



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

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

**ASSISTANT MECHANIC
(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



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

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

**ASSISTANT MECHANIC
(Regular)**

PAPER-II

Code No: _____
(For Official Use)

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

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

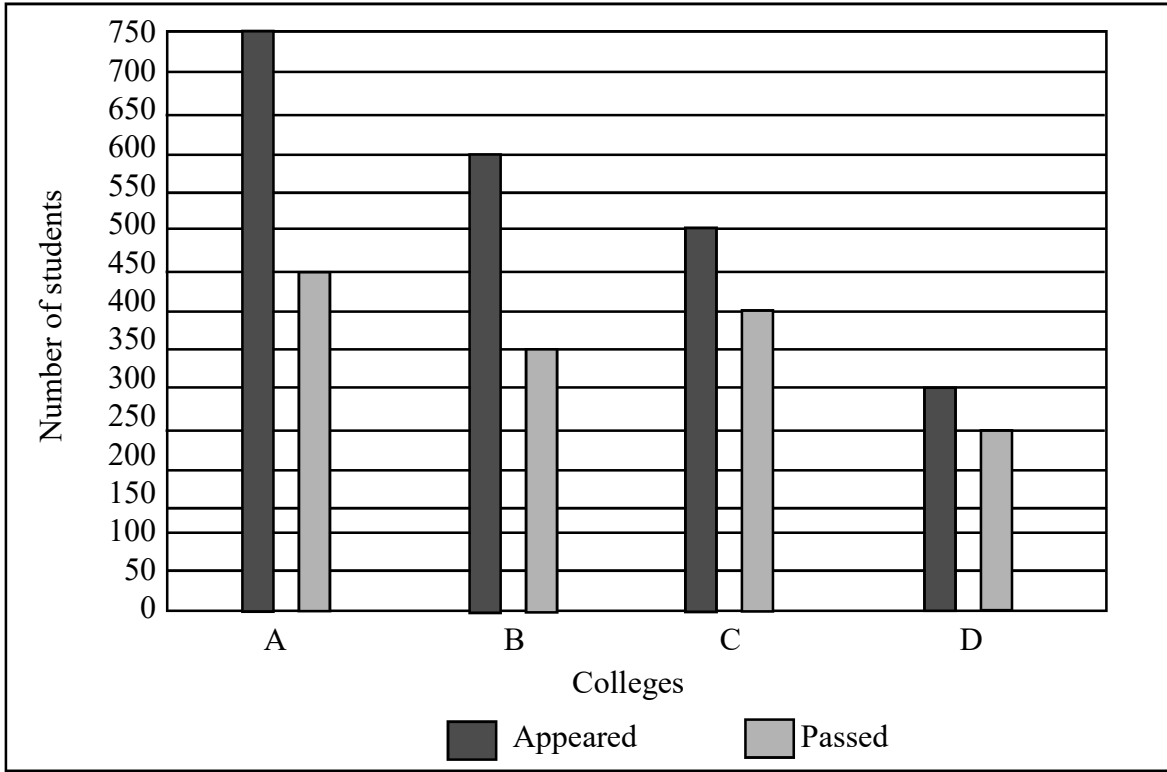
1. How many prime numbers are there below 10 ?
(a) 5 ☐ (b) 4 ☐
(c) 3 ☐ (d) 6 ☐
2. Which of the following is twin prime
(a) (5,7) ☐ (b) (8,10) ☐
(c) (4,6) ☐ (d) None of these ☐
3. Natural numbers are whole numbers other than _____
(a) 1 ☐ (b) 2 ☐
(c) 0 ☐ (d) -1 ☐
4. Even numbers are intergers which are divisible by _____
(a) 0 ☐ (b) 2 ☐
(c) 1 ☐ (d) 5 ☐
5. Dividend is equal to _____
(a) (Divisor x Quotient x Remainder) ☐ (b) (Divisor x Quotient) + Remainder ☐
(c) (Reminder x Quotient) + Devisor ☐ (d) (Divisor x Quotient) - Remainder ☐
6. Add : -1520 and 1264
(a) 2784 ☐ (b) -2784 ☐
(c) 256 ☐ (d) -256 ☐
7. The largest three digit number formed by digits 8, 5, 9 is
(a) 859 ☐ (b) 985 ☐
(c) 958 ☐ (d) 589 ☐
8. If 1 is added to the greatest 7 digit number, it will be equal to
(a) 10 thousand ☐ (b) 1 lakh ☐
(c) 10 lakh ☐ (d) 1 crore ☐
9. Counting numbers are called as
(a) Natural number ☐ (b) Prime number ☐
(c) Composite number ☐ (d) Whole numbers ☐
10. What is the successor and predecessor of 11999
(a) 12999, 11997 ☐ (b) 12000, 11998 ☐
(c) 12004, 11906 ☐ (d) 12001, 11996 ☐
11. The expanded form for 308927 is
(a) 300000 + 800 + 90 +2 + 7 ☐ (b) 30000 + 80000 + 9000 +20+7 ☐
(c) 300000+8000+900+20+7 ☐ (d) 3000000+8000+900+20+7 ☐
12. How many millimeter make one kilometre.
(a) 1000 ☐ (b) 10000 ☐
(c) 100000 ☐ (d) 1000000 ☐

