem. Write your answer in front of following problem given below. (c) Does a certain Java program say "yes" to an empty input?

7 .
Identify whether the given problems are Decision Problem, Counting Problem or Search Problem. Write your answer in front of following problem given below. (e) N-queens problem: where the goal is to place eight queens on a chessboard such that no queen attacks any other.

8 .
Create an IPO chart which will accept the ages of four boys and calculate their total age and average age. The program must display both the total age and the average age.

9 .
The child wants to plan a birthday party for their friend. (a) Draw an IPO chart of this situation. (b) Write down properties on computation thinking.

10 . Sketch the key concepts of data science in your own words.

11 .
Compare how big data is applicable to various fields of life. Illustrate your answer with suitable examples.

12 . Design a case study about how data science and big data has revolutionized the field of healthcare.

13 . Relate how AI can be beneficial in education and business?

14 . Categorize the benefits of cloud computing? Contrast between public and private clouds.

15 . Interpret the ethical issues in using the following tools. (a) Chat GPT (b) Lovo AI (c) Virtual Assistants

16 . Identify the precautions that need to be taken ensure the physical safety of computer hardware.

17 .
Express the ways, users can recognize and protect themselves from online cheats and phishing attempts.

18 . Describe the risks associated with online gaming and social networking for children.

19 .
Compare the impact of online platforms and algorithms on cultural diversity and the spread of global or local culture?

20 . How well does the entrepreneur fit the entrepreneurial profile describe in this chapter?

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