

# East Horizon English High School

Mechinagar-10, Dhulabari

## Second Terminal Examination 2079

Class: 9 Sub: Opt. 2 (Comp. Sc.) F.M. : 50 Time: 1 hr.30min.

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### Group A (Computer Fundamental) [20]

1. Answer the following questions: [2×5=10]
  - a) Define Data and Information.
  - b) What is Computer Graphics?
  - c) What do you mean by looping? List its types.
  - d) What is motherboard? List the computer parts integrated in motherboard.
  - e) Write the difference between compiler and interpreter.
2. Choose the best answer: [1×4=4]
  - a) The base of the octal number system is \_\_\_\_\_  
i. 2      ii. 10    iii. 8    iv. 16
  - b) A computer system is incomplete without \_\_\_\_\_  
i. Joystick      ii. Multimedia    iii. Software    iv. none
  - c) Objective types of questions can be examined by  
i. OCP    ii. DCU      iii. OCR      iv. OMR
  - d) Which of the following is a part of the central processing unit?  
i. Printer    ii. Keyboard    iii. Mouse      iv. ALU
3. Write the full forms of : [1×4=4]
  - a) MU    b) DPI      c) OCR      d) LCD
4. Write the single technical term for the following: [1×4=4]
  - a) Collection of computer programs.
  - b) An output device that is used to produce graphical outputs on the paper.
  - c) A system program which is responsible for proper functioning of the device attached to the computer.
  - d) The founder of IBM.
5. Match the following: [4]

a) Conditional statement	FOR ..... NEXT
b) Looping statement	IF .... THEN
c) Pre-test loop	DO .... Loop
d) POST - test loop	While ..... Wend

6. Define Algorithm and Flowchart. [2]
7. Define variable and constant. [2]
8. Write the function of the following QBASIC statements: [3]
  - a) SWAP
  - b) CONST
  - c) PRINT
9. Write the output of the following program. [2]

```
CLS
LET A=30
LET B=50
LET C=A*B
PRINT "Product = ";C
END
```

10. Rewrite the following program after correcting bugs. [2]

```
REM to generate series 1,9,25.....upto 10th term
x=1
a=1
WHILE x>=10
PRINT a2;
a=a+1
x=x+1
LOOP
END
```

11. Read the following program and give answer below : [2]

```
CLS
a=10
PRINT a;
IF a MOD 2 = 0 then
PRINT a-2
ELSE
PRINT a+2
END IF
END
```

- a. List out the variables used in above program.
  - b. List the operators with their names.
12. Do the following: [3×3=9]
    - a) WAP to calculate simple interest when principle, rate and time is given.
    - b) WAP to display whether input number is odd or even.

- c) WAP to display series 25, 20, 15 .....5.
13. Convert the following algebraic expression to QBASIC Expression:
    - a)  $2A+3C$
    - b)  $\sqrt{(A-B)}$

Set 1

**East Horizon English High School**  
**Mechinagar-10, Dhulabari**  
**Second Terminal Examination 2079**

Class: 9 Sub: Opt. 2 (Comp. Sc.) F.M. : 50 Time: 1hr.30min.

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1. Answer the following questions: [2×5=10]
  - a) What is Web Graphics?
  - b) Who is known as the father of computer science? Why?
  - c) Write the difference between analog and digital computer.
  - d) What do you mean by control flow statement?
  - e) What is system software? List its types.
2. Choose the best answer: [1×4=4]
  - a) Which of the following is tailored software?
    - i. Java ii. Payroll system iii. Photoshop iv. None
  - b) A printer is a \_\_\_\_\_ device
    - i. printing ii. output iii. hard copy output iv. All
  - c) ROM is an example of \_\_\_\_\_ memory
    - i. Volatile ii. Non-volatile iii. cache iv. none
  - d) Which of the following is a part of the central processing unit?
    - i. Printer ii. Keyboard iii. Mouse iv. ALU
3. Write the full forms of : [1×4=4]
  - a) DVD b) MICR c) CRT d) GUI
4. Write the single technical term for the following: [1×4=4]
  - a) The storage area of a computer.
  - b) Electronic paths that allow communication among different parts of the computer.
  - c) The memories that can directly accessed by the CPU.
  - d) Permanent memory of computer system.
5. Match the following: [4]

