



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

WRITTEN EXAMINATION : 2025
FOR THE POST OF

ELECTRICIAN-II
(Regular)

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: _____
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Signature of Candidate

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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

PART-A
SIMPLE ARITHMETIC (50X2=100 Marks)

1. Which of the following is a prime number?
(a) 7 ☐ (b) 12 ☐
(c) 9 ☐ (d) 8 ☐
2. What is the place value of 7 in the number 4756 ?
(a) 7 ☐ (b) 70 ☐
(c) 7000 ☐ (d) 700 ☐
3. What is the smallest 4-digit number?
(a) 4444 ☐ (b) 4000 ☐
(c) 1000 ☐ (d) 9000 ☐
4. Which number system do we use in everyday life ?
(a) Binary ☐ (b) Octal ☐
(c) Decimal ☐ (d) Hexadecimal ☐
5. Simplify: $(-9) \times (-4) + (-35) \div 7$
(a) 10 ☐ (b) 31 ☐
(c) 28 ☐ (d) 35 ☐
6. Find the value of $41.215 + 5.34 + 0.6784$
(a) 47.2334 ☐ (b) 46.2134 ☐
(c) 45.4334 ☐ (d) 48.2334 ☐
7. Simplify : $3\frac{1}{2} - 2\frac{1}{6}$
(a) $\frac{5}{2}$ ☐ (b) $\frac{6}{4}$ ☐
(c) $\frac{4}{3}$ ☐ (d) $\frac{2}{5}$ ☐
8. Simplify : $\frac{2}{5}$ of $\frac{3}{7} \times \frac{5}{3} - \frac{2}{3}$
(a) $\frac{8}{21}$ ☐ (b) $-\frac{8}{21}$ ☐
(c) $-\frac{6}{21}$ ☐ (d) $\frac{7}{5}$ ☐
9. What is the Square root of 729 ?
(a) 27 ☐ (b) 17 ☐
(c) 37 ☐ (d) 13 ☐
10. What is the cube root of 2197 ?
(a) 15 ☐ (b) 17 ☐
(c) 23 ☐ (d) 13 ☐
11. The average of 5 numbers is 20. If one number is excluded, the average of the remaining numbers is 18. What is the excluded number ?
(a) 20 ☐ (b) 25 ☐
(c) 28 ☐ (d) 27 ☐

12. The average of 3 numbers is 15. If two numbers are 12 and 18, what is the third numbers ?
 (a) 13 ☐ (b) 15 ☐
 (c) 16 ☐ (d) 14 ☐
13. The average of 10 numbers is 25. If each number is increased by 5. What is the new average ?
 (a) 30 ☐ (b) 27 ☐
 (c) 29 ☐ (d) 35 ☐
14. The average age of 5 friends is 18 years. If the age of a sixth friend is added, the average age becomes 19 years. What is the age of the sixth friend?
 (a) 15 years ☐ (b) 20 years ☐
 (c) 24 years ☐ (d) 25 years ☐
15. A book is marked at Rs 100 and sold at Rs. 75. What is the discount percentage ?
 (a) 20 % ☐ (b) 25 % ☐
 (c) 30 % ☐ (d) 35 % ☐
16. A bag is available for Rs 90 after a 10% discount. What is the marked price of the bag ?
 (a) Rs 110 ☐ (b) Rs 90 ☐
 (c) Rs 120 ☐ (d) Rs 100 ☐
17. A toy marked at Rs 40 is available for Rs 32. What percent discount is given on the marked price ?
 (a) 10 % ☐ (b) 20% ☐
 (c) 25 % ☐ (d) 30 % ☐
18. What percentage of 75 is 81 ?
 (a) 95 % ☐ (b) 98 % ☐
 (c) 100 % ☐ (d) 108 % ☐
19. If 16 % of a number is 2.4, find the number
 (a) 18 ☐ (b) 15 ☐
 (c) 20 ☐ (d) 10 ☐
20. A reduction of 10% in the price of a TV set brought down its cost to Rs 22950. What is the original price of the TV set?
 (a) Rs 25500 ☐ (b) Rs 24600 ☐
 (c) Rs. 27100 ☐ (d) Rs 21500 ☐
21. Convert 16% into a decimal
 (a) 16.00 ☐ (b) Rs. 1.60 ☐
 (c) 0.16 ☐ (d) 0.20 ☐
22. If 36% of the pupils in a school are girls and the number of boys in the school is 816, how many girls are there in the school ?
 (a) 423 ☐ (b) 459 ☐
 (c) 542 ☐ (d) 615 ☐
23. 0.0035 is equivalent to which of the following
 (a) 3.5% ☐ (b) 0.035% ☐
 (c) 0.35% ☐ (d) 03.50% ☐
24. Sanga bought a pendrive for Rs 200 and sold it for Rs 300. Find his gain percent
 (a) 50% ☐ (b) 30% ☐
 (c) 40% ☐ (d) 35% ☐

