



Provincial Department of Education Northern Province
Second term Examination -2023
Information Communication Technology I, II



Grade - 11

3 Hours

1) Diagnosing of diseases in health sector is successful through the invention of various equipment by using Information and Communication Technology. What is the correct answer matching few above equipment with its' testing organ.

Equipm ent	Testing organ
CAT	a. Record the activities of the brain
EEG	b. Monitor the heart beat
MRI	c. Made three dimensional images of different parts of body
ECG	d. Create images of internal organs of the body

(1) cdab (2) cadb (3) dcab (4) dcba

2) Consider the following statements regarding various storage devices.

- A. The memory of RAM capacity is larger than the memory of register capacity
- B. The access speed of Cache memory is larger than the access speed of Register
- C. The cost of price per one bit of RAM is more expensive than the cost of price per one bit of register.

What is the correct statement / statements from above?

(1) A Only (2) B Only (3) A,B Only (4) B,C Only

3) In computer internal operation, coding systems are used to represent various characters. Which is the answer that includes only coding systems used to represent 5, A, j characters?

- (1) BCD, ASCII, EBCDIC
- (2) Unicode, BCD, ASCII
- (3) BCD, ASCII, Unicode
- (4) ASCII, BCD, Unicode

4) Select the correct statement/s from the following?

- A. 1110101_2 Binary number 75_{16} is equivalent to the hexadecimal number
- B. 75_{16} is equivalent to 165_8
- C. 75_{16} is equivalent to 114_{10}

(1) A Only (2) A, B Only (3) B,C Only (4) A,B,C all

- 5) What is the following is equivalent to BCD 1000010₂
- (1) 82₁₀ (2) 130₁₀ (3) 202₁₀ (4) 28₁₀
- 6) Which one is the smallest out of the following?
- (1) 10101011₂ (2) 134₈ (3) 10010011_{BCD} (4) AF₁₆
- 7) The Most Significant Digit (MSD) and the Least Significant Digit (LSD) of the number 0473.570 respectively,
- (1) 0, 0 (2) 7, 0 (3) 7, 7 (4) 0, 7
- 8) 1101₂ + 101₂ is equal to
- (1) 1000101₂ (2) 110100₂ (3) 22₈ (4) 32₈
- 9) Not an example for GUI Operating System?
- (1) Mac OS (2) DOS (3) Windows 10 (4) Ubuntu
- 10) in main memory is used to Store BIOS Software.
- (1) ROM (2) Cache (3) Register (4) RAM
- 11) Select the correct keyboard shortcut?
- (1) Ctrl+P : Paste (2) Ctrl +Y: Undo
(3) Ctrl + H : Hyperlink (4) Ctrl + X : Cut
- 12) Choose the correct function?
- (1) =Sum(A1:O5)
(2) =Total(A9-H20)
(3) =Avg(A1,E5)
(4) =Sum((A1:A20)
- 13) In an certain electronic spread sheet, =(A2/A8)/A\$6 has been inserted in A15 cell. What is the value, when 30,10,14 are inserted into A2,A8,A6 cells respectively?
- (1) 3 (2) 20 (3) 17 (4) 14
- 14) A presentation consists of a collection of
- (1) Tables
(2) Worksheets
(3) Slides
(4) Pages

Questions 15, 16, 17 should be answered based on the employee table that maintains the details of employees in a factory database.

Staff_ID	Staff_Name	Address	Age	ProjectID
S001	Kamal	Jaffna	35	P001
S002	Raman	Kilinochchi	38	P003
S003	Meena	Mannar	34	P001
S004	Kajol	Vavuniya	31	P002

15) What is the most suitable primary key for this table?

1. Staff_Name 2. ProjectID 3. Age 4. Staff_ID

16) What is the most suitable foreign key for this table?

1. Staff_Name 2. ProjectID 3. Address 4. Staff_ID

17) Which of the following is the order that correctly displays the number of fields and records in a table?

1. 4 > 4 2. 3 > 5 3. 5 > 4 4. 5 > 3

18) Consider the following statements regarding relational database.

- A) Primary key must be present in both tables to establish a relationship between the tables
B) The type of relationship can be determined by the relationship between the records of two tables.
C) Field that is a foreign key in a table can be viewed as a field of a composite key in the same table.

Which of the above statements are correct?

