



**OFFICE OF THE ENGINEER-IN-CHIEF
PUBLIC HEALTH ENGINEERING DEPARTMENT
AIZAWL : MIZORAM**

**WRITTEN EXAMINATION : 2025
FOR THE POST OF**

PUMP OPERATOR

PAPER-II

Code No: _____
(For Official Use)

Signature of Invigilator

SUBJECT (Part)	MARKS OBTAINED
Part-A Simple Arithmetic (50x2=100 marks)	
Part-B Basic Computer Knowledge (50x2=100 marks)	
Total Marks obtained (Full Marks-200)	

Signature of Examiner



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Roll No: _____
(To be filled in by Candidate)

Signature of Candidate

Signature of Invigilator

Instructions:

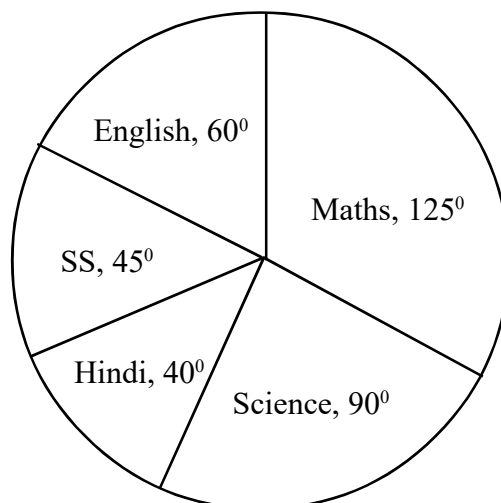
1. The question paper will also serve as the answer sheet. Candidates are required to answer Parts A, B, directly on the question/answer sheet using Tick (✓) Marks.
 2. Time : 3 Hours
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PART-A
SIMPLE ARITHMETIC (50X2=100 Marks)

1. How many composite number are there below 20 ?
(a) 5 ☐ (b) 10 ☐
(c) 15 ☐ (d) 8 ☐
2. Which of the following is twin prime
(a) (4,6) ☐ (b) (8,10) ☐
(c) (11,13) ☐ (d) None of these ☐
3. Whole numbers begin with the number _____
(a) 0 ☐ (b) 1 ☐
(c) 2 ☐ (d) 3 ☐
4. In the BODMAS rule, the letter 'M' stands for _____
(a) Monitor ☐ (b) Media ☐
(c) Mass ☐ (d) Muntiplication ☐
5. Divided is equal to _____
(a) (Divisor x Quotient x Reminder) ☐ (b) (Divisor x Quotient) + Reminder ☐
(c) (Reminder x Quotient) + Divisor ☐ (d) (Divisor x Quotient)- Remainder) ☐
6. What is the largest 4 digits number which is completely divisible by 12
(a) 9996 ☐ (b) 9999 ☐
(c) 9900 ☐ (d) 1000 ☐
7. The smallest 5 digit number among the following is
(a) 12031 ☐ (b) 11023 ☐
(c) 23011 ☐ (d) 32011 ☐
8. Which of the following is not a prime number?
(a) 19 ☐ (b) 37 ☐
(c) 51 ☐ (d) 13 ☐
9. 6 bowls cost Rs 180. What would be the cost of 20 such bowls ?
(a) Rs 700 ☐ (b) Rs 600 ☐
(c) Rs 800 ☐ (d) Rs 900 ☐
10. In a school $\frac{5}{8}$ of the students are boys. If there are 240 girls, then the total number of boys will be
(a) 400 ☐ (b) 350 ☐
(c) 500 ☐ (d) 450 ☐
11. $10 \div 5 + 8 - (6 - 2) \times 5$ is equal to _____
(a) - 10 ☐ (b) 10 ☐
(c) 12 ☐ (d) 8 ☐
12. Find the sum : $\frac{-9}{10} + \frac{5}{12}$
(a) $\frac{-4}{48}$ ☐ (b) $\frac{-5}{48}$ ☐
(c) $\frac{-7}{48}$ ☐ (d) $\frac{-6}{48}$ ☐