13. 557 rounded off to the nearest 100 is
 (a) 550 ☐ (b) 500 ☐
 (c) 600 ☐ (d) None of these ☐
14. A whole number is added to 25 and the same number is subtracted from 25. The sum of the resulting numbers is
 (a) 0 ☐ (b) 25 ☐
 (c) 50 ☐ (d) 75 ☐
15. The ratio of Rs 8 to 80 paise is
 (a) 1 : 10 ☐ (b) 10 : 1 ☐
 (c) 1 : 1 ☐ (d) 100 : 1 ☐
16. Find the missing number in the box in the following proportion : : 8 :: 12 : 32
 (a) 1 ☐ (b) 2 ☐
 (c) 3 ☐ (d) 4 ☐
17. Income of Vula is Rs 12000 per month and that of Ramtea is Rs 191520 per annum. If the monthly expenditure of each of them is Rs 9960 per month find the ratio of their savings.
 (a) 17 : 50 ☐ (b) 13 : 40 ☐
 (c) 17 : 35 ☐ (d) 11 : 50 ☐
18. Find the missing number in the box $\square : \frac{3}{5} = \frac{\square}{20}$
 (a) 10 ☐ (b) 15 ☐
 (c) 12 ☐ (d) 8 ☐
19. The average weight of 3 students is 60 kg. If the average weight of two of them is 55kg, what is the weight of the third student ?
 (a) 65 kg ☐ (b) 70 kg ☐
 (c) 75 kg ☐ (d) 80 kg ☐
20. If the average of 5 numbers is 40. What is the sum of these numbers ?
 (a) 100 ☐ (b) 150 ☐
 (c) 200 ☐ (d) 250 ☐
21. The average of 50 numbers is 20. If two numbers 37 and 43 are discarded, find the average of the remaining numbers.
 (a) 19.17 ☐ (b) 19.5 ☐
 (c) 19 ☐ (d) 18.5 ☐
22. What is the average of the first six multiples of 4 ?
 (a) 12 ☐ (b) 14 ☐
 (c) 15 ☐ (d) 18 ☐
23. A shirt with marked price Rs 800 was sold at Rs 680. The rate of discount allowed on the shirt is
 (a) 10 % ☐ (b) 12 % ☐
 (c) 15 % ☐ (d) 20 % ☐
24. The discount per cent is calculated in the _____ of an article .
 (a) Marked price ☐ (b) Selling price ☐
 (c) Surplus price ☐ (d) Margin price ☐
25. The ratio of Marked price to Selling price of an article is 6 : 5, then what is the discount percentage ?
 (a) 12.5 % ☐ (b) 20.66 % ☐
 (c) 15 % ☐ (d) 16.66 % ☐