- (1) A > B Only (2) B > C Only
(3) A > C Only (4) All of the above

19) Which of the following is a false statement about modern utility software?

1. Utility software is a type of system software
2. Virus, backup software are utility software.
3. Performance of the operating system can be increased through utility software
4. Utility software contributes to computer resource management

20) What is the advantage or are the advantages achieved by disk partitioning, which divides the hard drive into different partitions

- A- To store software, data in the computer separately
B- To install multiple operating systems.
C- To meet the requirements of the operating system.

- 1) A,C Only 2) A,B Only 3) B,C Only 4) All of the above

21) What is the shortcut key to save the prepared documents?

- 1) Ctrl+ V 2) Ctrl + S 3). Alt + S 4) Ctrl + C

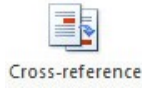
22) Which tool helps to change the space between lines?



1



2



3)



4)

23) Vimal is trying to install one software has a capacity of 1680 MB in his smartphone but there is not enough capacity to install it. So requested to uninstall one of the software from the

4. Which is the best software to choose to uninstall from the following

- 1) 1.5GB capacity games software
- 2) 2GB capacity spreadsheet application
- 3) 1600MB capacity Video editor software
- 4) 1750MB capacity Photoshop software

24) Computer screen resolution is described by the following color code based on RGB #671F50. What is the decimal value for the color code respectively?

1. 87, 1F, 78 2. 103, 31, 80 3. 135, 31, 120 4. 13, 131, 80

25) Which of the following statements about Pascal programming language is true? Are true?

A) Pascal is a high-level programming language.

B) Programming generated by Pascal is a machine-dependent computer language.

C) Compiler is used in Pascal programming as interpreter

1. A only 2. A,B only
3. A,C only 4. A,B,C

26. What is the file extension used in the Pascal program?

1. .py 2. .pas 3. .html 4. .vgd

27. Which of the following symbol is used to complete each of the statements in a Pascal program?

1. . 2. : 3. , 4. ;

28. Which of the following statements are true regarding variable?

- A. Variables are used to temporarily store data while a program is working.
- B. The values of variables can change during a program running.
- C. A variable must always be defined in advance in a Pascal program.

1. A only 2. A,B only
3. A,C only 4. A,B,C only

29. What is the output of the following pseudo code?

```
Begin
  N=100
  Count =1
  Repeat
    N = N- Count
    Count = Count +1
  Until Count > 5
  Display N
End
```

1. 90 2. 79 3. 80 4. 85

30. Which of the following are incorrect statements regarding arrays used in Pascal programming?

- A. An array is a standard data type.
- B. An array can store only the same type of data.
- C. Multiple data can be stored in an array

1. A only 2. A,B only
3. B only 4. A,C only

31. What is the output of the following Pascal program segment?

```
write(3);
write(4);
clrscr;
write(5);
```

1. 34 2. 345 3. 5 4. None

32) Give the output of the following pseudo code?

(When user enter the following input 3,8,4,-1,10,7)

```
Begin
  T=0
  Input num
  while num >0
    T=T+num
    Input num
  end while
  display T
End
```

1. 32 2. 15 3. 14 4. 24

33. Give the output of the following Pascal program segment.

```
num =2
    if num > 1 then
        num = 5
    endif
    if num > 10 then
        num = 6
    else
        if num > 8 then
            num = 15
        else
            num = 20
        endif
    endif
    display num
```

1. 5 2. 15 3. 20 4. 6

34) When image resolution is reduced what will happen to that image?

1. Image quality and file size will decrease
2. File size decreases as image quality increases
3. image quality and file size will increase
4. As the image quality decreases, the file size increases

35) Which one web server computer that plays a major role in email exchange

- 1) Web Server 2) WAMP Server
3) DNS Server 4) Mail Server

36) Which of the following is a not a country domain

- 1) sl 2) lk 3) au 4) in

37) Choose an inappropriate cloud computing service

- 1) Infrastructure as a service 2) Software as a Service
3) Mail service 4) Platform as a Service

38) The number of colors that can be represented by a 3bpp bit size in an image

- 1) 8 2) 16 3) 1024 4) 2048

39) In the CYMK color model, K indicates which one of the following

- 1) Blue 2) Black 3) Magenta 4) Yellow

40) Choose an inappropriate software for sound effects in the following

- 1) Audacity 2) Sound Engine
3) Music Editor free 4) Adobe reader

Part II

1)

1. A software system is being designed and implemented for a school to prepare progress report by School Old Boys association. Give both the inputs and outputs of this software?

