

09010021/2&1 B.B.E.K.O

October 2021

INFORMATION
AND COMMUNICATIONS

TECHNOLOGY 2 & 1

Essay and Objective

2 hours

2 & 1

Name.....

Index Number.....

Signature

Date of Examination

BEST BRAIN EXAMINATIONS KONSORTIUM GHANA

Special Private Mock Examinations For BECE Candidates

October 2021 INFORMATION AND COMMUNICATIONS TECHNOLOGY 2&1 2 hours

*Do not open this booklet until you are told to do so. While you are waiting, read and observe the following instructions carefully. Write your **name, index number, signature and date of examination** in **ink** in the spaces provided above*

*This booklet consists of **two** papers. Answer Paper 2 which comes first, in the booklet and Paper 1 on your Objective Test answer sheet. Paper 2 will last **1 hour 15 minutes**. Do **not** start Paper 1 until you are told to do so. Paper 1 will last **45 minutes**. At the end of the examination, submit the **entire** question paper to the invigilator.*

*Any candidate who tears off any part of the question paper will be **severely penalized**.*

*Whether you answer all the questions in this paper or not, hand in the **entire** question paper to the invigilator.*

For Examiner's Use Only	
Question Number	Mark
TOTAL	

© 2021 Best Brain Examinations Konsortium
(020-7732900 / 0249273049 / 0248726958)

This paper is in **two sections A and B**. Answer Question 1 in Section A and any other **three** questions in Section B.

Answer **all** the questions in the spaces provided in this question paper. At the end of the examination, you should submit the **entire** question paper to the invigilator.

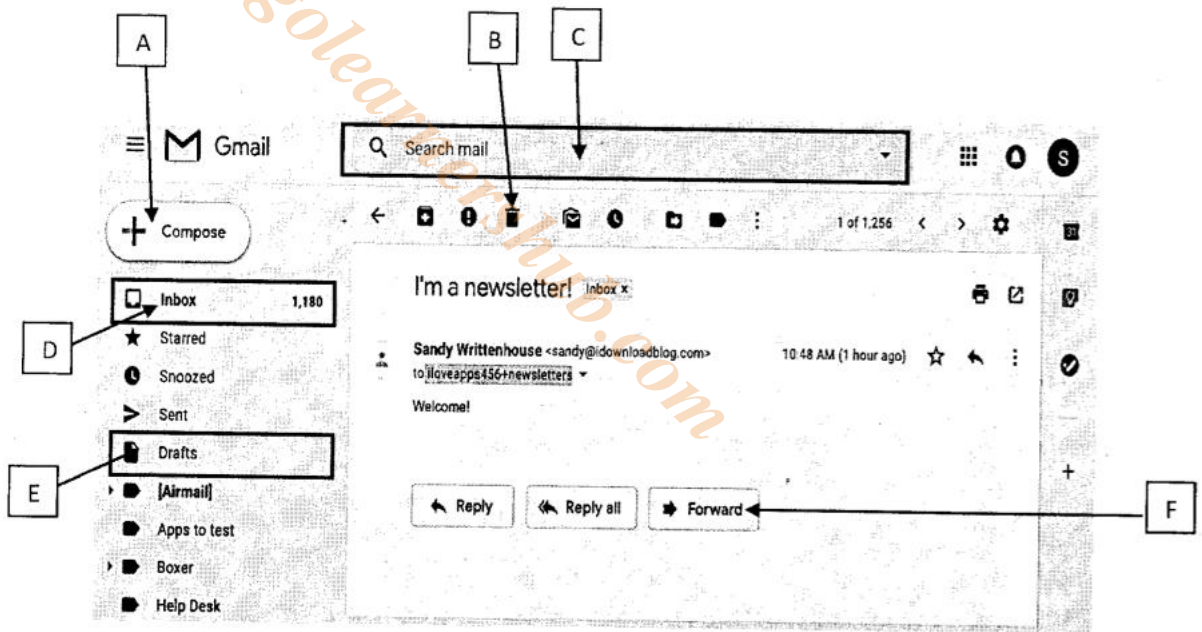
Any candidate who tears off any part of the question paper will be **severely** penalized.