13. Simplify : $\sqrt{15} \times \sqrt{20}$
 (a) $3\sqrt{10}$ ☐ (b) $10\sqrt{3}$ ☐
 (c) $10\sqrt{4}$ ☐ (d) $4\sqrt{10}$ ☐
14. Solve for x : $2x - 1 = 99$
 (a) 30 ☐ (b) 40 ☐
 (c) 50 ☐ (d) 60 ☐
15. When 2 is added to a number, the result is 15. Find the number.
 (a) 10 ☐ (b) 13 ☐
 (c) 12 ☐ (d) 8 ☐
16. The sum of any two consecutive even natural numbers is 442. Find the larger number.
 (a) 222 ☐ (b) 122 ☐
 (c) 322 ☐ (d) 422 ☐
17. If $5x = 3x - 40$, then $x + 9$ is equal to _____
 (a) 10 ☐ (b) 12 ☐
 (c) - 11 ☐ (d) - 15 ☐
18. Find the average of : 12, 10, 15, 8, 5, 14, 10, 6
 (a) 10 ☐ (b) 15 ☐
 (c) 12 ☐ (d) 8 ☐
19. The average age of 25 children in the class is 8 years. If the teacher's age is included the average age becomes 9 years. What was the teacher's age?
 (a) 32 years ☐ (b) 34 years ☐
 (c) 37 years ☐ (d) 40 years ☐

Direction (Questions 20, 21, 22 & 23) the given pie-chart represents the marks obtained by student in different subjects. If the student obtained 300 marks in English, then.



20. The total marks scored by the student is
 (a) 2000 ☐ (b) 1600 ☐
 (c) 1800 ☐ (d) 1000 ☐
21. On which subject did the student get 450 marks ?
 (a) Science ☐ (b) Maths ☐
 (c) SS ☐ (d) Hindi ☐
22. Marks scored in Maths is
 (a) 630 ☐ (b) 550 ☐
 (c) 600 ☐ (d) 625 ☐

23. In how many subjects did the student score less than 250 marks?
 (a) 3 ☐ (b) 2 ☐
 (c) 1 ☐ (d) 4 ☐
24. Rs 1024 is divided in the ratio 4 : 5 : 7. Then, the largest share is
 (a) Rs 520 ☐ (b) Rs 360 ☐
 (c) Rs 448 ☐ (d) Rs 450 ☐
25. If $2 : 3 :: 6 : x$, then the value of x is
 (a) 9 ☐ (b) 2 ☐
 (c) 15 ☐ (d) 5 ☐
26. Find the 4th propotion of 3,7 and 9
 (a) 11 ☐ (b) 15 ☐
 (c) 25 ☐ (d) 21 ☐
27. What percentage of Rs 5 is 30 paise?
 (a) 8 % ☐ (b) 6 % ☐
 (c) 10 % ☐ (d) 9 % ☐
28. Convert 30 % into decimal :
 (a) $\frac{1}{20}$ ☐ (b) $\frac{1}{10}$ ☐
 (c) $\frac{1}{16}$ ☐ (d) $\frac{1}{15}$ ☐
29. Convert 6.25% into a fraction :
 (a) 0.3 ☐ (b) 0.5 ☐
 (c) 0.6 ☐ (d) 0.2 ☐
30. What percentage is 5 grams of 1kg
 (a) 5% ☐ (b) 1.0 % ☐
 (c) 0.5% ☐ (d) None of these ☐
31. 20 % of 440 =
 (a) 42 ☐ (b) 58 ☐
 (c) 76 ☐ (d) 88 ☐
32. A student scored 300 marks out of 500 marks. What is the percentage of marks scored?
 (a) 60 % ☐ (b) 65 % ☐
 (c) 70 % ☐ (d) 55 % ☐
33. 50 % of 20 % of 1000 =
 (a) 50 ☐ (b) 100 ☐
 (c) 150 ☐ (d) 200 ☐
34. The amount for which an article is sold is called _____
 (a) Selling Price ☐ (b) Cost Pice ☐
 (c) Discount ☐ (d) None of these ☐
35. Selling Price (SP) > Cost Price (CP) =
 (a) Loss ☐ (b) Discount ☐
 (c) Gain ☐ (d) Average ☐
36. Find the cost price (CP), when SP = Rs 950 and loss % = 5 %
 (a) Rs 1500 ☐ (b) Rs 1000 ☐
 (c) Rs 1200 ☐ (d) Rs 1800 ☐