25. On selling a fan for Rs 810, Rema gains 8% . For how much did he purchase it.
 (a) Rs 730 ☐ (b) Rs. 780 ☐
 (c) Rs 750 ☐ (d) Rs 800 ☐
26. Find the cost price, when selling price is Rs 1596 and gain % is 12 %
 (a) Rs 1425 ☐ (b) Rs 1523 ☐
 (c) Rs 1438 ☐ (d) Rs 1512 ☐
27. Find the gain percent, when CP = Rs 620 ad SP = Rs 713
 (a) 20 % ☐ (b) 10 % ☐
 (c) 12 % ☐ (d) 15 % ☐
28. If the selling price of 16 water bottles is equal to the cost price of 17 water bottle, find the gain percent earned by the dealer.
 (a) 8% ☐ (b) 7% ☐
 (c) $6\frac{1}{4}\%$ ☐ (d) $5\frac{2}{3}\%$ ☐
29. Calculate the ratio of Rs 50 and 25 paise
 (a) 20 : 1 ☐ (b) 200 : 1 ☐
 (c) 50 : 1 ☐ (d) 500 : 1 ☐
30. If 3 : 17 : 21 : x, find x.
 (a) 119 ☐ (b) 120 ☐
 (c) 100 ☐ (d) 95 ☐
31. Caculate the ratio of 2 kg and 400 grams
 (a) 2 : 4 ☐ (b) 5 : 1 ☐
 (c) 3 : 1 ☐ (d) 7 : 1 ☐
32. Rs 500 is divided between A and B in 2 : 3 ratio. Find the share of B
 (a) Rs 400 ☐ (b) Rs 350 ☐
 (c) Rs 300 ☐ (d) Rs 200 ☐
33. Find the third proportion of 5, 10
 (a) 20 ☐ (b) 30 ☐
 (c) 25 ☐ (d) 35 ☐
34. Find the mean proportion between 36 and 9
 (a) 10 ☐ (b) 16 ☐
 (c) 18 ☐ (d) 15 ☐
35. A and B start a business by investing Rs 4000 and Rs 12000 respectively. Find the ratio of their profit after 1 year ?
 (a) 1 : 3 ☐ (b) 2 : 3 ☐
 (c) 3 : 5 ☐ (d) 2 : 5 ☐
36. Duha, Mawia and Siama enters into a business with capital of Rs 12000, Rs 15000 and Rs 21000. If their annual profit is Rs 10800, what will be Siama's share
 (a) Rs 4320 ☐ (b) Rs 4725 ☐
 (c) Rs 3275 ☐ (d) Rs 2600 ☐
37. If Lura can finish a piece of work in k days. Mawia alone can do it in 10 day. What time will Para required to do it alone.
 (a) $\frac{1}{k}$ ☐ (b) $\frac{1}{5k}$ ☐
 (c) $\frac{5}{k}$ ☐ (d) $\frac{k}{5}$ ☐