a) Assignment statement	READ .....	DATA
b) Declaration statement	SELECT CASE	
c) Input/output statement	DIM	
d) Control statement	LET	
6. Define Algorithm and Pseudo Code. [2]
7. Define SDLC. List its phase. [2]
8. Write the function of the following QBASIC statements: [3]
  - a) REM b) FOR.....NEXT c) CLS

9. Write the output of the following programs. [2]

```
CLS
LET A=30
LET B=50
LET C=B/A
PRINT C
END
```

10. Rewrite the following program after correcting bugs. [2]

```
CLS
REMARKS to check odd or even
INPUT A
IF A MOD 2=0 THEN
PRINT "A is even"
OTHERWISE
PRINT "A is odd"
END IF
END PROGRAM
```

11. Read the following program and give answer below : [2]

```
CLS
a=10
PRINT a;
IF a MOD 2 = 0 then
PRINT a-2
ELSE
PRINT a+2
END IF
END
```

- a) a. List out the variables used in above program.
- b) b. What will be the output of the above program.

12. Do the following: [3×3=9]

- a) To input any 3 numbers and calculate its average.
- b) To input cost price and selling price and determine whether there is profit or loss.
- c) To display 525, 500, .....upto 10th term

13. Convert the following algebraic expression to QBASIC Expression: 2

a)  $2(A-B)+5C$                       b)  $\sqrt{(A - B)}$

**East Horizon English High School**  
**Mechinagar-10, Dhulabari**  
**Second Terminal Examination 2079**

Class: 10 Sub: Opt. 2 (Comp. Sc.) F.M. : 50 Time: 1hr.30min.

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Group A (Computer Fundamental) [22]

1. Answer the following questions: [2×5=10]
  - a) Write the difference between guided and unguided media.
  - b) Give any two advantages of e-mail over traditional mail.
  - c) What do you mean by social media?
  - d) Give any two symptoms of virus attack.
  - e) What is e-learning? Write its types.
2. a) Convert as instructed: [1×2=2]
  - i. (FED)<sub>16</sub> into Binary
  - ii. (101111)<sub>2</sub> into Octalb) Perform the binary calculation: [1×2=2]
  - i. 110×11      ii. 10101÷10
3. Match the following:[0.5×4=2]

a) Combination of several media	Guided media
b) POP	Power protection device
c) UTP	Multimedia
d) UPS	Protocol used in e-mail
	CD-ROM
4. Choose the correct answer: [0.5×4=2]
  - a) Which of the following is an example of telecommunication?
    - i. Telephone ii. Telex iii. Television iv. all
  - b) Which type of e-commerce focuses on consumers dealing with each other?
    - i. B2B    ii. B2C      iii. C2B      iv. C2C
  - c) Which one is bounded media?
    - i. Fiber Optic    ii. Microwave    iii. Infrared    iv. Laser
  - d) Which one is an operating system software?
    - i. Ms-word    ii. Ms-Excel    iii. Firefox    iv. MS-DOS
5. Give an appropriate technical term for the following: [0.5×4=2]
  - a) A program that can disinfect a file from virus.

- b) A person who steals or destroys other's data, information, and program.
  - c) A company that provides internet services.
  - d) Set of moral principals that regulate the use of computers.
6. Write the full form of: [0.5×4=2]
- |           |        |        |        |
|-----------|--------|--------|--------|
| a) TCP/IP | b) URL | c) UPS | d) FTP |
|-----------|--------|--------|--------|

Group B (Database) [10]

