

පළාත් අධ්‍යාපන දෙපාර්තමේන්තුව – නැගෙනහිර පළාත
மாகாணக் கல்வித் திணைக்களம் – கிழக்கு மாகாணம்
Provincial Department of Education – Eastern Province

අධ්‍යයන හොඳ සහතික පත්‍ර (සාමාන්‍ය පෙළ) විභාගය - 2010 ආදර්ශ ප්‍රශ්න පත්‍රය
கல்விப் பொதுத் தராதரப் பத்திர (சாதாரண தர) விசேட பரீட்சை - 2010
General Certificate of Education (O/L) Special Examination -2010

තොරතුරු හා සන්නිවේදන තාක්ෂණය I
தகவல் தொடர்பாடல் தொழினுட்பவியல் I
Information & Communication Technology I

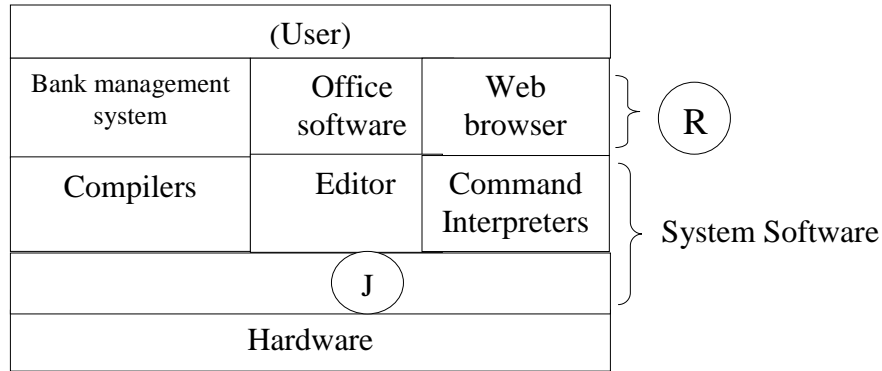
කලපය පැය 1
1 மணித்தியாலம்
One hour

Note:

- (i) Answer **all** questions.
- (ii) In each of the questions **1** to **40**, pick one of the alternatives **(1), (2), (3), (4)** which you consider as **correct** or most **appropriate**.
- (iii) **Mark a cross (X) on the number corresponding to your choice in the answer sheet provided.**
- (iv) Further instruction are given on the back of the answer sheet. Follow them carefully.
- (v) After answering **paper I** and **paper II**, **tie the sets of answers scripts together and hand over.**

1. The temperature of a city is continuously measured between every hour and tabled. The temperature in the table is.
 - (1) Continuous Numerical Data
 - (2) Discrete Numerical Data
 - (3) Quantity Data
 - (4) None of the above
2. The False statement about USB
 - (1) When the peripherals were attached with the computer through it, It is designed to play automatically without installing programs (plug and play)
 - (2) Only 12 devices can be attached
 - (3) USB 2.0 type ports transfer data at the speed of 480 Mbps
 - (4) It has the ability of attaching peripherals without turning off the computer (hot swappable)
3. Which is the correct descending order of access speed of storage devices?
 - (1) Level 2 cache memory , Level1 cache memory, RAM,ROM
 - (2) Level1 cache memory, Secondary cache memory, RAM,ROM
 - (3) Primary cache memory level1,Secondary cache memory level2, RAM,ROM
 - (4) Secondary cache memory ,cache memory level1, ROM, RAM
4. In order to get the text Information **Communication Technology (ICT)** on the monitors screen at least how many keys has to be used?
 - (1) 39
 - (2) 20
 - (3) 19
 - (4) 42

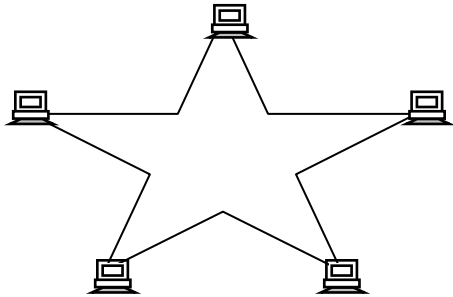
5. The following picture shows the relationship of the User with the computer system.
The letter R and J refers to