37. Oranges are bought at 6 for Rs 10 and sold at 4 for Rs 9. Find the gain percent.
 (a) 35 % ☐ (b) 20 % ☐
 (c) 15 % ☐ (d) 10 % ☐
38. The list price of article is Rs 500 and sold at 20 % discount. Find the selling price.
 (a) Rs 280 ☐ (b) Rs 250 ☐
 (c) Rs 325 ☐ (d) Rs 400 ☐
39. If marked price is Rs 500 and selling price Rs 450, then discount percentage is _____
 (a) 8 % ☐ (b) 15 % ☐
 (c) 10 % ☐ (d) 20 % ☐
40. Find the square root of 1674
 (a) 42 ☐ (b) 32 ☐
 (c) 38 ☐ (d) 28 ☐
41. Find the simple interest on rs 12500 for 2 years at 8 % per annum.
 (a) Rs 1500 ☐ (b) Rs 2000 ☐
 (c) Rs 2500 ☐ (d) Rs 3200 ☐
42. Find the compound interest on Rs 10000 for 2 years, compounded annually at 9% per annum.
 (a) Rs 1800 ☐ (b) Rs 1900 ☐
 (c) Rs 1881 ☐ (d) Rs 2500 ☐
43. Speed =
 (a) $\frac{\text{Distance}}{\text{Time}}$ ☐ (b) $\frac{\text{Time}}{\text{Distance}}$ ☐
 (c) Distance x Time ☐ (d) Distance - Time ☐
44. A cheetah runs 240km in 3 hours. How much time will it to cover 160km at the same rate
 (a) 4 hours ☐ (b) 3 hours ☐
 (c) 5 hours ☐ (d) 2 hours ☐
45. A and B can do a piece of work separately in 30 days and 20 days respectively. How long will it take for both A and B together to do the work.
 (a) 15 days ☐ (b) 12 days ☐
 (c) 18 days ☐ (d) 10 days ☐
46. Hmingi and Faki invested Rs 24000 and Rs 8000 for a period of 2 years. After 2 years, they earned Rs 48000. What will be the share of Hmingi
 (a) Rs 36000 ☐ (b) Rs 25000 ☐
 (c) Rs 42000 ☐ (d) Rs 34000 ☐
47. Diagonal of a Square = _____
 (a) $\sqrt{3} a - b$ ☐ (b) $\sqrt{3} a^2$ ☐
 (c) $\sqrt{2} a$ ☐ (d) $\sqrt{3} a$ ☐
48. Area of a Circle = _____
 (a) πr^2 ☐ (b) πr ☐
 (c) $2r$ ☐ (d) $2\pi r$ ☐
49. In how many ways can the letters of the word 'STRESS' be arranged ?
 (a) 150 ☐ (b) 120 ☐
 (c) 180 ☐ (d) 170 ☐
50. The area of a rectangular plot is 462m² and its length is 28m. Find the perimeter of the plot.
 (a) 80m ☐ (b) 75 m ☐
 (c) 89m ☐ (d) 78 m ☐

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PART-B
BASIC COMPUTER KNOWLEDGE
(50X2=100 Marks)

1. Which of the following is not an input device?
 (a) VDU ☐ (b) Light Pen ☐
 (c) Keyboard ☐ (d) Scanner ☐
2. A light sensitive device that converts printed text, drawing, or other images into digital form is called
 (a) Plotter ☐ (b) Printer ☐
 (c) Scanner ☐ (d) OMR ☐
3. Which device has the limitation that we can only read it but cannot modify or erase it-
 (a) SS Disk ☐ (b) Tape Drive ☐
 (c) Floppy Disk ☐ (d) Hard Drive ☐
4. Sometimes the mouse pointer moves erratically. This is because the____
 (a) IRQ setting is not proper ☐ (b) Virus in the system ☐
 (c) Mouse Ball/Screen is dirty ☐ (d) Driver is not installed properly ☐
5. Specialized Program that allows user to utilize in specific application is classified as-
 (a) Applications Programs ☐ (b) Relative Programs ☐
 (c) Replicate Programs ☐ (d) Proactive Programs ☐
6. ____ is known as the translator for low level programming language.
 (a) Compiler ☐ (b) Linker ☐
 (c) Loader ☐ (d) Assembler ☐
7. Information travels between components to Motherboard through?
 (a) CMOS ☐ (b) Busses ☐
 (c) Bays ☐ (d) Flash Memory ☐
8. The resolution of Laser Printers are specified in terms of-
 (a) CPM ☐ (b) PPM ☐
 (c) DPI ☐ (d) LPM ☐
9. What is the function of Recycle Bin?
 (a) Store deleted File ☐ (b) Store Temporary File ☐
 (c) Store Corrupted File ☐ (d) Store Documents File ☐
10. Data Bus is _____ directional.
 (a) Single ☐ (b) Multi ☐
 (c) Biodirectional ☐ (d) None of these ☐
11. ____ is the translator which performs macro expansion tasks.
 (a) Macro Preprocessor ☐ (b) Macro Processor ☐
 (c) Macro Pro-Processor ☐ (d) Assembler ☐
12. DASD is an acronym of _____
 (a) Data Access Storage Device ☐ (b) Device Access to Storage Device ☐
 (c) Data Assembling in Storage Disk ☐ (d) Data Assemble in Stored Device ☐