38. Mawia and Para can do a piece of work in 6 days, Mawia alone can do it in 10 days. What time will Para required to do it alone.
- (a) 15 days ☐ (b) 11 days ☐
(c) 10 days ☐ (d) 20 days ☐
39. 6 men can finish a work in 20 days. 8 men will complete the same work in
- (a) 12 days ☐ (b) 18 days ☐
(c) 15 days ☐ (d) 16 days ☐
40. A speed of 36 km/h is the same as _____
- (a) 10 m/s ☐ (b) 12 m/s ☐
(c) 8 m/s ☐ (d) 15 m/s ☐
41. David crosses a path 600 metre long in 5 minutes. His speed in km/h is
- (a) 10 km/h ☐ (b) 6.5 km/h ☐
(c) 7.2 km/h ☐ (d) 8 km/h ☐
42. Which of the following is true
- (a) Distance = Time / Speed ☐ (b) Time = Distance x Speed ☐
(c) Speed = Distance / Time ☐ (d) Time = Speed / Distance ☐
43. Convert 90 km/h into m/s?
- (a) 5 m/s ☐ (b) 15 m/s ☐
(c) 35 m/s ☐ (d) 25 m/s ☐
44. Which of the following formula is corect
- (a) Simple Interest = $\frac{PTR}{100}$ ☐ (b) Principal = $\frac{100 + \text{Amount}}{100}$ ☐
(c) Rate = $\frac{100 + SI}{P}$ ☐ (d) Time = $\frac{100 + SI}{P}$ ☐
45. The simple interest on a sum of Rs 500 for a period pf 3 years is 60. The rate of interest is _
- (a) 8 % ☐ (b) 5 % ☐
(c) 6 % ☐ (d) 4 % ☐
46. The compound interest on pricipal of Rs 5000 in two years at the rate of 10 %per annum is
- (a) Rs 500 ☐ (b) Rs 1050 ☐
(c) Rs 550 ☐ (d) None of these ☐
47. Find the circumference of a circle of radius 14 cm
- (a) 66 cm ☐ (b) 75 cm ☐
(c) 88 cm ☐ (d) 90 cm ☐
48. Find the volume of a cuboid which is 8m long, 6m broad and 3.5m high.
- (a) 172 m² ☐ (b) 168 m² ☐
(c) 146 m² ☐ (d) 196 m² ☐
49. In how many ways can the letters of the word 'FLIGHT' be arranged ?
- (a) 120 ☐ (b) 140 ☐
(c) 160 ☐ (d) 180 ☐
50. Find the additive inverse of $\frac{5}{9}$
- (a) $\frac{10}{9}$ ☐ (b) $\frac{9}{5}$ ☐
(c) $\frac{5}{9}$ ☐ (d) $\frac{-5}{9}$ ☐
- ooOoo----

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

1. 'C' is what kind of language?
(a) An assembly language ☐ (b) A third generation high level language ☐
(c) Future Language ☐ (d) A machine language ☐
2. Identify the device through which data and instructions are entered into a computer?
(a) Software ☐ (b) Output device ☐
(c) Input device ☐ (d) None of these ☐
3. Computer Monitor is also known as?
(a) DVU ☐ (b) UVD ☐
(c) VDU ☐ (d) CCTV ☐
4. Arrange in ascending order the units of memory TB, KB, GB, MB?
(a) TB>MB>GB>KB ☐ (b) MB>GB>TB>KB ☐
(c) TB>GB>MB>KB ☐ (d) GB>MB>KB>TB ☐
5. Which one of these stores more data than a DVD?
(a) CD Rom ☐ (b) Floppy Disk ☐
(c) Blue Ray Disk ☐ (d) Red Ray Disk ☐
6. The output shown on the computer monitor is called-
(a) Hard Copy ☐ (b) Hard Copy ☐
(c) Soft Copy ☐ (d) Screen Copy ☐
7. 8 bits make up 1_____
(a) Byte ☐ (b) Megabyte ☐
(c) Kilobyte ☐ (d) None ☐
8. Which one is the result of the output given by a computer?
(a) Data ☐ (b) Instruction ☐
(c) Information ☐ (d) Excursion ☐
9. What is kind of CD-ROM?
(a) Optical Disk ☐ (b) Magnetic Disk ☐
(c) Magneto Optical Disk ☐ (d) None ☐
10. Which is known as the most powerful type of computer?
(a) Super Computer ☐ (b) Iframe ☐
(c) Mega Frame ☐ (d) Super Access ☐
11. Which is not a function of microprocessor?
(a) Control the rest of the computer's components ☐
(b) Keeps the system unit cool ☐
(c) Interprets instructions given by software ☐
(d) Processing data ☐
12. In Power Point, the Header & Footer button can be found on the insert tab in what group?
(a) Illustrations Group ☐ (b) Object Group ☐
(c) Text Group ☐ (d) Tables Group ☐