7. Answer the following questions: [2×3=6]
  - a) Define data and information.
  - b) What is report? Give its importance.
  - c) Name any four data types that can be defined in Ms-Access.
8. Choose the correct answer: [0.5×4=2]
  - a) The columns in a database table are called \_\_\_\_\_.
    - i. record    ii. field    iii. report    iv. memo
  - b) Which is the suitable data type to store video?
    - i. text    ii. memo    iii. OLE    iv. Hyperlink
  - c) Text data type can store maximum of \_\_\_\_\_ characters.
    - i. 250    ii. 350    iii. 255    iv. 355
  - d) Which of the following is a database application?
    - i. Ms-word    ii. Ms-Access    iii. Ms-Excel    iv. QBASIC
9. Match the following: [0.5×4=2]

a) Indexing Data	Size upto 1 GB
b) Form	Column on datasheet
c) Field	Row on a datasheet
d) OLE object	Searching fast
	Graphical interface for data entry

Group C (Programming) [18]

10. Answer the following:[3]
  - a) What is a variable?
  - b) What is looping?
  - c) Give the function of KILL and CLOSE statements.
11. Rewrite the given program after correcting bugs: [2]

```
DECLARE SUB series( )
CLC
EXECUTE series
```

END

SUB series

REM to generate 2 2 4 6 10 .. ... upto 10th term

P=2

Q=2

FOR ctr=1 to 5

DISPLAY P,Q,

P=P+Q

Q=P+Q

WEND

END series( )

12. Write the output of the following program: [2]

```
DECLARE FUNCTION area(L,B)
```

```
L=15
```

```
B=10
```

```
PRINT "The area =";area(L,B)
```

```
END
```

```
FUNCTION area (L,B)
```

```
A=L*B
```

```
area = A
```

```
END FUNCTION
```

13. Study the following program and answer the given questions: [2]

```
DECLARE FUNCTION sum(A,B)
```

```
INPUT "Enter first number"; A
```

```
INPUT "Enter second number"; B
```

```
PRINT "The sum of the two numbers="; sum(A,B)
```

```
END
```

```
FUNCTION sum(A,B)
```

```
S=A+B
```

```
sum=S
```

```
END FUNCTION
```

a) List the numerical variables used in the above program.

b) Will the program run if the first line is deleted?

14. Do the following:

- WAP using function.....end function to get temperature in Celsius from the user and print the temperature in Fahrenheit.
- WAP using sub ..... end sub to get a word from the user and print it in the reverse order.
- A sequential data file "Marks.dat" contains Name, English, Nepali, Maths and Science fields. WAP to display all the contents that data file.

Set 1

# East Horizon English Secondary School 10+2

Mechinagar-10, Dhulabari

Second Terminal Examination 2079

Class: 10 Sub: Opt. 2 (Comp. Sc.) F.M. : 50 Time: 1hr.30min.

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## Group A (Computer Fundamental) [22]

1. Answer the following questions: [2×5=10]
  - a) Write down the advantage and disadvantage of internet.
  - b) Why do we use Web Browsers? Name any two web browsers.
  - c) What is e-commerce? Write any 2 e-commerce website of Nepal.
  - d) Define Hacker and Cracker.
  - e) What is cyber space? List the moral principles of cyber ethics.
2. Do the following:
  - a) Convert as indicated: [1×2=2]
    - i)  $(26A)_{16}$  into decimal
    - ii)  $(172)_8$  into binary
  - b) Calculate the following binary calculation: [1×2=2]
    - i)  $101011 \times 11$
    - ii)  $110100 - 11010$
3. Match the following: [0.5×4=2]

a) Repeater	Internet Protocol
b) Fiber Optic Cable	Connector
c) TCP/IP	Guided Media
d) RJ 45	Amplifies the signal and forwards it
4. Select the best alternatives: [0.5×4=2]
  - a) Each node is connected to two adjacent nodes in ..... topology.
    - i. Star
    - ii. Ring
    - iii. Tree
    - iv. Bus
  - b) A UPS .....
    - i. increases the storage capacity of a computer system.
    - ii. increases processor's speed.
    - iii. provides backup power in the event of a power cut.
    - iv. all of above.
  - c) An NIC is .....
    - i. a Novell Interface Controller
    - ii. used to control a printer.
    - iii. interfaces a modem to a computer.
    - iv. connects a computer to a network
  - d) Which of the following is mobile software?
    - i. Blackberry
    - ii. Android
    - iii. Apple iOS
    - iv. All of them