26. The percentage required to pass in a paper is 40% which is equal to 80 marks. What is the total mark of the paper
- (a) 100 ☐ (b) 150 ☐
(c) 200 ☐ (d) 250 ☐
27. Calculate 16 % of Rs 5500
- (a) Rs 640 ☐ (b) Rs 760 ☐
(c) Rs 860 ☐ (d) Rs 880 ☐
28. Siama spent 80% of his monthly salary and saves Rs 10000. His monthly income is
- (a) Rs 40000 ☐ (b) Rs 45000 ☐
(c) Rs 50000 ☐ (d) Rs 55000 ☐
29. What percent of 50 is 16 ?
- (a) 25 % ☐ (b) 32 % ☐
(c) 35 % ☐ (d) 40 % ☐
30. A man's salary increased from Rs 50000 to Rs 52000. What is the increment percentage ?
- (a) 4% ☐ (b) 6% ☐
(c) 7% ☐ (d) 8% ☐
31. If x is 80% of y, what percent of x is y ?
- (a) 115 % ☐ (b) 110 % ☐
(c) 120 % ☐ (d) 125 % ☐
32. If A and B together can complete a price of work in 15 days and B alone in 20 days, in how many days can A alone complete the work.
- (a) 50 ☐ (b) 55 ☐
(c) 60 ☐ (d) 65 ☐
33. A and B together can complete a work in 3 days. They start together but after 2 days, B left the work. If the work is completed after two more days, B alone could do the work in
- (a) 6 days ☐ (b) 5 days ☐
(c) 7 days ☐ (d) 4 days ☐
34. The perimeter of an equilateral triangle is 150m . The length of one of its side is
- (a) 40 m ☐ (b) 50 m ☐
(c) 55 m ☐ (d) 60 m ☐
35. A rectangular field of 50m breath and 100m length is surrounded by a 2 metre wide road. Find the area of the road.
- (a) 616 m² ☐ (b) 428 m² ☐
(c) 516 m² ☐ (d) 746 m² ☐
36. Find the area of a circle whose radius is 7 cm.
- (a) 124 m² ☐ (b) 154 m² ☐
(c) 168 m² ☐ (d) 184 m² ☐
37. A wire is looped in the form of a circle of radius 28cm. It is rebent into a square form. Find the length of the side of the square
- (a) 44 cm ☐ (b) 52 cm ☐
(c) 36 cm ☐ (d) 68 cm ☐
38. A bicycle wheel makes 5000 revolution in moving 11 km. Find the diameter of the wheel ?
- (a) 50 cm ☐ (b) 65 cm ☐
(c) 70 cm ☐ (d) 75 cm ☐

39. Find the length of the longest pole that can be put in a room of dimensions 10m by 10m by 5m
 (a) 10 m ☐ (b) 12 m ☐
 (c) 13 m ☐ (d) 15 m ☐
40. Find the simple interest on Rs 7300 for 3 years at 10 % per annum.
 (a) Rs 1500 ☐ (b) Rs 2190 ☐
 (c) Rs 2500 ☐ (d) Rs 3200 ☐
41. Which of the following is a perfect square ?
 (a) 1057 ☐ (b) 7928 ☐
 (c) 625 ☐ (d) 64000 ☐
42. Find the compound interest on Rs 12500 for 2 years, compounded annually at 8% per annum.
 (a) Rs 2080 ☐ (b) Rs 1900 ☐
 (c) Rs 2200 ☐ (d) Rs 2500 ☐
43. A speed of 25m/s is equal to
 (a) 65 km/h ☐ (b) 90 km/h ☐
 (c) 50 km/h ☐ (d) 40 km/h ☐
44. The speed of a bus is 72 km/h. the distance covered by the bus in 5 second is
 (a) 50 m ☐ (b) 70 m ☐
 (c) 80 m ☐ (d) 100 m ☐
45. Profit (or gain)= _____
 (a) CP - SP ☐ (b) SP - CP ☐
 (c) CP + SP ☐ (d) CP / 100 ☐

Directions (Question 46-50) : Study the following graph carefully and answer the question given below :



46. The respective ratio of the number of students appeared in college A to the number of students appeared in college B
 (a) 3 : 2 ☐ (b) 2 : 3 ☐
 (c) 6 : 7 ☐ (d) 5 : 4 ☐
47. The average number of students passed in all the colleges together is
 (a) 362.5 ☐ (b) 356.2 ☐
 (c) 326.5 ☐ (d) 352.6 ☐

48. The average number of students appeared in all the colleges together is
 (a) 553.7 ☐ (b) 537.5 ☐
 (c) 357.5 ☐ (d) 573.5 ☐
49. The differences between the number of students passed in college C and the number of students passed in college D is
 (a) 400 ☐ (b) 250 ☐
 (c) 150 ☐ (d) 350 ☐
50. The students passed in college C is approximately what percent of the total number of students studying in the same college ?
 (a) 40 ☐ (b) 80 ☐
 (c) 90 ☐ (d) 50 ☐