13. Which of the following is not a type of primary storage?
 (a) RAM ☐ (b) ROM ☐
 (c) Static RAM ☐ (d) All are primary storage device ☐
14. 'www' stands for-
 (a) World Whole Web ☐ (b) Wide World Web ☐
 (c) Web World Wide ☐ (d) World Wide Web ☐
15. Which one of the following are components of Central Processing Unit (CPU)?
 (a) Control Unit ☐ (b) Arithmetic Logic Unit, Mouse ☐
 (c) Arithmetic Logic Unit, Input ☐ (d) Arithmetic Logic Unit, Control Unit ☐
16. What is the name of a device that converts digital signals to analog signals?
 (a) Router ☐ (b) Switch ☐
 (c) Modem ☐ (d) None ☐
17. Where is RAM located?
 (a) Expansion Board ☐ (b) External Drive ☐
 (c) Mother Board ☐ (d) All of these ☐
18. Charles Babbage designed the first mechanical computer named-
 (a) Analytical Engine ☐ (b) Processor ☐
 (c) Computer Engine ☐ (d) Abacus ☐
19. If a computer provides database services to other, then it will be known as-
 (a) Web Server ☐ (b) Application Server ☐
 (c) Database Server ☐ (d) FTP Server ☐
20. Full Form of 'URL' is-
 (a) Uniform Resource Locator ☐ (b) Uniform Resource Link ☐
 (c) Uniform Registered Link ☐ (d) Unified Resource Link ☐
21. An Assembler is used to translate a program written in-
 (a) Low-Level Language ☐ (b) Machine Language ☐
 (c) Assembly Language ☐ (d) High Level Language ☐
22. Technology used to provide internet by transmitting data over wires of telephone network is -
 (a) Transmitter ☐ (b) Diodes ☐
 (c) retro ☐ (d) DSL ☐
23. Which level language is Assembly Language
 (a) High Level Programming Language ☐ (b) Medium Level Programming Language ☐
 (c) Low Level Programming Language ☐ (d) Machine Language ☐
24. Documents, Movies, images and photographs etc are stored at a?
 (a) Application Server ☐ (b) Web Server ☐
 (c) Print Server ☐ (d) File Server ☐
25. Which of the following is used in RAM?
 (a) Conductor ☐ (b) Semi Conductor ☐
 (c) Vacuum Tubes ☐ (d) Transistor ☐
26. What is the full form of GUI in terms of computers?
 (a) Graphical user instrument ☐ (b) Graphical Unified Instrument ☐
 (c) Graphical Unified Interface ☐ (d) Graphical User Interface ☐