5. Write the appropriate technical terms for the following: [0.5×4=2]
  - a) The rules that govern computer communication.
  - b) The physical layout of the network in which all the devices are connected.
  - c) The code causing damage to a computer or system.
  - d) The term used to describe the tool which allows one computer user to send a message to one or more other computer users over computer network.
6. Write the full form of the following: [0.5×4=2]
  - a) HTTP
  - b) FTP
  - c) ICT
  - d) CAL

## Group B (Database) [10]

7. Answer the following questions: [2×3=6]
    - a) What is primary key? Give its importance.
    - b) Write the advantages of form over table in Ms-Access.
    - c) Differentiate between records and fields.
  8. Select the best answer: [0.5×4=2]
    - a) If you let the program create a primary key for you, it uses the field name .....
      - i. counter
      - ii. ID
      - iii. MDB
      - iv. primary
    - b) A data type specially useful when you want to include sentences or paragraph.
      - i. text
      - ii. memo
      - iii. date & time
      - iv. yes/no
    - c) Which of the following can you do to add a field to the query?
      - i. Double click the field name in the field list.
      - ii. Use the drop-down list in the query design grid.
      - iii. Drag the field name from the field list to the query design grid.
      - iv. All of the above.
  9. State whether 'True' or 'False' : [0.5×4=2]
    - a) You can include records from only one table in a query.
    - b) Form is a source of table.
    - c) You cannot include spaces or punctuations in a query name.
    - d) You can undo the deleted records from action query.
- ## Group C (Programming) [18]
10. Answer the following questions: [1×3=3]
    - a) What is a global variable?

b) What is the difference between Function Procedure and Sub procedure?

c) Write the function of EOF and Write# statements.

11. Write the output of the following: [2]

```
DECLARE SUB L(p)
CLS
X=12
CALL L(X)
END
```

```
SUB L(P)
M=3
WHILE M<7
PR=M*P
PRINT PR
M=M+2
WEND
END SUB
```

12. Debug the following program: [2]

```
DECLARE FUNCTION NSUM(N)
CLS
INPUT "Enter a number";NUM
S$=NSUM(N)
PRINT "The sum of the numbers from 1 to ";num;"is";S
END
```

```
FUNCTION NSUM(N)
SM=0
FOR I=ONE to N
SM=SM+I
NEXT I
SM=NSUM
FUNCTION END
```

13. Read the program given below and answer the following questions:

[1×2=2]

```
DECLARE SUB GSERIES(A,R,N)
DECLARE FUNCTION PROD(A,B)
```

```
CLS
INPUT "ENTER FIRST TERM";X
INPUT "ENTER COMMON RATIO";Y
INPUT "NUMBER OF TERMS TO BE GENERATED";Z
CALL GSERIES(X,Y,Z)
END
```

```
SUB GSERIES(A,R,N)
FOR I= 1 TO N
PRINT A
A=PROD(A,R)
NEXT I
END SUB
```

```
FUNCTION PROD(A,B)
PROD=A*B
END FUNCTION
```

a) What will be the output of the programs if user inputs numbers 2, 2 and 4 for variables X, Y and Z respectively.

b) List the name of procedures/modules declared in the above program.

14. Code the following programs: [3×3=9]

a) WAP to declare the sub procedure to calculate and display the volume of a box.

b) Write a Function procedure to display the input digit in reverse order.

c) A data file "student.dat" consists of several records in it with name, class and scores in each record. WAP to update scores of all students by adding 10.

Set 2

# East Horizon English Secondary School 10+2

Mechinagar-10, Dhulabari

Second Terminal Examination 2079

Class: 8 Sub: Computer Science F.M. : 50 Time: 1hr.30min.