13. Which is the secondary memory of Data Processing system?
 (a) CPU ☐ (b) Hard Disk ☐
 (c) Floppy Disk ☐ (d) ALU ☐
14. As Humans are called Homo Sapiens, ____ called the Sillico Sapiens.
 (a) Computers ☐ (b) Robots ☐
 (c) Hardwares ☐ (d) Monitors ☐
15. Set of programs which consist of full set of documentation is termed as-
 (a) Bus Packages ☐ (b) File Packages ☐
 (c) Database Packages ☐ (d) Software Packages ☐
16. A program in execution is called a _____.
 (a) Programming ☐ (b) Process ☐
 (c) Data Releasing ☐ (d) High Level Language Reading ☐
17. A device that is used to transmit data over telecommunications lines is called _____.
 (a) Drive Bay ☐ (b) Data Bus ☐
 (c) Drive Platform ☐ (d) Modem ☐
18. For comparison and calculations, the computer uses _____.
 (a) CPU ☐ (b) ALU ☐
 (c) Control Unit ☐ (d) Processors ☐
19. In a typical computer operation, which of the following memories is put in use?
 (a) ROM ☐ (b) HDD ☐
 (c) CND ☐ (d) RAM ☐
20. The basic goal of computer processors is to convert the given data into _____.
 (a) Program ☐ (b) Information ☐
 (c) Contents of Main Memory ☐ (d) Text, Table and Graph ☐
21. Which among the following is not a peripheral hardware device in a computer system?
 (a) Keyboard ☐ (b) Optical Drive ☐
 (c) Printer ☐ (d) HDD ☐
22. Computers process data under the control of sets of instructions called _____.
 (a) Computer Data ☐ (b) Computer Program ☐
 (c) Computer Bus ☐ (d) Computer Instruction ☐
23. A microprocessor unit, a memory unit, and an input/output unit form a _____.
 (a) Microcomputer ☐ (b) CPU ☐
 (c) Compiler ☐ (d) ALU ☐
24. The software used to drive microprocessor-based system is known as-
 (a) Firmware ☐ (b) Assembly Language Program ☐
 (c) Flowchart Instruction ☐ (d) BASIC Interpreter Instruction ☐
25. How many bits are used in the data bus?
 (a) 7 ☐ (b) 9 ☐
 (c) 8 ☐ (d) 16 ☐
26. What is the primary function of a CPU?
 (a) Memory Management ☐ (b) Input/Output Operation ☐
 (c) Data Processing ☐ (d) Storage Management ☐

27. What is the primary function of a CPU?
- | | | | |
|-----------------------------|--------------------------|----------------------------|--------------------------|
| (a) Permanent Data Storage | ☐ | (b) Temporary Data Storage | ☐ |
| (c) Input/output Operations | ☐ | (d) Data Processing | ☐ |
28. What is the primary function of a Hard Disk Drive?
- | | | | |
|-----------------------------|--------------------------|-----------------------|--------------------------|
| (a) Input/output operations | ☐ | (b) Data Processing | ☐ |
| (c) Permanent Data Storage | ☐ | (d) Memory Management | ☐ |
29. What is the primary function of a Graphics Card?
- | | | | |
|-----------------------------|--------------------------|------------------------|--------------------------|
| (a) Data Processing | ☐ | (b) Memory Management | ☐ |
| (c) Input/output operations | ☐ | (d) Graphics Rendering | ☐ |
30. What is the primary function of an Operating System
- | | | | |
|-----------------------------|--------------------------|-------------------------|--------------------------|
| (a) Data Processing | ☐ | (b) Memory Management | ☐ |
| (c) Input/output operations | ☐ | (d) Resource Management | ☐ |
31. What is the first electronic Computer?
- | | | | |
|------------|--------------------------|--------------|--------------------------|
| (a) ENIAC | ☐ | (b) Colossus | ☐ |
| (c) UNIVAC | ☐ | (d) Z3 | ☐ |
32. Who is credited with inventing the first programmable computer?
- | | | | |
|---------------------|--------------------------|--------------------|--------------------------|
| (a) Charles Babbage | ☐ | (b) Ada Lovelace | ☐ |
| (c) Alan Turing | ☐ | (d) John Atanasoff | ☐ |
33. Magnetic Tape is-
- | | | | |
|-----------------------------|--------------------------|------------------------------|--------------------------|
| (a) Random Access Medium | ☐ | (b) A parallel access medium | ☐ |
| (c) Universal Access Medium | ☐ | (d) Serial Access Medium | ☐ |
34. The Amount of data that a disk may contains known as the Disk's____
- | | | | |
|-------------------|--------------------------|----------------------|--------------------------|
| (a) Volume | ☐ | (b) Size | ☐ |
| (c) Tracking Unit | ☐ | (d) Storage Capacity | ☐ |
35. A laser printer does not use-
- | | | | |
|-----------------------------|--------------------------|------------------|--------------------------|
| (a) A photo-conductive drum | ☐ | (b) A print head | ☐ |
| (c) None of these | ☐ | (d) A laser beam | ☐ |
36. What are the individual dots which make up a picture on the monitor screen called?
- | | | | |
|------------------|--------------------------|-------------------|--------------------------|
| (a) Colored Spot | ☐ | (b) Pixies | ☐ |
| (c) Pixels | ☐ | (d) None of these | ☐ |
37. Hard Copy is a term used to describe?
- | | | | |
|---------------------------------|--------------------------|---------------------------|--------------------------|
| (a) Printed Output | ☐ | (b) Writing on Hard Board | ☐ |
| (c) Storing Information on Disk | ☐ | (d) All of the above | ☐ |
38. Resolution of laser printer is specified in terms of-
- | | | | |
|---------|--------------------------|---------|--------------------------|
| (a) DPI | ☐ | (b) LPM | ☐ |
| (c) CPM | ☐ | (d) PPM | ☐ |
39. The majority of computer crimes are committed by-
- | | | | |
|------------------------|--------------------------|----------------------------|--------------------------|
| (a) Hackers | ☐ | (b) Insiders | ☐ |
| (c) Overseas Criminals | ☐ | (d) Young Teenage geniuses | ☐ |