Whether you answer all the questions in this paper or not, hand in the **entire** question paper to the invigilator.

Credit will be given for clarity of expression and orderly presentation of material.

SECTION A
[24 marks]
Answer question 1
[Compulsory]

1. (a) Name the features labeled A, B, C, D, E and F in the webpage below and state one function of each.



A:
.....
.....

B:
.....
.....

C:
.....
.....

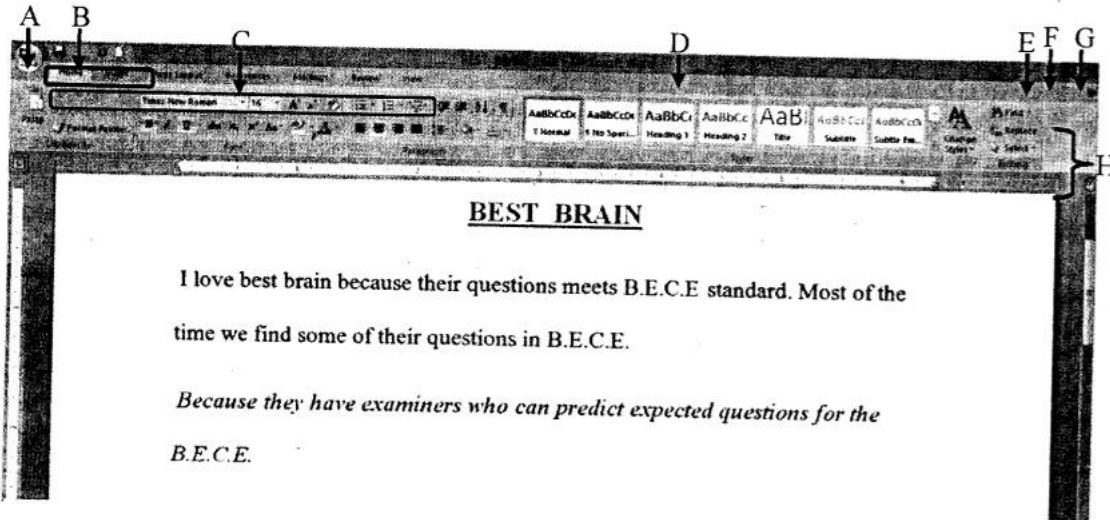
D:
.....
.....

E:
.....
.....

F:
.....
.....

[6 marks]

(b) Study the diagram below and answer questions (i) to (iv).



- (i) Name the application program used for the figure above.
.....
- (ii) Write the names of the parts labeled A, B, C, D, E, F, G and H. [1 mark]
A: B:
C: D:
E: F:
G: H:
- (iii) What is the name of the area where the sentences are written? [4 marks]
.....
- (iv) Which **two** tools were used to format the last paragraph? [1 mark]
..... [1 mark]

(c) Study the spreadsheet below and use it to answer questions 1(b) (i) to (vi)

	A	B	C	D	E	F	G
1	Name	Math	Science	English			
2	Wisdom	86	84	57			
3	Collins	89	79	84			
4	Cecil	52	57	79			
5	Gifty	40	88	42			
6	Dorcas	89	43	40			
7							
8							

Turn over

- (i) Give the file name [1 mark]
- (ii) Give the file extension [1 mark]
- (iii) Name the worksheets in the workbook. [1 mark]

(iv) State the use of the command groups labelled I, II, III and IV.

I:

II:

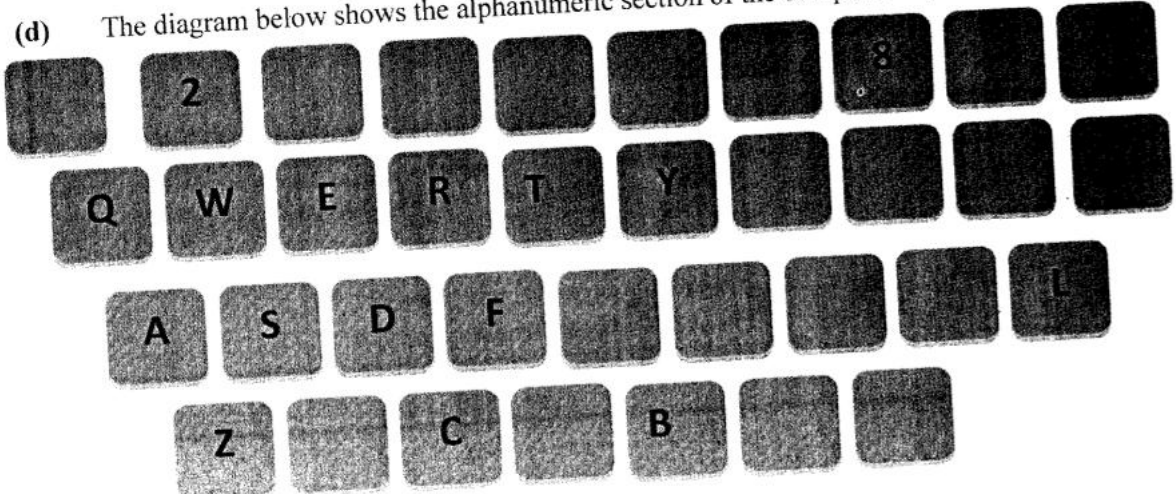
III:

IV:

(v) Write down two formulas that can be used to find the average of all the marks entered in the spreadsheet using the SUM and AVERAGE functions. [2 marks]

(vi) Describe two calculations in the spreadsheet that can be performed using AutoSum. [1 mark]

(d) The diagram below shows the alphanumeric section of the computer keyboard. [1 mark]



Write in the right order from left to right, the missing characters in the following parts:

- (i) Number row keys:
- (ii) Qwerty row keys:
- (iii) Home row keys:
- (iv) Bottom row keys:

[4 marks]

SECTION B

[36 marks]

Answer **three questions only** from this section

- 2. (a) Outline the steps involved in saving a newly created document.

.....

.....

.....

.....

.....

.....

.....

[3 marks]

- (b) Write down the steps to save a formatted text with a new name on the desktop.

.....

.....

.....

.....

.....

.....

.....

[3 marks]

- (c) State **two** differences each between:

- (i) a worksheet and a workbook.

WORKSHEET	WORKBOOK

- (ii) random access memory and read only memory.

RANDOM ACCESS MEMORY	READ ONLY MEMORY

[4 marks]

Turn over

(d) Explain the following terms:

(i) *Data theft:*

.....
.....

(ii) *System crash:*

.....
.....

[2 marks]

3. (a) Identify **four** benefits associated with using information and communications Technology in teaching and learning.

.....
.....
.....
.....
.....
.....
.....
.....

[4 marks]

(b) List **six** uses of the internet.

.....
.....
.....
.....
.....
.....
.....
.....

[3 marks]

(c) Outline **three** benefits of copyright protection.

.....
.....
.....
.....
.....
.....
.....

[3 marks]

(d) Explain the following terminologies in information and communications technology:
(i) Range:

.....
.....

(ii) Graph

.....
.....

[2 marks]

4. (a) Outline the steps you will follow in:
(i) starting Microsoft Excel from the Start menu.

.....
.....
.....
.....
.....
.....

(ii) using the AutoSum function of Microsoft Excel for addition operation.

.....
.....
.....
.....
.....

[3 marks]

(b) State the basic function of each of the following parts of a web browser:

(i) Back button;

.....
.....

(ii) Adress bar;

.....
.....

[2 marks]

(c) Give **four** differences between *selecting* and *highlighting* text in a Word Processing application.

SELECTING	HIGHLIGHTING

[3 marks]

Turn over

(d) Write down the steps in the right order of creating a new workbook in Excel program.

.....

.....

.....

.....

.....

.....

4. (a) State **four** important features of storage media. [4 marks]

.....

.....

.....

.....

.....

.....

(b) State **four** ways to protect storage media. [4 marks]

.....

.....

.....

.....

.....

.....

(c) (i) Name **four** examples of word processors. [4 marks]

.....

.....

(ii) Give **four** examples of operating systems.

.....

.....

(d) Complete the table below on keystroke combinations. [2 marks]

KEYSTROKE	ACTION USED TO PERFORM
Ctrl + ↑	
	To move up one window.
Ctrl + End	
	To move to the beginning of a document.