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1. Answer the following questions: [2×11=22]
  - a) What is an Abacus? When and where was abacus invented?
  - b) Give any two examples of full duplex communication media.
  - c) What do you mean by network topology? List different types of network topology.
  - d) Define Webpage and Website.
  - e) Mention any two ways of protecting computer from virus.
  - f) What is ICT?
  - g) What is Microsoft Power point 2007?
  - h) Write the major functions of an operating system.
  - i) What is System Software? List its types.
  - j) What is digital computer? Give example
  - k) What is binary number system?
2. Convert the following decimal number into binary number:[2]
  - a) 48                      b) 201
3. Convert the following binary number into octal number:[2]
  - a) 10111                      b) 111101
4. Perform the following binary arithmetic:[2]
  - a) 10101+1010
  - b) 10110×10
5. Match the following: [0.5×4=2]

a) Cyber law of Nepal introduced	computer ethics
b) Revised of ETA	Validate the authenticate of message
c) Moral Principal	2063 BS
d) Digital Signature	2061 BS
6. Choose the best answer: [0.5×4=2]
  - a) Two way communication media is .....
    - i) radio    ii) TV    iii) newspaper    iv) internet
  - b) Computer viruses are
    - i) computer programs    iii) human virus
    - ii) dust particles    iv) none of the above

- c) A hand-held computers is also called .....
    - i) PDA                      iii) micro computer
    - ii) Laptops                      iv) workstation
  - d) ..... is used in fifth generation computers.
    - i) Bio Chip                      iii) Transistor
    - ii) Hard Disk                      iv) Vacuum Tube
7. Write single technical term for the following: [1×8=8]
    - a) The ability of computer by which they can think itself.
    - b) Earliest calculating device.
    - c) The computer which is known as the beginning of the era of the modern computer.
    - d) The most powerful and fastest computer among digital computers.
    - e) Collection of data.
    - f) The legal property rights of someone over his creation of the mind, both artistic and commercial.
    - g) A person who uses a computer to gain an unauthorized access.
    - h) A network which is extended beyond 100km.
  8. State whether the following statements are true or false:[1×3=3]
    - a) Computer network does not allow sharing software.
    - b) Computer ethics gives awareness to the user in the computing field.
    - c) ICT can be used as a teaching tool.
  9. Fill in the blanks: [1×4=4]
    - a) ..... is the first page of a website.
    - b) ..... is a most popular presentation software.
    - c) A ..... is software with the ability to reproduce itself.
    - d) ..... prevents the unauthorized copying of a work of authorship.
  10. Write down the full form of the following: [1×3=3]
    - a) ICT                      b) WAN                      c) IC

Set A



# East Horizon English Secondary School 10+2

Mechinagar-10, Dhulabari

Second Terminal Examination 2079

Class: 8 Sub: Computer Science F.M. : 50 Time: 1hr.30min.

- Answer the following questions: [2×11=22]
  - What is Napier Bone? Who invented it?
  - What is clipart?
  - Define network connecting device. Write down the different types of network connecting device.
  - Define computer hardware. List its types.
  - How does a computer virus spread across the computer?
  - What is Cyber Law?
  - What is Microsoft Excel 2007?
  - List the types of operating system.
  - What is Utility Software? Give two examples.
  - What is hybrid computer? Give example.
  - What is decimal number system?
- Convert the following decimal number into binary number:[2]
  - 48
  - 201
- Convert the following binary number into octal number:[2]
  - 10111
  - 111101
- Perform the following binary arithmetic:[2]
  - 10101+1010
  - 10110×10
- Match the following: [0.5×4=2]

a) Liveware	Processed data
b) Data	Programmer
c) Information	Manipulating data
d) Data Processing	Raw Facts
- Choose the best answer: [0.5×4=2]
  - Which of the following is search engine?
    - Yahoo
    - Google
    - i & ii
    - none
  - Viruses are transferred from .....
    - e-mail
    - internet
    - pen drive
    - all
  - PS/2 model computers are designed by .....