40. IDE or SATA interface connect Motherboard with-
- | | | | |
|------------------|--------------------------|---------------|--------------------------|
| (a) Power Supply | ☐ | (b) Processor | ☐ |
| (c) RAM | ☐ | (d) Hard Disk | ☐ |
41. Hyper-Threading (HT) is related to-
- | | | | |
|-----------------|--------------------------|---------------|--------------------------|
| (a) Processor | ☐ | (b) RAM | ☐ |
| (c) Motherboard | ☐ | (d) Hard Disk | ☐ |
42. The horizontal and vertical lines on a spreadsheets are called-
- | | | | |
|-----------------|--------------------------|----------------|--------------------------|
| (a) Cells | ☐ | (b) Sheets | ☐ |
| (c) Block Lines | ☐ | (d) Grid-lines | ☐ |
43. A collection of interrelated file in computer is-
- | | | | |
|------------------|--------------------------|--------------|--------------------------|
| (a) File Manager | ☐ | (b) Filed | ☐ |
| (c) Record | ☐ | (d) Database | ☐ |
44. The Operating System is the most common type of _____ software
- | | | | |
|---------------------|--------------------------|-------------------|--------------------------|
| (a) Communication | ☐ | (b) System | ☐ |
| (c) Word Processing | ☐ | (d) None of these | ☐ |
45. Which Indian IT Expert started web-based email service HOTMAIL in 1996?
- | | | | |
|-------------------|--------------------------|--------------------|--------------------------|
| (a) Sabeer Bhatia | ☐ | (b) Vinod Bhatia | ☐ |
| (c) Ajim Premji | ☐ | (d) Narayan Murthy | ☐ |
46. The length of a word in Computer is measured in-
- | | | | |
|----------------|--------------------------|-----------|--------------------------|
| (a) bits | ☐ | (b) byte | ☐ |
| (c) Milimetres | ☐ | (d) Metre | ☐ |
47. 'Zipping' a file means-
- | | | | |
|----------------------------|--------------------------|-----------------------------|--------------------------|
| (a) Encrypting the message | ☐ | (b) Compressing the Message | ☐ |
| (c) Transfer the Message | ☐ | (d) All of the above | ☐ |
48. What is the Super Computer developed in India
- | | | | |
|-----------|--------------------------|------------|--------------------------|
| (a) CRAY | ☐ | (b) PARAM | ☐ |
| (c) ENIAC | ☐ | (d) CSIRAC | ☐ |
49. Use of Icons and Windows are characteristic of a _____ interface.
- | | | | |
|--------------------|--------------------------|----------------------|--------------------------|
| (a) Command Driven | ☐ | (b) Windows Oriented | ☐ |
| (c) Graphical-User | ☐ | (d) None of these | ☐ |
50. Which device cannot be shared in Network?
- | | | | |
|---------------|--------------------------|-------------------|--------------------------|
| (a) Projector | ☐ | (b) Keyboard | ☐ |
| (c) Scanner | ☐ | (d) None of these | ☐ |

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