2. Write down the units for measuring the speed of the following devices

1. Hard Disc

2. Computer Network

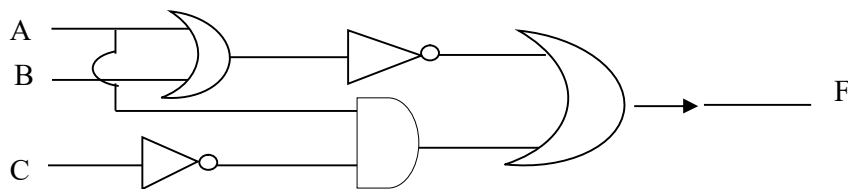
3. List down ICT related two devices used in health service sector and their functions?

4. Write down the all 4 types of primary memories and distinguish non-volatile memory and non-volatile memory?

5. Give two main parts found inside of central processing unit (CPU)?

6. Convert the following 1076_8 octal numbers into Hexa Decimal numbers and show all the steps for the your calculation clearly?

7. Answer for the following questions based the following circuit



1. Write-down the Boolean.gates final output

2. What is the value for C if A=1, B=0 and F=1?

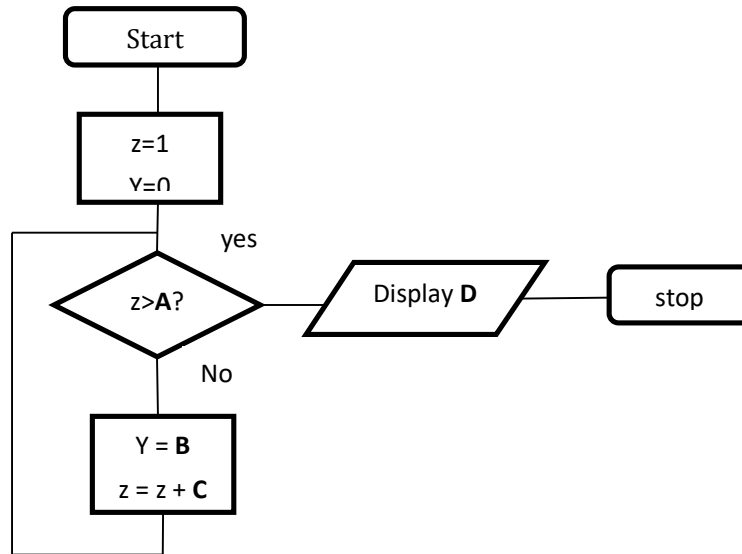
8. Give two data types used to represent text in Pascal computer language?

9. A grade 11 student defined an array in Pascal computer language as follows **var marks; array [0..8] of integer:** It has two errors, Correct the errors and write the array correctly.

10. A student when edits an image said that the background color of the image is as follows (255, 255, 255), What is the background color of the image he mentioned?

(2 Mark*10 = 20Mark's)

2. The following flowchart shows the sum of integers from 1 to 8 as output.



1. Indicate the words A,B,C,D meaning

.....

2. Write down the pseudo code for the above flow chart
3. What type of control structure is used in the algorithms of flow chart.
4. Consider the following Pascal program

```

Var S : array [0..4] of string ;
begin
    S[1]:='Rama''
    S[0]:='Sivany''
    S[2]:='Ajmal''
    S[4]:='Suthan''
    S[3]:='Rekan''
  
```

```

    for i:=4 down to 1
        writeln (S[i]);
    end
  
```

What is the output of the above program.

.....

