

Sample Paper

Course : SAFAL Scholarship Exam

Duration : 120 Minutes

Maximum Marks : 100

Note:

- The question paper consists of 100 questions, carrying 1 mark each.
- All 100 questions are compulsory.
- There will be no internal choices in any section/module.
- The question paper is divided into four modules, with 25 questions from each module.
- No Negative marking is there in any question.
- The distribution of questions is as follows:

Module	Subject	No. of Questions	Marks
Module 1	Aptitude & Reasoning	25	25
Module 2	Basic English	25	25
Module 3	Computer Application	25	25
Module 4	Mathematics	25	25
Total		100	100

Section - A

Q1. Book : Author :: Painting : ?

- (A) Painter
- (B) Canvas
- (C) Brush
- (D) Gallery

Q2. Doctor : Hospital :: Teacher : ?

- (A) School
- (B) Book
- (C) Student
- (D) Blackboard

Q3. Find the odd one out: Apple, Banana, Carrot, Mango

- (A) Apple
- (B) Banana
- (C) Carrot
- (D) Mango

Q4. Find the odd one out: Triangle, Rectangle, Circle, Cube

- (A) Triangle
- (B) Rectangle
- (C) Circle
- (D) Cube

Q5. A is B's father. B is C's sister. How is A related to C?

- (A) Father
- (B) Uncle
- (C) Grandfather
- (D) Brother

Q6. Pointing to a woman, Rahul said, "She is the daughter of my mother's only son." How is the woman related to Rahul?

- (A) Sister
- (B) Daughter
- (C) Niece
- (D) Wife

Q7. Introducing a man, a woman said, "His wife is the only daughter of my father." How is the woman related to the man?

- (A) Mother
- (B) Sister
- (C) Wife
- (D) Daughter

Q8. Pointing to a man, a woman said, "His mother is the only daughter of my mother." How is the woman related to the man?

- (A) Mother
- (B) Sister
- (C) Aunt
- (D) Grandmother

Q9. If CAT is coded as DBU, how is DOG coded?

- (A) EPH
- (B) EPI
- (C) FQH
- (D) EQH

Q10. If in a certain code, TABLE is written as UBCMF, how is MOUSE written in that code?

- (A) NPVTF
- (B) NPVTG
- (C) OPVTF
- (D) NPWTF

Q11. If 'PAPER' is coded as 'QBQFS', how is 'PENCIL' coded?

- (A) QFODJM
- (B) QFOCJM
- (C) QEODJM
- (D) QFNDJM

Q12. If 'DELHI' is coded as 73541 and 'CALCUTTA' is coded as 82589662, how is 'CALICUT' coded?

- (A) 8251896
- (B) 8251882
- (C) 8215896
- (D) 8251869

Q13. Suresh walks 4 km towards east, then turns left and walks 3 km. How far is he from his starting point?

- (A) 5 km
- (B) 6 km
- (C) 7 km
- (D) 8 km

Q14. A person walks 6 km towards south, then turns 90° anticlockwise and walks 8 km. How far is he from the starting point now?

- (A) 8 km
- (B) 9 km
- (C) 10 km
- (D) 12 km

Q15. Point A is 5 km north of Point B. Point C is 3 km east of Point A. Point D is 5 km south of Point C. Point E is 4 km west of Point D. What is the direction of Point E with respect to Point B?

- (A) North
- (B) South
- (C) East
- (D) West

Q16. If all roses are flowers and all flowers need water, which of the following is definitely true?

- (A) All roses need water
- (B) All flowers are roses
- (C) Some roses do not need water
- (D) No roses need water

Q17. If 'A' means '+', 'B' means '-', 'C' means '×', 'D' means '÷', what is the value of 10 A 5 B 3?

- (A) 12
- (B) 15
- (C) 8
- (D) 18

Q18. Pick the odd one out: Pen, Pencil, Eraser, Book

- (A) Pen
- (B) Pencil
- (C) Eraser
- (D) Book

Q19. Five friends P, Q, R, S, T sit in a row. P is to the right of Q. R is to the left of Q but right of S. T is at one end, and the order from T is T, S, R, Q, P. Who sits in the middle?