27. What is the full form of ALU?
 (a) Arithmetic Logic Unit ☐ (b) Allowed Logical Unit ☐
 (c) Arithmetic Logical Unit ☐ (d) Arithmetic Logic Uniface ☐
28. Who was the Father of Internet?
 (a) Charles Babbage ☐ (b) Vint Cerf ☐
 (c) Denis Riche ☐ (d) Martin Cooper ☐
29. Verification is a process of-
 (a) Access ☐ (b) Login ☐
 (c) Logout ☐ (d) Authentication ☐
30. What is LINUX
 (a) Malware ☐ (b) Operating System ☐
 (c) Application Program ☐ (d) Firmware ☐
31. Which among following is an image name extension-
 (a) .gif ☐ (b) .docx ☐
 (c) .pptx ☐ (d) .lib ☐
32. Which is the most common language used in web designing?
 (a) C ☐ (b) C++ ☐
 (c) PHP ☐ (d) HTML ☐
33. Who is also known as the Father of Computer-
 (a) Charles Babbage ☐ (b) Vint Cerf ☐
 (c) Denis Riche ☐ (d) Martin Cooper ☐
34. Which among the following is commonly used language in Android Applications?
 (a) C ☐ (b) PHP ☐
 (c) C++ ☐ (d) Java ☐
35. What is the full form of HTTP?
 (a) Hyper Transfer Text Protocol ☐ (b) Hyper Text Transfer Protocol ☐
 (c) High Text Transfer Protocol ☐ (d) Hex Transfer Text Protocol ☐
36. Which among the following is odd?
 (a) CD/DVD ☐ (b) Floppy Disk ☐
 (c) SD Disk ☐ (d) BIOS ☐
37. Which operations are performed by RAM?
 (a) Read ☐ (b) Write ☐
 (c) Read and Write ☐ (d) Depends on computer ☐
38. Who is known as father of Artificial Intelligence?
 (a) John McCarthy ☐ (b) Vint Cerf ☐
 (c) Denis Ritche ☐ (d) James Gosling ☐
39. USB is which type of storage device?
 (a) Primary ☐ (b) Secondary ☐
 (c) Tertiary ☐ (d) None of these ☐

40. Which program is run by BIOS to check hardware components are working properly while computer turned on?
- | | | | |
|----------|--------------------------|----------|--------------------------|
| (a) DMOS | ☐ | (b) POST | ☐ |
| (c) CMOS | ☐ | (d) RIP | ☐ |
41. _____ is non-volatile.
- | | | | |
|---------|--------------------------|-----------|--------------------------|
| (a) RAM | ☐ | (b) Cache | ☐ |
| (c) ROM | ☐ | (d) SSD | ☐ |
42. RAM is which storage of device?
- | | | | |
|--------------|--------------------------|-------------------|--------------------------|
| (a) Primary | ☐ | (b) Secondary | ☐ |
| (c) Tertiary | ☐ | (d) None of these | ☐ |
43. _____ is volatile in nature.
- | | | | |
|---------|--------------------------|---------|--------------------------|
| (a) RAM | ☐ | (b) ROM | ☐ |
| (c) USE | ☐ | (d) DVD | ☐ |
44. What is the full form of CMOS?
- | | |
|---|--------------------------|
| (a) Content Metal Oxide Semiconductor | ☐ |
| (b) Complementary Metal Oxide Semiconductor | ☐ |
| (c) Complementary Metal Oxidation Semiconductor | ☐ |
| (d) None of these | ☐ |
45. Second Generations Computers consist of which the following?
- | | | | |
|-------------------------|--------------------------|-----------------|--------------------------|
| (a) Vaccum Tubes | ☐ | (b) Diodes | ☐ |
| (c) VLSI Microprocessor | ☐ | (d) Transistors | ☐ |
46. MPG, which is an extension of which type of files?
- | | | | |
|-----------|--------------------------|-----------|--------------------------|
| (a) Audio | ☐ | (b) Image | ☐ |
| (c) Video | ☐ | (d) Flash | ☐ |
47. What is the full form of SMPS?
- | | | | |
|------------------------------|--------------------------|-------------------------------|--------------------------|
| (a) Switch Mode Power Supply | ☐ | (b) Simply Mode Power Supply | ☐ |
| (c) Static Mode Power Supply | ☐ | (d) Storage Mode Power Supply | ☐ |
48. Who invented Java?
- | | | | |
|------------------|--------------------------|--------------------|--------------------------|
| (a) Denis Ritche | ☐ | (b) James Gosling | ☐ |
| (c) Bajarnae | ☐ | (d) Linus Torvalds | ☐ |
49. Which Operating System is developed by Apple?
- | | | | |
|-----------|--------------------------|-------------|--------------------------|
| (a) Linux | ☐ | (b) Windows | ☐ |
| (c) macOS | ☐ | (d) DOS | ☐ |
50. Where is BIOS is stored?
- | | | | |
|-----------------------|--------------------------|------------------|--------------------------|
| (a) Hard Disk | ☐ | (b) RAM | ☐ |
| (c) Flash Memory Chip | ☐ | (d) Any of these | ☐ |

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