[2 marks]

END OF ESSAY TEST

DO NOT TURN OVER THIS PAGE UNTIL YOU ARE TOLD TO DO SO

YOU WILL BE PENALIZED SEVERELY IF YOU ARE FOUND LOOKING AT THE NEXT PAGE BEFORE YOU ARE TOLD TO DO SO

45 minutes

PAPER 1
OBJECTIVE TEST

Answer all the questions on your Objective Test answer sheet.

- Use **2B** pencil throughout
- On the pre-printed answer sheet, check that the following details are **correctly** printed: Your **surname** followed by your **other names**, the Subject Name. Your Index Number; Centre Number and the Paper Code.
- In the boxes marked Candidate Number, Centre Number and Paper Code, **reshade** each of the shaded spaces.
- An example is given below. This is for a candidate whose name is Seyram BABANAWO. Her index number is 772384188 and she is writing the examination at Centre Number 77234. She is offering Information and Communication Technology 1 and the Paper Code is 4510.

**BEST BRAIN EXAMINATION KONSORTIUM
SPECIAL PRIVATE MOCK FOR BECE CANDIDATES
OBJECTIVE ANSWER SHEET.**

CANDIDATE NAME: SEYRAM BABANAWO	SUBJECT: I. C. T
---	----------------------------

- | | |
|--|---|
| <ol style="list-style-type: none"> Use HB Pencil Press firmly Answer each question by choosing one letter and then, shade through the letter chosen like this
[A] <input checked="" type="checkbox"/> [C] [D] [E] If you want to change an answer, rub out your | <ol style="list-style-type: none"> First mark completely If only four alternative answers are given for each question, ignore the letter E Your question paper may have fewer than 60 Questions. |
|--|---|

CANDIDATE NUMBER			CENTRE NUMBER			PAPER CODE		
7	7	3	7	7	3	4	5	0
[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]	[0]
[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]
[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]	[2]
[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]	[3]
[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]
[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]
[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]
[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]	[7]
[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]	[8]
[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]	[9]

For Supervisors Only.

If candidate is absent shade this space

© 2021 Best Brain Examinations Konsortium
(020-7732900 / 0249273049 / 0248726958)

Answer all the questions.

Each question is followed by four options lettered A to D. Find out the correct option for each question and shade in pencil on your answer sheet the space which bears the same letter as the option you have chosen. Give only one answer to each question. An example is given below.

A group of files are stored in a

- A. graphic
- B. folder
- C. text
- D. word

The correct answer is folder, which is lettered B and therefore answer space B would be shaded.

A

B

C

D

Think carefully before you shade the answer spaces. Erase completely any answer you wish to change. Do all rough work on this paper.

Now answer the following questions.

1. We can secure our intellectual properties through
 - A. copyright law.
 - B. copyright infringement.
 - C. copyright protection.
 - D. copyright distribution.
2. The operating system of a computer manages the communication between
 - A. keyboard and the mouse.
 - B. microsoft office and open office.
 - C. utility software and the application software.
 - D. hardware and the application software.
3. Using CTRL + ALT + DEL keys command combination will lead to
 - A. warm booting of computer system.
 - B. cold booting of computer system.
 - C. hibernation of computer system.
 - D. shutting down of computer system.
4. In the computer field, a terabyte of data is equivalent to
 - A. 1000 Megabytes.
 - B. 1000 Gigabytes.
 - C. 1000 Kilobytes
 - D. 1000 Millibytes.
5. An example of an operating system is
 - A. EXCEL.
 - B. WORD.
 - C. DISC.
 - D. DOS.
6. Which of the following is true about the Spacebar in word processing?
 - A. It is hardly used.
 - B. It is frequently used.
 - C. It is used to erase characters.
 - D. It can be used in place of Enter key.
7. Which of the following is not true about a dialogue box?
 - A. It has a close button.
 - B. It contains a title bar.
 - C. It helps the user.
 - D. It interacts with the user.
8. Moving files from one place to another location
 - A. removes the original file from its original location.
 - B. retains the original files.
 - C. destroys the format of the original files.
 - D. protects the original files.
9. The sharpness of an image on a monitor screen is determined by the number of
 - A. colours.
 - B. units.
 - C. pixels.
 - D. bytes.