-----ooOoo-----

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

- What is the full form of RAM?
 (a) Random Access Memory ☐ (b) Read Access Memory ☐
 (c) Readily Available Memory ☐ (d) Random Available Memory ☐
- Which device is used to input data into a computer?
 (a) Printer ☐ (b) Keyboard ☐
 (c) Monitor ☐ (d) Speaker ☐
- Which of the following is an example of system software?
 (a) Microsoft Excel ☐ (b) Adobe Reader ☐
 (c) Windows 10 ☐ (d) Google Chrome ☐
- Which of the following is NOT a programming language?
 (a) Python ☐ (b) HTML ☐
 (c) Java ☐ (d) Microsoft Word ☐
- Which part of the computer is responsible for executing instructions?
 (a) Hard Disk ☐ (b) RAM ☐
 (c) CPU ☐ (d) Motherboard ☐
- Which storage device has the largest capacity?
 (a) DVD ☐ (b) USB Flash Drive ☐
 (c) SSD ☐ (d) Hard Disk Drive ☐
- What does GUI stand for?
 (a) Graphical User Interface ☐ (b) General User Interface ☐
 (c) Guided User Interface ☐ (d) Graphical User Interaction ☐
- Which of the following is a volatile memory?
 (a) SSD ☐ (b) Hard Disk ☐
 (c) RAM ☐ (d) ROM ☐
- What is the main function of an operating system?
 (a) Perform calculation ☐ (b) Manage hardware and software resources ☐
 (c) Browse the internet ☐ (d) Create documents ☐
- What does URL stand for?
 (a) Uniform Resource Locator ☐ (b) Uniform Resource Link ☐
 (c) Universal Resource Locator ☐ (d) Universal Resource Link ☐

11. What is the purpose of a firewall in a computer network?
 (a) To speed up the Internet ☐ (b) To protect against unauthorized access ☐
 (c) To Manage network traffic ☐ (d) To boost Wi-fi Signal ☐
12. What type of software is used to surf the web?
 (a) Operating System ☐ (b) Web Browser ☐
 (c) Database ☐ (d) Text Editor ☐
13. What does 'HTTP' stand for?
 (a) HyperText Transmission Protocol ☐ (b) HyperText Transfer Protocol ☐
 (c) HyperTransfer Text Protocol ☐ (d) Hyper Transmission Transfer Protocol ☐
14. Which of the following is an example of an input device?
 (a) Printer ☐ (b) Monitor ☐
 (c) Mouse ☐ (d) Speaker ☐
15. What is the smallest unit of data in a computer?
 (a) Byte ☐ (b) Bit ☐
 (c) Nibble ☐ (d) Kilobyte ☐
16. What is the purpose of the ALU in a computer?
 (a) To Manage Memory ☐ (b) To perform arithmetic and logic operations ☐
 (c) To control input and output ☐ (d) To manage storage ☐
17. Which file format is used for images?
 (a) .docx ☐ (b) .xlsx ☐
 (c) .jpg ☐ (d) .pptx ☐
18. Which key is used to delete the character to the left of the cursor?
 (a) Enter ☐ (b) Backspace ☐
 (c) Delete ☐ (d) Shift ☐
19. Which of the following is a search engine?
 (a) Firefox ☐ (b) Bing ☐
 (c) Outlook ☐ (d) Skype ☐
20. What does the shortcut Ctrl + C do?
 (a) Cuts the selected text ☐ (b) Copies the selected text ☐
 (c) Saves the document ☐ (d) Pastes the copied text ☐
21. What is the function of the Control Panel in Windows?
 (a) To access web browsers ☐ (b) To edit documents ☐
 (c) To play media files ☐ (d) To change settings and control system config ☐
22. Which of the following is a popular spreadsheet application?
 (a) Microsoft Word ☐ (b) Microsoft Excel ☐
 (c) Microsoft Access ☐ (d) Microsoft Powerpoint ☐
23. Which of the following is a programming language?
 (a) Chrome ☐ (b) Python ☐
 (c) Windows ☐ (d) Photoshop ☐
24. What does SSD stand for?
 (a) Solid State Drive ☐ (b) Static State Drive ☐
 (c) Static State Drive ☐ (d) Solid Storage Drive ☐