(1,4,1,4- 10 marks)

3.

a) Give the name of software for the following file extensions

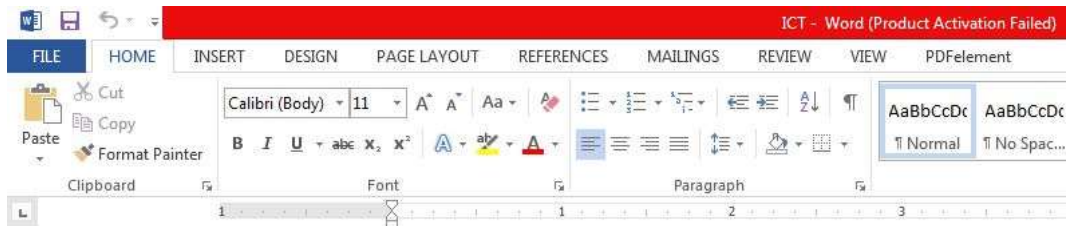
1. .docx -.....
2. .psd -

b) Fill the blanks by using the correct words

(animation, slide layout, slide show, slide sorter, new slide, new presentation)

1. By pressing F5 keymode will be activated
2. The short cut key Ctrl+ N helps to create.....
3. To change a slide design Options helps
4. Ctrl+ M Shortcut key helps to insert

c) Answer the questions based on the following screenshots



1. Write down the name of the documents?
2. Which menu is used to create mail merge?
3. Write down the name of the font which is used in this document?
4. Write down the shortcut key for this activated alignment?

(1 Mark*10 = 10Mark's)

4. The following tables contain the information of a customer in a bank. Observe these tables and answer the following questions

Customer			
C_N ame	C_Nu mber	C_Addres s	Date
S.Ni mal	CS100	Point Pedro	01/01/20 16
A.A mal	CS101	Karavedd y	05/03/20 15
Y.Niz ar	CS102	Uduppid dy	03/02/20 17

Current_Account		
CNumber	C_Number	Balance
CS100	C120	100000.00
CS101	C121	60000.00
CS102	C200	5000.00

Saving_Account		
C_Number	S_Number	Balance
CS100	S100	52000.00
CS101	S101	10000.00
CS102	S102	6000.00

- Give two examples for primary key fields from the above tables
- Give two examples for foreign key fields from the above tables
- 'Mr. A.Raman' joined in the bank as a new customer from "Jaffna"
 - Write the table name/s to be updated.
 - Write the entries in the field or record to be updated.
- Mr. S.Nimal closes all his accounts from the bank.
 - Write the table name/s to be updated.
 - Write the entries in the fields to be updated.
- On 15th March 2017, Mr. Y.Nizar deposited Rs. 5000.00 in his current account
 - Write the table name/s to be completed.
 - Write the entries in the fields to be completed.

(2 *5 = 10 Marks)

- The figure given below is prepared in electronic spreadsheet software covering three subject marks of two school students. Observe the marks shown in it completely and answer the following questions

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Roman College							Royal College						
2	Student Name	Maths	Science	English	Total	Average	Highest marks in 3 subjects	Student Name	Maths	Science	English	Total	Average	Highest marks in 3 subjects
3	AA	29	32	13				BA	25	17	52			
4	AB	79	78	65				BB	29	25	50			
5	AC	76	75	74				BC	23	21	42			
6	AD	58	51	50				BD	17	22	39			
7	AE	68	62	72				BE	47	36	55			
8	AF	62	54	71				BF	16	9	42			
9	AG	32	40	56				BG	7	0	6			
10	AH	29	45	45				BH	32	33	57			
11	AI	53	65	46				BJ	31	20	52			
12	AJ	56	51	68				BI	26	25	35			
13														

1. Write the two functions separately to find the total score of each student in both schools
2. Write the two functions separately to find the mean score of each student in the two schools.
3. Write the two functions separately to find the highest marks obtained by each student in the three subjects of the two schools.
4. Name the tools used to join the cells from cell A1 to D1.
5. Name the tool you want to do something to display the letters vertically In cells A2 to N2

(2,2,2,1,1,1,1 = 10 Marks)

6.

1. Write down steps of system development life cycle?
2. After training the employees of the inventory management software designed for a store, the software manufacturing company advised to use the parallel implementation technique to use the software. What is the main reason for this?
3. Before designing a system, user needs should be identified clearly. Give two data collection techniques used to identify user needs?
4. Give two examples of Uniform Resource Locators that directly address Educational Related?
5. Mention the facility found in e-mail to automatically send an e-mail at a organized time?

(5 *2 = 10 Marks)

7. Choose any four topics and write down the shot notes

1. Raster image
2. Pseudo code
3. Constant
4. Interpreter
5. Disk Partition
6. Cloud Computing

(2.5 *4 = 10 Marks)

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