10. The commonly used method for transferring files across networks and the internet is
 A. Fast Transfer Protocol.
 B. File Transfer Protocol.
 C. File Transfer Projector.
 D. Fast File Transferring.
11. The horizontal block or bar at the bottom of windows desktop which you use to access programs is
 A. size bar
 B. taskbar
 C. paint bar
 D. Brush bar
12. The command that resends instruction in a browser window is
 A. refresh.
 B. back
 C. home.
 D. forward.
13. It is important to sit properly when typing because it helps to
 A. prevent injuries.
 B. communicate with friends.
 C. share resources.
 D. avoid internet fraud.
14. The strip of buttons and icons located above a work area in a worksheet is the
 A. Tab.
 B. Sheet Tab.
 C. Text data.
 D. Ribbon
15. Which formatting tool will spread text evenly on a line?
 A. Left align
 B. Right align
 C. Centre
 D. Justify
16. The intersection of the 8th row and 7th column in a spreadsheet application will have the cell reference
 A. 8G
 B. G8
 C. 7H
 D. H7
17. To avoid being cyber-bullied you should always
 A. ignore requests from people to be your friend online.
 B. observe proper internet ethical rules.
 C. post mean things about people on your wall on Facebook.
 D. give out personal information to anyone who requests.
18. Clicking the middle button on the control box will help switch between
 A. Maximize and minimize
 B. Restore down and maximize
 C. Close and Restore down
 D. Minimize and Restore down
19. The mouse action which opens a context menu is
 A. right-clicking.
 B. double clicking.
 C. dragging.
 D. triple clicking.
20. Which of the following fingers is used in pressing the secondary mouse button?
 A. Right middle finger
 B. Left ring finger
 C. Right index finger
 D. Left little finger
21. All the following are examples of internal hardware **except**
 A. CPU.
 B. mouse.
 C. motherboard.
 D. RAM

Turn over

22. Which of the following is not a search engine?
 A. Bing
 B. Yahoo
 C. Windows
 D. Google
23. Which of these is **not** a case type in MS Word?
 A. Sentence case
 B. Lower case
 C. Toggle case
 D. Capitalize each vowel
24. Local Area Network (LAN) **cannot** be used in
 A. a school.
 B. an office.
 C. the world.
 D. banks.
25. *Save* and *Save as* commands can be found in
 A. File menu
 B. Help menu
 C. Edit menu
 D. Format menu
26. A rectangle can be drawn easily in word processing application using the
 A. Square tool
 B. Rectangle tool
 C. Circle tool
 D. Bezier tool
27. A web crawler is also known as
 A. link directory
 B. search optimizer
 C. web spider
 D. web manager
28. Which of the following is a button on the mouse used to move through a web page?
 A. Page up
 B. Open drill
 C. Page down
 D. Scroll wheel
29. Double clicking the application/control icon on the task bar of a web browser will
 A. quit the application
 B. restore the application
 C. open the application
 D. reshape the application
30. A hyperlink may be in any of the following formats **except**
 A. a word
 B. a picture
 C. an icon
 D. a fleet
31. Which of the following tools can be used in Encarta to look for information on computers?
 A. Webpage
 B. Forward button
 C. Search tool
 D. Back button
32. To start Paint, we begin by clicking on the
 A. Start button.
 B. Paint button.
 C. Accessories button.
 D. Clock button.
33. To highlight text without using the mouse, use the
 A. shift key while holding down the arrow keys.
 B. F5 key while holding down the arrow keys.
 C. arrow keys while holding down shift key.
 D. control keys while holding down shift key.
34. How many Paint brushes are there in Microsoft Paint?
 A. 9
 B. 8
 C. 11
 D. 6
35. Commands on the ribbon are organized
 A. in alphabetical order.
 B. in logical groups.
 C. by most recent use
 D. in no particular order.
36. One activity in editing word document that duplicates selected text is
 A. Cut and paste
 B. Move and paste
 C. Copy and paste
 D. View and paste
37. Formulas in Excel usually begin with the sign
 A. =
 B. -
 C. /
 D. /
38. 'xlx' is the file extension for
 A. Word documents.
 B. Excel documents.
 C. PowerPoint documents.
 D. CorelDraw documents.
39. What key is used to select multiple ranges of cells in Excel?
 A. AltCar or AltGr
 B. CTRL
 C. Alt
 D. Shift
40. The combination of letters and numbers as used in computing environment is termed
 A. alphanumeric.
 B. alphanumbers.
 C. characters.
 D. letters.