- (A) Q
- (B) R
- (C) S
- (D) T

Q20. Find the next term: 100, 95, 85, 70, 50, ?

- (A) 20
- (B) 25
- (C) 30
- (D) 35

Q21. Find the missing term: 1, 3, 7, 13, 21, ?

- (A) 29
- (B) 31
- (C) 33
- (D) 35

Q22. Find the next term: 7, 12, 19, 28, 39, ?

- (A) 50
- (B) 52
- (C) 48
- (D) 54

Q23. Which figure best represents the relationship between Doctors, Men, and Indians?

- (A) Three intersecting circles
- (B) Three separate circles
- (C) One circle inside another
- (D) Two overlapping circles, one separate

Q24. Which figure best represents the relationship between Teachers, Writers, and Women?

- (A) All three overlapping
- (B) No overlap at all
- (C) Teachers inside Writers
- (D) Writers inside Women

Q25. In a survey of 100 students, 60 like Tea, 50 like Coffee, and 30 like both. How many like neither?

- (A) 10
- (B) 20
- (C) 30
- (D) 40

Section - B

Q26. Change to passive voice: "She writes a letter."

- (A) A letter is written by her
- (B) A letter was written by her
- (C) A letter is being written by her
- (D) A letter has been written by her

Q27. Change to passive voice: "They are building a house."

- (A) A house is built by them
- (B) A house is being built by them
- (C) A house was being built by them
- (D) A house has been built by them

Q28. Change to active voice: "The cake was baked by Mary."

- (A) Mary bakes the cake
- (B) Mary baked the cake
- (C) Mary is baking the cake
- (D) Mary had baked the cake

Q29. Change to passive voice: "The teacher will explain the lesson."

- (A) The lesson will be explained by the teacher
- (B) The lesson is explained by the teacher
- (C) The lesson was explained by the teacher
- (D) The lesson has been explained by the teacher

Q30. Change to passive voice: "Someone has stolen my bicycle."

- (A) My bicycle is stolen
- (B) My bicycle was stolen
- (C) My bicycle has been stolen
- (D) My bicycle had been stolen

Q31. Change to passive voice: "I had completed the work before he arrived."

- (A) The work was completed by me before he arrived
- (B) The work had been completed by me before he arrived
- (C) The work is completed by me before he arrived
- (D) The work has been completed by me before he arrived

Q32. Fill in the blank: She is ____ honest girl.

- (A) a
- (B) an
- (C) the
- (D) no article

Q33. Fill in the blank: He is sitting ____ the chair.

- (A) in
- (B) on
- (C) at
- (D) into

Q34. Fill in the blank: The cat jumped ____ the wall.

- (A) over
- (B) in
- (C) into
- (D) on

Q35. Fill in the blank: I have been living here ____ 2015.

- (A) for
- (B) since
- (C) from
- (D) at

Q36. Fill in the blank: ____ Sun rises in the east.

- (A) A
- (B) An
- (C) The
- (D) No article

Q37. Fill in the blank: There is ____ university near my house.

- (A) a
- (B) an
- (C) the
- (D) no article

Q38. Choose the correct preposition: She insisted ____ paying the bill despite our objections.

- (A) on
- (B) at
- (C) in
- (D) for

Q39. Choose the correct pronoun: ____ is my best friend.

- (A) Him
- (B) He
- (C) His
- (D) Himself

Q40. Identify the collective noun: A ____ of lions.

- (A) flock
- (B) pride
- (C) herd
- (D) swarm

Q41. Choose the correct plural of 'child'.

- (A) childs
- (B) children
- (C) childe
- (D) childrens

Q42. Choose the correct reflexive pronoun: She hurt ____ while cooking.

- (A) her
- (B) herself
- (C) hers
- (D) she

Q43. Identify the abstract noun in the sentence: "Her courage inspired the entire village."

- (A) Courage
- (B) Village
- (C) Entire
- (D) Inspired

Q44. Choose the correct verb to agree with the pronoun: Neither of the boys ____ done their homework.

- (A) have
- (B) has
- (C) having
- (D) had

Q45. Choose the correct verb form: She ____ to school every day.