- (1) Operating System, Application software (3) Packages, Utilities
 (2) Utilities, Packages (4) Application Software, Operating System
6. Select the appropriate statement about booting process of a computer
- (1) It is the process of transferring data and operating system from secondary storage devices (Hard Disk, CD ROM, Floppy disk) to Primary storage unit
 (2) It is the copying process of application programs from main memory to cache memory
 (3) It is the loading process of application data from hard disk to primary memory.
 (4) It is the process of loading operating system from cache memory to primary memory
7. Read the following statements.
- (A) Resolution of a scanner is measured in bits per inch (bpi)
 (B) Resolution of a picture is measured in dots per inch (dpi)
 (C) Resolution of a digital camera is measured in dots per inch (dpi)
 The incorrect statement / statements of the above
 (1) (C) Only (2) (B) Only (3) (A) Only (4) (C),(B)
8. The word size of a computer is
- (1) The number of words in a word processing software
 (2) The maximum number of Bits which can be handled or saved by the processor at a time.
 (3) It is the Bit size of a word
 (4) It is the maximum words which were saved in a memory
9. The number of Bits to represent the Hexadecimal number BAD is
- (1) 9 (2) 12 (3) 8 (4) 3
10. How many Bytes are in 1/16 MB
- (1) 10^{26} Bytes (2) 2^{26} Bytes (3) 2^{30} Bytes (4) 10^{30} Bytes

11. The base value of the decimal number system is
 (1) 2 (2) 16 (3) 8 (4) 10

12. The topology of the following figure is?



- (1) Bus
 (2) Star
 (3) Ring
 (4) Tree

13. Kenujan is two years elder than Mohammed. Printha is Three years elder than Kenujan. Printha is 17 years old. So which of the following is representing the ages of Kenujan and Mohammed in Binary form?

- (1) 1110, 1100 (2) 1010, 1001 (3) 1011, 1000 (4) 1111, 1010

14. Which of the following/ followings are the equivalent value for the Hexadecimal AC ?

- (1) 172_{10} (2) 10101100_2 (3) 152_{10} , 1010001_2 (4) 172_{10} , 10101100_2

15. Which of the following is the correct Boolean statement?

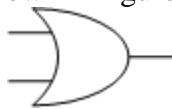
- (1) $X \cdot 1 = X$ (2) $X \cdot 0 = X$ (3) $X + 1 = 0$ (4) $X + X = 1$

16. Which one shows the correct figure for the truth table

A	B	Output
0	0	1
0	1	0
1	0	0
1	1	0

- (1) (2) (3) (4)

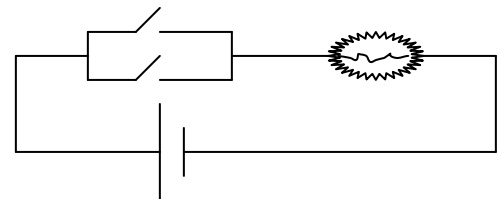
17. Which one of the digital logic gates can be used to characterize the operation of the electrical circuit shown in figure



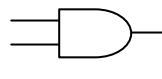
(1)



(3)



(2)



(4)

18. The true statement about Multitasking Operating System

- (1) Many people can run Many programs at a time
- (2) Single CPU allows many programs to run at a time
- (3) It will allow the individual Programs threat to function separately without interfering each other
- (4) Many CPUs allow programs to run, Complex

19. What will happen when **OVR** activated in the status bar of the Word processing application?

- (1) Help to erase the characters from the right side of the cursor
- (2) When typing among the words the inserting characters will appear in front of the available characters
- (3) Helps to erase left side characters of the cursor
- (4) When typing among the words the inserting words will replace the characters of the right side of the cursor

20. In the worksheet given below, formula =RANK (R2, R2:R4) written in cell S2 and copied to cells S3 and S4 to get rank of total. What is the output in cell S3?

	Q	R	S	T
1	Name	Total	Rank	
2	Kenujan	745		
3	Enoch	632		
4	Rubaraj	589		
5				

- (1) 1
- (2) 2
- (3) 3
- (4) Incorrect answer

21. In the worksheet given below, function =SUM(B2:B6) written in cell B7. What type of data in cells B2, B3 and B4 respectively?