END OF OBJECTIVE TEST

BEST BRAIN EXAMINATIONS KONSORTIUM
SPECIAL PRIVATE MOCK EXAMINATIONS FOR BECE CANDIDATES – OCTOBER 2021
MARKING SCHEME – INFORMATION & COMMUNICATIONS TECHNOLOGY

PAPER 2 ESSAY

QUESTION ONE

- (a) (i) **NAME AND FUNCTIONS OF LABELED PARTS**
A - **Compose button:** used to create or compose a new message.
B - **Delete button:** used to remove unwanted messages in the mail.
C - **Mail search tab:** Helps to search or look for mails already sent to you.
D - **Inbox:** stores all received messages sent to you. It is also used to access messages sent from other recipients
E - **Draft button:** used to store or save messages for future use.
F - **Forward button:** used to forward messages to other e-mail addresses.
[6 marks @ 1 mark each]
- (b) (i) **NAME THE APPLICATION PROGRAM USED FOR THE FIGURE ABOVE.**
Microsoft Word application software/ Ms Word application software/ Ms Word software/ Microsoft Word application. [1 mark]
- (ii) **NAMING THE PARTS LABELED A –H**
A – Office button B – Quick Access Tool bar C – Title bar
D - Command tabs E – Minimize button F- Restore
G – Close H – Ribbon
[4 marks @ ½ mark each]
- (iii) **NAME OF THE AREA WHERE THE SENTENCES ARE WRITTEN**
Work Area/Text Area/Document window [1 mark]
- (iv) **TOOLS USED TO FORMAT THE LAST PARAGRAPH.**
Bold and Italic. [1 mark @ ½ mark each]
- (c) (i) **NAME OF FILE NAME**
SCORESHEET [1 mark]
- (ii) **FILE EXTENSION**
.xlsx [1 mark]
- (iii) **WORKSHEETS IN THE WORKBOOK**
Scores, Attendance, Timetable [1 mark]
- (iv) **USE OF COMMANDS**
I – Used to perform copy paste operations on data
II – Used to modify the appearance of data
III – Used to modify the arrangement of data in cells
IV – Used to edit the format of numerical data in cells [2 marks @ ½ mark each]
- (v) **FORMULAS USING SUM AND AVERAGE FUNCTIONS**
=SUM (B2:D6)/15
=AVERAGE (B2:D6) [1 mark]

(vi) **CALCULATIONS USING AUTOSUM**

1. Calculating the total marks in all three subjects for each individual student
2. Calculating the total marks scored in each subject by all students

[1 mark]

(d) **COMPLETION OF DIAGRAM**

- (i) Number row keys: **1 3 4 5 6 7 9 0**
- (ii) Qwerty row keys: **U I O P**
- (iii) Home row keys: **G H J K**
- (iv) Bottom row keys: **X V N M**

QUESTION TWO

(a) **STEPS INVOLVED IN SAVING A NEWLY CREATED DOCUMENT.**

1. Click on the File ribbon tab
2. Click on Save As
3. Choose location for storage
4. Enter the new name
5. Click Save

OR

1. Type short cut key, '**Ctrl + S**'.
2. Click '**Browse**' to choose storage destination and file name of document
3. Click '**Save**'

[3 marks for all correct]

(b) **STEPS TO SAVE A FORMATTED DOCUMENT**

1. Click on the File ribbon tab
2. Click on Save As
3. Choose the desktop as location
4. Enter the new name
5. Click Save

[3 marks for all correct]

(c) (i) **DIFFERENCE BETWEEN A WORKBOOK AND A WORKSHEET**

A workbook is a file containing one or more worksheets.