- (A) go
- (B) goes
- (C) going
- (D) gone

Q46. Fill in the blank: They ____ playing football when it started raining.

- (A) was
- (B) were
- (C) is
- (D) are

Q47. Fill in the blank: He ____ his homework already.

- (A) finish
- (B) finishes
- (C) has finished
- (D) finishing

Q48. Choose the correct form: I ____ never been to Paris.

- (A) have
- (B) has
- (C) had
- (D) having

Q49. Fill in the blank: Water ____ at 100 degrees Celsius.

- (A) boil
- (B) boils
- (C) boiled
- (D) boiling

Q50. Choose the correct form: She ____ dinner when I called her.

- (A) cook
- (B) cooks
- (C) was cooking
- (D) cooking

Section - C

Q51. What does CC stand for in email?

- (A) Computer Copy
- (B) Carbon Copy
- (C) Common Copy
- (D) Complete Copy

Q52. The speed of a computer's processor is generally measured in units of:

- (A) Bytes
- (B) Hertz
- (C) Pixels
- (D) Decibels

Q53. Which is the brain of a computer?

- (A) Monitor
- (B) CPU
- (C) Keyboard
- (D) Mouse

Q54. 1 Byte is equal to:

- (A) 4 bits
- (B) 8 bits
- (C) 16 bits
- (D) 32 bits

Q55. Which company developed Windows?

- (A) Apple
- (B) Google
- (C) Microsoft
- (D) IBM

Q56. Which software is mainly used for calculations and spreadsheets?

- (A) MS Word
- (B) MS Excel
- (C) PowerPoint
- (D) Notepad

Q57. CPU stands for:

- (A) Central Processing Unit
- (B) Central Program Unit
- (C) Computer Processing Unit
- (D) Central Processor Utility

Q58. Which of the following is an input device?

- (A) Monitor
- (B) Printer
- (C) Keyboard
- (D) Speaker

Q59. RAM stands for:

- (A) Random Access Memory
- (B) Read Access Memory
- (C) Random Available Memory
- (D) Read Available Memory

Q60. Which part of the CPU performs arithmetic and logical operations?

- (A) Control Unit
- (B) ALU
- (C) Cache
- (D) Register

Q61. Which of the following is a storage device?

- (A) Keyboard
- (B) Hard Disk
- (C) Monitor
- (D) Mouse

Q62. Which memory is volatile in nature?

- (A) ROM
- (B) RAM
- (C) Hard Disk
- (D) Pen Drive

Q63. The speed of a CPU is generally measured in:

- (A) Bytes
- (B) Hertz
- (C) Bits per second
- (D) Pixels

Q64. Which of the following is an operating system?

- (A) MS Excel
- (B) Windows
- (C) Photoshop
- (D) Oracle

Q65. Which of these is NOT an operating system?

- (A) Linux
- (B) macOS
- (C) Android
- (D) MS Word

Q66. The main function of an operating system is to:

- (A) Manage hardware and software resources
- (B) Create documents
- (C) Browse the internet
- (D) Play videos

Q67. Which of the following operating systems is primarily used on smartphones?

- (A) Windows
- (B) Android
- (C) MS-DOS
- (D) Ubuntu

Q68. Which software is used to create presentations?

- (A) MS Excel
- (B) MS Word
- (C) MS PowerPoint
- (D) Notepad

Q69. GUI stands for:

- (A) Graphical User Interface
- (B) General User Interface
- (C) Graphic Utility Interface
- (D) General Utility Interface

Q70. MS Word is an example of:

- (A) System software
- (B) Application software
- (C) Utility software
- (D) Firmware

Q71. Which of the following is antivirus software?

- (A) Quick Heal
- (B) MS Excel
- (C) Windows
- (D) Chrome

Q72. Which of the following is a spreadsheet software?

- (A) MS Excel
- (B) MS Word
- (C) MS PowerPoint
- (D) MS Access

Q73. A file with a .exe extension is:

- (A) An image file
- (B) An executable file
- (C) A text file
- (D) A video file

Q74. What is the shortcut key for Save?