	A	B	C
1	Name	Points Collected	
2	Kenujan	45	
3	Lavanujan	50	
4	Enoch	78	
5	Joel	15	
6	Rubesh	25	
7	Total	135	
8			

- (1) Numbers, Labels, left aligned labels
- (2) Numbers, Labels, left aligned Numbers
- (3) Numbers, left aligned Numbers and labels
- (4) Numbers, left aligned Numbers, left aligned labels

22. A student has inserted the following mathematic formula in a VB program $8+3 \text{ MOD } 2-4^{2/2}$ The out put will be?

- (1) 0
- (2) 1
- (3) 3
- (4) 4

23. The technique when we prepare an algorithm to print numbers from 0 to 9 is

- (1) Selection
- (2) Repetition
- (3) Sequential
- (4) All of them

24. Which is not suitable for naming the VB variables
 (1) 5A (2) Sub (3) A_5 (4) V1

25. The following organization is using spreadsheet application for their activities. The income is in the A7 cell and the Years expenses are in C8, D8 and E8 cells. You have been asked to calculate the years Profit. What is the formula you will create in the F8 cell?

	A	B	C	D	E	F
6	Income	Year	Expenses			
7	Rs100000.00	Year	Manufacturing	Wages	Transport	Profit
8		1993	Rs 20000.00	Rs12500.00	Rs 10500.00	
9		1994	Rs 15000.00	Rs11500.00	Rs 8500.00	
10		1995	Rs180000.00	RS20500.00	Rs 15000.00	

1. = \$A\$7 – C8-D8-E8
 2. = C8 – \$A\$7-D8-E8
 3. = \$A\$7 +C8-D8-E8
 4. = \$A\$7 – C8-D8+E8

26. Select the correct statement about the page numbering in M.S word document?
 A. We can insert page number by using page number dialog box from the Insert menu.
 B. We can insert it in the bottom and the top of the pages.
 C. We can insert page number by using Header and Footer toolbar from the Insert menu
 D. We can be able to use different formats to insert page numbers

- (1) Only C is correct (3) A and D are correct
 (2) A,B,C are correct (4) .All A,B,C and D are correct

27. Select the false statement from the following statements
 A. Frequently used data will be saved in the cache memory
 B. The computer will boot according to the information saved in ROM
 C. The capacity of the RAM is essential for the performance of a computer. We can increase the RAM capacity by adding RAM cards.
 D. The Blue- Ray disks have very low capacity.

- (1) C (3) A,D
 (2) A,B,C (4) All of them

28. The computer which has the good performance than the desktop computer and used for video editing, animation and modeling is called by:

- (1) Palmtop computer (3) Workstation
 (2) Laptop (4) Tablet pcs

29. Consider the followings Statements

- A. Computer soft wares are tangible electronic devices.
- B. Installing system software in a computer is depend on by the hardware platform
- C. We can get the computer software by paying money and without paying(Free),
- D. We cant install Open source software in a computer which runs on Windows operating system

The correct Statement / Statements

- (1) C only
- (2) A,B,C are correct
- (3) A,D are correct
- (4) .All are wrong

30. Private Sub Command1 Click ();

Dim n as integer

n = 1

Do

Print n

n = n+ 2

Loop until n >10

End Sub.

When the above program run the out put of the first and last characters are.

- (1) 1,10
- (2) 1,9
- (3) 1,11
- (4) 1,8

31.The false statement about HTML tags is

- (1) HTML tags commonly appear in pairs
- (2) They don't have case sensitive (Capital , small differences)
- (3) When the browser fail to understand they will show error messages.
- (4) We call the data included in <> as page

32. In an email the part BCC is referred as

- (1) All will understand to whom the copies have been sent.
- (2) The receivers will not be able to know the other receivers of the same copy
- (3) The receivers will know to whom the copies are not sent
- (4) The receiver will not be able to forward it to the other parties

33. The changes when we disconnect the CMOS battery and replace it after a considerable time

- (1) The pass word to enter into the operating system will be erased
- (2) The changes will occur in the date and time
- (3) The CMOS pass word will be erased
- (4) All of the above will happen

34. Characters for a strength password is

- (1) Easily pronounceable words
- (2) Included only with letters
- (3) Included with special characters only
- (4) Included with text, numbers and special symbols

