

Time: 1 hour

## DO NOT OPEN THIS BOOKLET UNTIL INSTRUCTED TO DO SO

> All questions are compulsory.
> Read the instructions on the ANSWER SHEET and fill in your NAME, CLASS and OTHER INFORMATION.
> To mark your choice of answer by darkening the circles in the ANSWER SHEET, use a Blue/Black Ball Pen only.
> You MUST record your answers on the ANSWER SHEET only.
> There are $\mathbf{5 0}$ MULTIPLE CHOICE QUESTIONS.
Use the information provided to choose the BEST answer among the four possible options.
On your ANSWER SHEET fill in the circle that matches your answer.
> Marks are NOT deducted for incorrect answers.
> Return the ANSWER SHEET to the invigilator at the end of the examination.
> You are NOT allowed to use a calculator.
You may use a ruler and spare paper for rough work.

## Section A (Logical Reasoning)

(This section contains 10 multiple choice questions. Each question has four choices (A), (B), (C) and (D), out of which only ONE is correct.)

1. Count the number of cubes in the figure that follows.

(A) 25
(B) 30
(C) 32
(D) 34
2. Find the missing number.

(A) 25
(B) 125
(C) 225
(D) 625
3. In a certain code, GIGANTIC is written as GIGTANCI. How is MIRACLES written in that code?
(A) MIRLCAES
(B) MIRLACSE
(C) RIMCALSE
(D) RIMLCAES
4. Laxman went 15 kms to the west from his house, then turned left and walked 20 kms . He then turned East and walked 25 kms and finally turning left, he covered 20 kms . How far was he from his house finally?
(A) 5 kms
(B) 10 kms
(C) 40 kms
(D) 80 kms
5. Which term of the series $5,10,20,40$, $\qquad$ , is 1280 ?
(A) 8th
(B) 9th
(C) 10th
(D) 11th
6. Genuine : Authentic :: Mirage : $\qquad$
(A) Image
(B) Transpiration
(C) Reflection
(D) Illusion
7. $X$ introduces $Y$ saying, "He is the husband of the grand daughter of the father of the my father." How is $Y$ related to $X$ ?
(A) Brother
(B) Son
(C) Brother-in-law
(D) Nephew
8. If $A$ stands for,$+ B$ stands for,$- C$ stands for $\times$, then what is the value of (10 C 4) A (4 C 4) B 6?
(A) 46
(B) 50
(C) 56
(D) 60
9. How many odd numbers are there in the sequence which are immediately followed by an odd number?

51473984726315863858843496
(A) 1
(B) 2
(C) 3
(D) More than 4
10. In a certain code language, '617' means 'sweet and hot'; ' 735 ' means 'coffee is sweet' and '263' means 'tea is hot'. Which of the following would mean 'coffee is hot'?
(A) 731
(B) 536
(C) 367
(D) 753

## Section B (Subject Specific)

(This section contains 25 multiple choice questions. Each question has four choices (A), (B), (C) and (D), out of which only ONE is correct.)
11. A $\qquad$ is a collection of related Web pages linked to each other by hyperlinks.
(A) website
(B) web page
(C) server
(D) web browser
12. $\qquad$ means using a computer to deliver part, or all of a course whether it's in a school, part of business training or a distance learning course.
(A) e-learning
(B) e-banking
(C) e-commerce
(D) e-reservation
13. At the technical and developmental level, the Internet is made possible through creation, testing and implementation of Internet standards. These standards are developed by the $\qquad$ -.
(A) Internet Ethics Task Force
(B) International Ethics Task Force
(C) Internet Enhancement Task Force
(D) Internet Engineering Task Force
14. We use $\qquad$ keyword to find the number of values in a column.
(A) ADD
(B) TOTAL
(C) COUNT
(D) SUM
15. In video conferencing, you are able to $\qquad$ .
(A) only see the other person
(B) only talk to the other person
(C) touch the other person
(D) both talk and see the other person
16. An HTML table is defined with the <table> tag. Some of the statements about <table> tag are given below. Choose the INCORRECT one.
(A) Each table row is defined with the <tr> tag.
(B) A table header is defined with the <th> tag.
(C) By default, table headings are bold and centered.
(D) A table data/cell is defined with the <tc> tag.
17. Which of these websites is NOT an e-commerce site?
(A)