- (A) Ctrl + A
- (B) Ctrl + S
- (C) Ctrl + P
- (D) Ctrl + D

Q75. What is an email used for?

- (A) Sending and receiving electronic messages
- (B) Printing documents
- (C) Playing games only
- (D) Formatting a computer

Section - D

Q76. The area of a rectangle with length 12 cm and breadth 6 cm is:

- (A) 60 cm^2
- (B) 66 cm^2
- (C) 72 cm^2
- (D) 78 cm^2

Q77. The perimeter of a square with side 13 cm is:

- (A) 44 cm
- (B) 48 cm
- (C) 52 cm
- (D) 56 cm

Q78. The sum of the angles in a triangle is:

- (A) 90°
- (B) 180°
- (C) 270°
- (D) 360°

Q79. The area of a rhombus with diagonals 10 cm and 8 cm is:

- (A) 18 cm^2
- (B) 40 cm^2
- (C) 80 cm^2
- (D) 36 cm^2

Q80. The volume of a cube with side 5 cm is:

- (A) 100 cm^3
- (B) 125 cm^3
- (C) 150 cm^3
- (D) 75 cm^3

Q81. The area of a triangle with base 10 cm and height 12 cm is:

- (A) 60 cm^2
- (B) 120 cm^2
- (C) 100 cm^2
- (D) 110 cm^2

Q82. The total surface area of a cylinder with radius 7 cm and height 10 cm is (use $\pi = 22/7$):

- (A) 748 cm²
- (B) 528 cm²
- (C) 660 cm²
- (D) 792 cm²

Q83. The value of 15% of 200 is:

- (A) 20
- (B) 25
- (C) 30
- (D) 35

Q84. The smallest prime number is:

- (A) 0
- (B) 1
- (C) 2
- (D) 3

Q85. If $x + 5 = 12$, then $x = ?$

- (A) 5
- (B) 6
- (C) 7
- (D) 8

Q86. The HCF of 12 and 18 is:

- (A) 2
- (B) 3
- (C) 6
- (D) 9

Q87. Simplify: $(2x + 3)(x - 4)$

- (A) $2x^2 - 5x - 12$
- (B) $2x^2 + 5x - 12$
- (C) $2x^2 - 5x + 12$
- (D) $2x^2 + 11x - 12$

Q88. If $a + b = 10$ and $ab = 21$, then $a^2 + b^2 = ?$

- (A) 58
- (B) 79
- (C) 100
- (D) 121

Q89. The average of 10, 20, 30, 40, 50 is:

- (A) 25
- (B) 30
- (C) 35
- (D) 40

Q90. The mode of the data 2, 3, 3, 4, 5, 3, 6 is:

- (A) 2
- (B) 3
- (C) 4
- (D) 5

Q91. The probability of getting a head when a coin is tossed once is:

- (A) 0
- (B) $\frac{1}{4}$
- (C) $\frac{1}{2}$
- (D) 1

Q92. The median of 3, 5, 7, 9, 11 is:

- (A) 5
- (B) 7
- (C) 9
- (D) 11

Q93. The probability of getting an even number when a die is rolled once is:

- (A) $\frac{1}{6}$
- (B) $\frac{1}{3}$
- (C) $\frac{1}{2}$
- (D) $\frac{2}{3}$

Q94. In a class of 50 students, 30 play cricket, 20 play football, and 10 play both. How many play neither?

- (A) 5
- (B) 10
- (C) 15
- (D) 20

Q95. The value of $\sin 30^\circ$ is:

- (A) $\frac{1}{2}$
- (B) 1
- (C) 0
- (D) $\frac{\sqrt{3}}{2}$

Q96. The value of $\cos 0^\circ$ is:

- (A) 0
- (B) 1
- (C) -1
- (D) $1/2$

Q97. The value of $\tan 45^\circ$ is:

- (A) 0
- (B) 1
- (C) $\sqrt{3}$
- (D) Undefined

Q98. $\sin^2\theta + \cos^2\theta = ?$

- (A) 0
- (B) 1
- (C) 2
- (D) θ

Q99. The derivative of x^2 with respect to x is:

- (A) x
- (B) $2x$
- (C) x^2
- (D) 2

Q100. The value of $\int x \, dx$ is:

- (A) $x^2/2 + C$
- (B) $x^2 + C$
- (C) $2x + C$
- (D) $x + C$

Answer Key

Section A: Aptitude & Reasoning

Q.No	Correct Option
1	A — Painter
2	A — School
3	C — Carrot
4	D — Cube
5	A — Father
6	B — Daughter
7	C — Wife
8	A — Mother
9	A — EPH
10	A — NPVTF
11	A — QFODJM
12	A — 8251896
13	A — 5 km
14	C — 10 km
15	D — West
16	A — All roses need water
17	A — 12
18	D — Book
19	B — R
20	B — 25
21	B — 31
22	B — 52
23	A — Three intersecting circles
24	A — All three overlapping
25	B — 20

Section B: Basic English

Q.No	Correct Option
26	A — A letter is written by her
27	B — A house is being built by them
28	B — Mary baked the cake
29	A — The lesson will be explained by the teacher
30	C — My bicycle has been stolen
31	B — The work had been completed by me before he arrived
32	B — an
33	B — on

Q.No	Correct Option
34	A — over
35	B — since
36	C — The
37	A — a
38	A — on
39	B — He
40	B — pride
41	B — children
42	B — herself
43	A — Courage
44	B — has
45	B — goes
46	B — were
47	C — has finished
48	A — have
49	B — boils
50	C — was cooking

Section C: Computer Applications

Q.No	Correct Option
51	B — Carbon Copy
52	B — Hertz
53	B — CPU
54	B — 8 bits
55	C — Microsoft
56	B — MS Excel
57	A — Central Processing Unit
58	C — Keyboard
59	A — Random Access Memory
60	B — ALU
61	B — Hard Disk
62	B — RAM
63	B — Hertz
64	B — Windows
65	D — MS Word
66	A — Manage hardware and software resources
67	B — Android
68	C — MS PowerPoint
69	A — Graphical User Interface
70	B — Application software
71	A — Quick Heal
72	A — MS Excel
73	B — An executable file
74	B — Ctrl +S
75	A — Sending and receiving electronic

Q.No	Correct Option
	messages

Section D: Mathematics

Q.No	Correct Option
76	C — 72 cm^2
77	C — 52 cm
78	B — 180°
79	B — 40 cm^2
80	B — 125 cm^3
81	A — 60 cm^2
82	A — 748 cm^2
83	C — 30
84	C — 2
85	C — 7
86	C — 6
87	A — $2x^2 - 5x - 12$
88	A — 58
89	B — 30
90	B — 3
91	C — $1/2$
92	B — 7
93	C — $1/2$
94	B — 10
95	A — $1/2$
96	B — 1
97	B — 1
98	B — 1
99	B — $2x$
100	A — $x^2/2 + C$

Topics for SAFAL Examination

Subject: Computer Applications

1. Computer Fundamentals
2. Input and Output devices
3. Basic Operating Systems
4. MS Word
5. MS Excel
6. MS PowerPoint
7. Email
8. Computer Shortcuts
9. Computer Abbreviations

Subject : Basic English

1. Active & Passive Voice
2. Articles & Prepositions
3. Nouns & Pronouns
4. Verbs & Tenses

Subject : Mathematics

1. Geometry & Mensuration
2. Number System & Algebra
3. Statistics & Probability
4. Trigonometry & Calculus

Subject : Aptitude & Reasoning

1. Analogy & Classification
2. Blood Relations
3. Coding & Decoding
4. Directions
5. Logical Reasoning
6. Series
7. Venn Diagram
8. Alphanumeric Series
9. Classification / Relationship Diagram
10. Letter-Shift Coding



Haryana State Electronics Development Corporation Limited
हरियाणा राज्य इलैक्ट्रॉनिक्स विकास निगम लिमिटेड
(a state government undertaking/हरियाणा सरकार का उपक्रम)

11. Mirror Reverse Coding
12. Number Coding
13. Set-based Numeric Venn Diagram
14. Survey-Based Numeric Venn Diagram