35 The out put of the $(4 + 5 > 6)$ and $(9 - 3 < 3)$ is

- (1) 1
- (2) 0
- (3) 1+1
- (4) 0 + 0

36. File extensions which were not to be able to send as attachment with e-mails are
- (1) .Doc , .xls
 - (2) .txt , .pdf
 - (3) .exe , .bat
 - (4) .jpg, gif
37. The correct pair which shows the database management packages relationships of one - one, one - many , many – many is
- (1) Principal – School , Principal – Students, Subjects – Students
 - (2) Principal – School , Subjects – Students , Principal – Students,
 - (3) Principal – Students, Principal – School , Subjects – Students
 - (4) Principal – School , Principal – Students, Subjects – Students
38. What computer device has the following characters Clock speed , word size, data path, maximum Memory
- (1) System board
 - (2) Processor
 - (3) Hard disk
 - (4) RAM chip
39. The true statement about the content of the internet is
- (1) A single country can create a law to control the internet
 - (2) It is easy to control the access of a part of the internet
 - (3) Internet is belongs to a country
 - (4) The content of the same web sites may be legal to a country and may be prohibited to another
40. Which one of the following management system is suitable for the excellent principal?
- (1) Transaction processing System
 - (2) Management Information system
 - (3) Decision support System
 - (4) Office Automated System

පළාත් අධ්‍යාපන දෙපාර්තමේන්තුව – නැගෙනහිර පළාත
மாகாணக் கல்வித் திணைக்களம் – கிழக்கு மாகாணம்
Provincial Department of Education – Eastern Province

අධ්‍යයන භාෂා සහතික පත්‍ර (සාමාන්‍ය පෙළ) විභාගය - 2010 ආදර්ශ ප්‍රශ්න පත්‍රය
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තොරතුරු හා සන්නිවේදන තාක්ෂණය II
தகவல் தொடர்பாடல் தொழினுட்பவியல் II
Information & Communication Technology II

කාලය පැය 2
இரு மணித்தியாலங்கள்
Two hour

Important: Answer this question paper only in the medium of language you have applied

- Answer **first** question and, **four** other questions only.
- First question carries **20** marks and each other questions carries **10** marks

1)

- In a data processing the processed information changes as data for another data processing. Are you agreeing on this statement? Support your answers with examples
- What is the purpose of a small battery attached in the system board?
- Some Special Functioning graphical and video software are unable to function in some computers as they functions in some types of computers Provide three reasons for the malfunctioning ?
- When we use Tamil or Sinhala rather than using English in e-mail transaction what are the steps we can take to prevent the problems?
- Mention General two types of input devices?
- State two reasons for the reduction of the usage of Floppy disks among computer users.
- Provide two names of the microchip producing companies?
- In the toolbox of graphical software, what is the function of the Icon shown below?
- State  common protocols which were used in the web pages?
- The required data for the CPU is provided by the RAM chips. But RAM chips are not providing the required data with the expected speed. What is the memory unit used to solve this problem?

2) ICT is the developing field. Most of the organizations are changing into computerized, using internet and modern ICT equipment for their development. Important data is backed up for the safety.

- Give three opportunities where the organization uses the modern ICT devices?
- Provide two characteristics of information of a computerized organization?
- Today most of the Organizations have introduced the use of Internet, but they are facing Internet based problems. List down three of them.
- Varieties of the printers are available in the modern market. But the laser printer is famous among the business community. Provide two reasons for the statement.

3) The following spread sheet is the employee pay sheet of a company called Remo Brothers. Answer the following questions referring the following information.

- The Bonus is 10% of the basic salary.
- The pension is calculated using the following
 - If the salary is equal or greater than Rs 30000/= 7% If not; 4%.
 - The Insurance is 4% of the basic salary.