(B)
CLiQ
(C)

(D)

18. Which of these programs CANNOT be used to view an HTML document?
(A)

(B)

(C)

(D)

19. $\qquad$ file infects the executable code files such as .exe, .com, .drv, .sys etc. It however becomes active when the infected file is executed.
(A) Worm
(B) Trojan
(C) Spyware
(D) Parasitic virus
20. The bgcolor attribute is used to control the background of an HTML element, specifically page body and table backgrounds. The syntax to use bgcolor attribute with any HTML tag is $\qquad$ .
(A) <tagname backgroundgcolor="color_value"...>
(B) <tagname bcolor="color_value"...>
(C) <tagname bgcolor="color_value"...>
(D) <tagname bg olor="color_list"...>
21. Your friend is working for a web designing company where he is currently working on a website of a school. He writes code to print some text on a web page. But instead of following OUTPUT1, he is getting OUTPUT2. As a friend suggest him correct code for the desired output.

| Mathematical Formula |
| :--- |
| $\mathrm{A}^{2}+\mathrm{B}^{2}+2 \mathrm{AB}$ |
| Chemical Formula |
| $\mathrm{NA}_{2} \mathrm{HPO}_{4}$ |

OUTPUT1
(A) Mathematical Formula
$<P>A<$ sup $>2</$ sup $>+B 2+2 A B</ P>$
Chemical Formula
<P>NA<sub>2</sub> HO4</P>
(C) Mathematical Formula
$<\mathrm{P}>\mathrm{A}<$ sup $>2</$ sup $>+\mathrm{B}<$ sup $>2</$ sup $>+2 \mathrm{AB}</ \mathrm{P}>$
Chemical Formula
<P>NA<sub>2</sub> HPO<sub>4</sub></P>
22. What do we achieve by using Al in education?
(A) Quality education
(B) Quality food
(C) Quality books
23. The researchers in the Human Brain Project have produced a $\qquad$ atlas of the brain which has fifty times the resolution of previous such maps.
(A) 1-dimensional
(B) 2-dimensional
(C) 3-dimensional
(D) multi-array based
24. The first documented extraction of a virus on a computer was performed by $\qquad$ in the year 1987.
(A) John Neumann
(B) Bernd Fix
(C) Paul Stalman
(D) Linus Torvalds
25. Microsoft $\qquad$ is a relational database management system developed by Microsoft.
(A) MySQL
(B) SQL Server
(C) Both (A) and (B)
(D) Network
26. Your passwords should NOT consist of $\qquad$ .
(A) names of people close to you
(B) lowercase letters
(C) special characters
(D) numbers
27. Which of the following options represents the correct labelling?

(A) (i) Document area (ii) Command bar (iii) Favorites bar (iv) Status bar
(B) (i) Command bar (ii) Document area (iii) Favorites bar (iv) Status bar
(C) (i) Document area (ii) Command bar (iii) Status bar (iv) Favorites bar
(D) (i) Favorites bar (ii) Command bar (iii) Document area (iv) Status bar
28. When using external CSS in your HTML file, you will write the following code <link rel = "stylesheet" type = " \(\qquad\) ? " href = "address">

What will come in place of (?) ?
(A) C\&S
(B) Style sheet
(C) test/CSS
(D) External
29. Which of the following technologies is used in autonomous drones?
(A) Machine learning
(B) Computer version
(C) NLP
(D) None of these
30. Python can be used for $\qquad$ .
(A) web programming development
(B) data analysis
(C) GUI application development
(D) all of these