25. Which of the following is an example of application software?
 (a) Linux ☐ (b) macOS ☐
 (c) Notepad ☐ (d) BIOS ☐
26. Which key is used to refresh a webpage?
 (a) F1 ☐ (b) F2 ☐
 (c) F5 ☐ (d) F12 ☐
27. Which of the following is a cloud storage service?
 (a) Onedrive ☐ (b) File Manager ☐
 (c) Windows Explorer ☐ (d) Task Manager ☐
28. What does LAN stand for?
 (a) Local Access Network ☐ (b) Large Area Network ☐
 (c) Local Area Network ☐ (d) Long Area Network ☐
29. Which of the following can be used to protect a computer from viruses?
 (a) File Explorer ☐ (b) Antivirus Software ☐
 (c) Task Manager ☐ (d) Disk Cleanup ☐
30. What does FTP stand for?
 (a) File Transfer Protocol ☐ (b) Fast Transfer Protocol ☐
 (c) File Transmission Protocol ☐ (d) Fast Transmission Protocol ☐
31. What does a system bus do-
 (a) Allows the user to communicate with the computer ☐
 (b) Carries out instructions ☐
 (c) Connect various components within the computer ☐
 (d) stores data and instructions ☐
32. What are the two types of Monitor?
 (a) CRT and DVD ☐ (b) CRT and LCD ☐
 (c) DVD and VCD ☐ (d) LCD and DVD ☐
33. Basic building blocks for a Digital Circuit is-
 (a) CMOS ☐ (b) Logic Gate ☐
 (c) BIOS ☐ (d) DMOS ☐
34. _____ Keys are present on the top row of the keyboard.
 (a) Function ☐ (b) Type Writer ☐
 (c) Numeric ☐ (d) Navigation ☐
35. _____ Computers are used in Banking, Railways and Airlines.
 (a) Mini Computer ☐ (b) Micro Computer ☐
 (c) Super Computer ☐ (d) Mainframe Computer ☐
36. The first Computer mouse was built by-
 (a) Douglas Engelbart ☐ (b) William English ☐
 (c) Oaniel Coogher ☐ (d) Robert Zawacki ☐
37. Which of the following refers to the memory in your computer?
 (a) RAM ☐ (b) DSL ☐
 (c) USB ☐ (d) LAN ☐

38. When you are working on a document on PC, where is the documents temporarily stored?
 (a) RAM ☐ (b) ROM ☐
 (c) CPU ☐ (d) Flash Memory ☐
39. Information travels between components on the motherboard through-
 (a) Flash Memory ☐ (b) CMOS ☐
 (c) Bays ☐ (d) Bus ☐
40. How are data organized in a spreadsheet?
 (a) Lines and space ☐ (b) Layers and planes ☐
 (c) Height and Width ☐ (d) Rows and Columns ☐
41. Transformation of input into output is performed by?
 (a) Peripherals ☐ (b) CPU ☐
 (c) Storage ☐ (d) Memory ☐
42. How many options does a binary choice offer?
 (a) One ☐ (b) Two ☐
 (c) Three ☐ (d) Four ☐
43. ____ is a collection of web pages and ____ is the very first page that we see Web-site
 (a) Home-page, Web-page ☐ (b) Web-site, Home-page ☐
 (c) Web-page, Home-page ☐ (d) Web-page, Web-site ☐
44. When the pointer is positioned on a ____ it is shaped like a hand-
 (a) Grammer Error ☐ (b) Hyperlink ☐
 (c) Screen Tip ☐ (d) Spelling error ☐
45. The ____ of a system includes the programs or instructions.
 (a) Hardware ☐ (b) Icon ☐
 (c) Information ☐ (d) Software ☐
46. 'www' stands for-
 (a) World Word Web ☐ (b) World Wide Web ☐
 (c) World White Web ☐ (d) World Work Web ☐
47. What menu is selected to cut, copy, and paste?
 (a) File ☐ (b) Tools ☐
 (c) Special ☐ (d) Edit ☐
48. The most important or powerful computer in a typical network is-
 (a) Desktop ☐ (b) Network Client ☐
 (c) Network Server ☐ (d) Network Station ☐
49. Which of the following is an example of connectivity?
 (a) Internet ☐ (b) SSD ☐
 (c) Power Cord ☐ (d) Data ☐
50. The primary purpose of software is to turn data into-
 (a) Web sites ☐ (b) Information ☐
 (c) Programs ☐ (d) Objects ☐

----ooOoo----