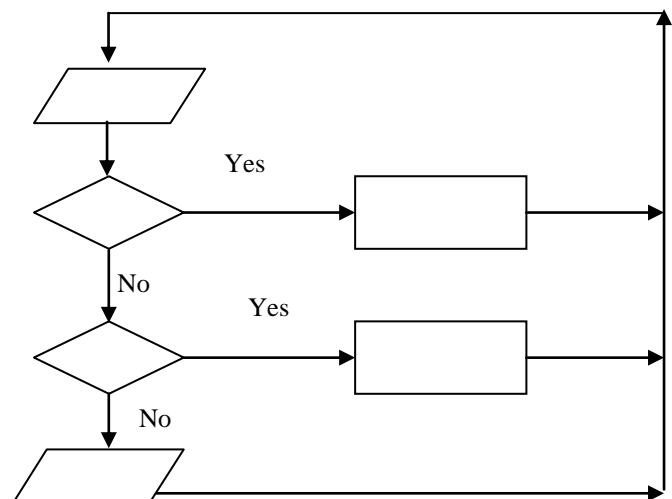
	A	B	C	D	E	F	G	H	I
1	EMP.NO.	SALARY	BONUS	GROSS SALARY	PENSION	INSURANCE	LOAN	SALARY DEDUCTION	NET SALARY
2	0001	50,000.00	5,000.00	55,000.00	3,500.00	500.00	350.75	4,350.75	50,649.25
3	0002	45,000.00	4,500.00	49,500.00	3,150.00	450.00	785.96	4,385.96	45,114.04
4	0003	32,000.00	3,200.00	35,200.00	2,240.00	320.00	876.23	3,436.23	31,763.77
5	0004	28,000.00	2,800.00	30,800.00	1,120.00	280.00	-	1,400.00	29,400.00
6	0005	24,000.00	2,400.00	26,400.00	960.00	240.00	-	1,200.00	25,200.00
7	0006	18,000.00	1,800.00	19,800.00	720.00	180.00	1000.56	1,900.56	17,899.44
8	Insurance	1%							
9									

- i. What is the formula we have to create to calculate Bonus in cell C2, when we copy and fill the series from C2 to C7 the answer must appear as shown in the figure.
- ii. Write the formula to calculate the pension in the cell E2? When we copy and fill the series from E2 to E7 the values must appear as shown in the figure.
- iii. Write the formula to calculate the Insurance. (B8 is used to calculate the the Insurance) When we copy and fill the series from F2 to F7 the answer must appear as shown in the figure.
- iv. Write the formula to calculate the Gross Salary, Salary Deduction and Net Salary to get them accordingly in cell D2, H2 and I2

4) (a) A central cooling system uses a monitoring and feedback system to control the temperature of computer lab in the school.

The system is used to maintain the temperature of the lab 25°C. Complete the flow chart to show how this system works by writing a letter for each answer the flowchart boxes below.

- A- Turn off the A.C
- B- Turn on the A.C
- C- Read the temperature in the lab
- D- Is the temperature is greater than 25°C
- E- Is the temperature is less than 25°C
- F- Print the temperature of the lab



- (i) How we state the above conditional execution?
- (ii) Write the pseudo code that corresponds to the logic given in the flow chart?

(iii) Write down the output for the following code.

```
(a) Dim I As Integer
    For I=1 To 5
        Print "Computer"
    Next
End Sub
```

```
(b) Dim I As Integer
    I = 10
    Do While I<30
        Print I
        I = I + 2
    Loop
```

5)

i. Quickcallz is a High Street company that sells a range of mobile phones. They are going to produce a leaflet that will contain text and clip-art, to advertise their Summer Sale.. The owners of the shop are worried about the copyright on the clip-art they are planning to use.

(a) What is meant by the term copyright?

(b) Give **one** penalty the owners could face if they broke the copyright law.

ii. One method often used to communicate is e-mail.

a) Explain what is meant by the term *e-mail*.

b) One of the problems with e-mail is that people may receive spam.

Describe what is meant by the term *spam*.

iii. An increasing number of people are joining social networking websites.

a) Describe what is meant by the term *social networking*

b) Give **two** reasons why social networking websites are becoming increasingly popular.

c) Give **two** possible disadvantages to the **visitor** of using social networking sites.

d) Discuss the advantages of using a social networking website compared to using a web log (blog).

6. Write short on **three** of the following

i. The importance of using School net for the teaching learning process..

ii. The modern technical development in the telecommunication process.

iii. Health hazard of the mobile telephones and computer games.

iv. The advantages and ICT skill development of a student by participating in the Computer software competition and computer quiz programs.