## GRADE 10

31. What will be the value of the following Python expression?
$12+5 \% 4$
(A) 12
(B) 13
(C) 15
(D) 11
32. Which of the following is not a supercomputer?
(A) PARAM
(B) Summit
(C) CDC 1700
(D) Sierra
33. A $\qquad$ helps people keep track of things.
(A) relationship
(B) database
(C) table
(D) instance
34. Which of these is NOT a component of URL?
(A) Protocol
(B) Subdomain
(C) IP Address
(D) Domain extension
35. In Internet banking, the security of transactions is a big issue. Your account information might get $\qquad$ by unauthorized people over the Internet.
(A) copied
(B) shuffled
(C) deleted
(D) hacked

## Section C (Competency Based)

(This section contains 15 multiple choice questions. Each question has four choices (A), (B), (C) and (D), out of which TWO are correct.)
36. A search engine is a software program that provides the required information in the form of a list of related websites, based on a search criterion defined by the user. Most commonly used search engines are
$\qquad$ -
(A)

(B)

(c) $\mathrm{Y}_{\mathrm{A}} \mathrm{HOO}$ !
(D)

37. Which of the following are the utility software?
(A) Disk Defragmenter
(B) Antivirus Software
(C) Microsoft Word
(D) Notepad
38. The hexadecimal number system consists of $\qquad$ and $\qquad$ .
(A) 0 to 9
(B) $A$ to $F$
(C) A to E
(D) 0 to 7
39. The $\qquad$ refers to the banking service provided by the banks over the Internet. You can $\qquad$ through it.
(A) internet banking
(B) ATM
(C) update your passbook
(D) transfer funds
40. A column or a group of columns that can be used as the primary key of the table is called a $\qquad$ key and a $\qquad$ key is a combination of two or more columns in a table.
(A) candidate
(B) group
(C) composite
(D) combination
41. An $\qquad$ is a collection of related items that have no special order or sequence. This list is created by using HTML $\qquad$ tag. Each item in the list is marked with a bullet.
(A) ordered list
(B) unordered list
(C) <ul>
(D) <ol>
42. A $\qquad$ is a kind of digital code or credential that $\qquad$ the identity of the server.
(A) digital certificate
(B) signature
(C) digital copy
(D) authenticates
43. Which of these is NOT a data type category?
(A) Numerical
(B) Character/String
(C) Signs
(D) Special character
44. To ensure one's $\qquad$ at work, one should refrain from making personal calls on a work phone and avoid using company e-mail for $\qquad$ purposes.
(A) privacy
(B) publicity
(C) personal
(D) official
45. You are creating employee data of your company. You want that your date of birth should be written as 24 June 1980 or Tuesday, 24 June 1980 instead of $24 / 6 / 1980$. What data type will you choose for that?
(A) Date
(B) Long date
(C) Short date
(D) Medium date
46. Which of the following statements is false regarding FTP?
(A) You can only copy file.
(B) You cannot rename, delete, or otherwise change the original files that are present on servers.
(C) It is an internet facility which allows you to log on to remote computer.
(D) FTP is originally designed for only UNIX operating system.
47. The $\qquad$ data backup or $\qquad$ data backup is a method of off-site storage in which data is regularly backed up over a network on a remote server, typically hosted by a service provider.
(A) online
(B) offline
(C) remote
(D) on-site
48. Sangeeta is going for conference where she needs to give presentation to the audience. She does not want to carry her laptop and pen drive. Help her to find a solution.
(A) She can use google drive.
(B) She can use drop box.
(C) She can carry a DVD.
(D) She can take hard copy with her.
49. Which of the following are empty tags?
(A) <B>
(B) <HR>
(C) $<B R>$
(D) <BODY>
50. An information system on the Internet which allows the documents to be interconnected by $\qquad$ , is called the $\qquad$ .
(A) hyper links
(B) cables
(C) world wide web
(D) consortium