- Microsoft
  - Intel
  - IBM
  - none
- Which of the following is not the example of first generation computer?
    - EDSAC
    - UNIVAC
    - IBM
    - ENIAC
- Write single technical term for the following: [1×8=8]
    - The computer which is known as the beginning of the era of the modern computer.
    - The ability of computer by which they can think itself.
    - Earliest calculating device.
    - A person who uses a computer to gain an unauthorized access.
    - A network device which has multiple ports for connecting different computers.
    - The most powerful and fastest computer among digital computers.
    - Collection of data.
    - The legal property rights of someone over his creation of the mind, both artistic and commercial.
  - State whether the following statements are true or false:[1×3=3]
    - Extranet is a private network.
    - Computer ethics gives awareness to the user in the computing field.
    - Internet banking is very secured in Nepal.
  - Fill in the blanks: [1×4=4]
    - ..... is the collection of information that stored in the website.
    - The powerpoint 2016 has by default extension .....
    - ..... prevents the unauthorized copying of a work of authorship.
    - A ..... is software with the ability to reproduce itself.
  - Write down the full form of the following: [1×3=3]
    - ENIAC
    - NIC
    - IT

Set B

# East Horizon English High School

Mechinagar-10, Dhulabari

**Second Terminal Examination 2079**

Class: 7

Sub: Comp. Sc

F.M. : 25

Time: 45min.

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1. Answer the following : [2×5=10]

- What is internet?
- What is computer network?
- What do you mean by a computer virus?
- What do you mean by web browser?
- What is Microsoft Powerpoint 2007?

2. Fill in the blanks: [1×4=4]

- \_\_\_\_\_ key is used to run the slide.
- The government of Nepal has passed cyber law on \_\_\_\_\_BS.
- \_\_\_\_\_ is the world's largest wide area network.
- \_\_\_\_\_ is the address of web page or website.

3. State whether the following statements are True or False.[ 1×4=4]

- Excel is a presentation software.
- Cyber crime is also known as e-crime.
- Computer network allows sharing only software.
- Internet is a collection of files.

4. Write the single technical term for the following. [1×3=3]

- Gaining unauthorized access to individual computers or computer networks.
- The path through which the message flows in computer network.
- To copying files or documents or programs or data from user computer to the internet.

5. Choose the best answer:3

- Which of the following is father of cyber ethics?
  - Charles Babbage
  - Norbert Weiner
  - Howard Aiken
  - None

b) There are \_\_\_\_ types of computer network on the basis of geographical area.

- 2
- 3
- 4
- 5

c) Which of the following terms is a 'browser'?

- google Chrome
- WWW
- e-mail
- none

6. Write down the full form of WWW. [1]

Best of Luck [1]

# East Horizon English High School

Mechinagar-10, Dhulabari

## Second Terminal Examination 2079

Class: 7

Sub: Comp.Sc

F.M. : 25

Time: 45min.

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iii) Chatting

iv) All

c) All web pages start with which of the following?

i) Htp

ii) http:/

iii) http://

iv) www

1. Answer the following : [2×5=10]

- What are the uses of internet?
- List the different elements of computer network.
- What is Antivirus Software?
- What is search engine?
- What do you mean by transition effect?

2. Fill in the blanks: [1×3=3]

- \_\_\_\_\_ is a most popular presentation software
- \_\_\_\_\_ deals with illegal copying and resale of software.
- \_\_\_\_\_ is a group of computers located in the same room.
- \_\_\_\_\_ is a client software that allows the users to display and intact with a web page.

3. State whether the following statements are True or False.[ 1×3=3]

- We can add textual content to a slide by using text boxes.
- Internet Pornography is a cyber crime.
- Internet is the example of WAN.
- e-mail is expensive than ordinary postal service.

4. Write the single technical term for the following. [1×5=5]

- Moral rules to be followed by computer user and other professionals.
- It is a set of rules which are used to establish communication between several computers.
- Software or programs that search the websites for you.

5. Choose the best answer:3

a) Which of the following is cyber crime?

- i) Hacking    ii) Pornography    iii) craking    iv) All

b) What can you do with the help of computer network?

- i) share hardware    ii) share software

6. Write down the full form of URL [1]

Best of Luck [2]