A worksheet is a single spreadsheet page in a workbook on which data is entered

[1 each x 2 = 2 marks]

(ii) **DIFFERENCE BETWEEN RAM and ROM**

Random Access Memory	Read Only Memory
It holds data, programs and information temporarily.	It contains fixed startup instruction
It is volatile	Non-volatile
It can be read / written on by users	It can only be read
Cannot be found in most appliances	Can be found in most appliances

[2 marks @ 1 mark each]

(d) **EXPLANATION OF THE FOLLOWING TERMS**

(i) **Data theft:** This is computer viruses known as spyware that steal data from a user's computer and pass it on to dangerous hands/people. [1 mark]

(ii) **System crash:** This is when viruses infect a computer system and prevents the computer from working again. [1 mark]

QUESTION THREE

(a) **BENEFITS ASSOCIATED WITH THE USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY IN TEACHING AND LEARNING.**

- It makes teaching and learning easy
- It makes teaching and learning interesting
- It makes students learn at their own pace
- It gives access to information and learning materials online
- It gives access to online libraries for research
- It facilitates e-learning
- Etc.

[4 marks @ 1 mark each]

(b) **USES OF THE INTERNET**

- Researching
- Online communication
- Entertainment
- Customer support service
- Downloading software
- Distance learning
- Shopping
- Banking etc.

[3 marks @ ½ mark each]

(c) **BENEFITS OF COPYRIGHT PROTECTION**

- Protects the work of people
- It ensures healthy competition
- It promotes development

[3 marks @ 1 mark each]

(d) **EXPLANATION OF TERMS**

- (i) **Range:** is a group of specified/ selected adjacent cells [1 mark]
- (ii) **Graph:** is a visual representation of a set of objects where some pairs of the objects are connected by lines. [1 mark]

QUESTION FOUR

(a) (i) **HOW TO START MICROSOFT EXCEL FROM THE START MENU**

- Click the start button.
- Click the Excel item displayed in the start menu.
- The Excel window will be opened and the Excel button in the task bar will appear.

[1 ½ mark each]

(ii) **USING THE AUTOSUM FUNCTION OF MICROSOFT EXCEL FOR ADDITION OPERATION**

- Click on the cell to receive the result of the addition operation
- Select the range of cells from the first cell reference to the last cell reference.
- Click on the auto sum icon or symbol

[1 ½ mark each]

(b) **BASIC FUNCTIONS OF THE FOLLOWING:**

- (i) **Back button:** lets you back up to the copies of pages you visited previously. [1 mark]
- (ii) **Address bar:** is the input field in a web browser that is used to locate a website or start a search. [1 mark]

[1 mark]

(c) **DIFFERENCES BETWEEN SELECTING AND HIGHLIGHTING IN A WORD PROCESSING APPLICATION**

SELECTING	HIGHLIGHTING
1. Meant for formatting purpose	Laying emphasis on a point
2. Background vanishes after formatting	Background stays after highlighting
3. Temporary action	Permanent / long-lasting action
4. Not dependent on colour	Dependent on colour
5. Involves one step to accomplish	Involves multiple steps to accomplish.

[1 each x 3 = 3 marks]

(d) **RIGHT ORDER OF CREATING A NEW WORKBOOK WHILE IN EXCEL PROGRAM**

- Click the office button
- Click new
- Click blank and recent. Then click blank workbook
- Click create

[Award 4 marks @ 1 mark each]

QUESTION FIVE

(a) **IMPORTANT FEATURES OF STORAGE MEDIA**

- Some of them have tracks
- They have sectors
- They have data areas
- They have silver coated surfaces
- They are non-volatile/store data permanently
- They have storage capacities in terms of bytes, bytes/megabytes/terabytes
- It is accessed sequentially or randomly
- Made of plastic material
- Data are recorded on sectors within tracks
- Each track is subdivided into sectors.

[4 marks @ 1 mark each]

(b) **WAYS TO PROTECT STORAGE MEDIA.**

- Keeping storage media in a protective packet
- Keeping storage media away from magnetic field
- Write-protect storage media
- Keeping storage media away from moisture
- Keeping storage media away from dirt
- Keeping storage media in a protective case
- Keeping storage media from hot environment.

[4 marks @ 1 mark each]

(c) (i) **EXAMPLES OF WORD PROCESSORS:**

Microsoft word, writer, word perfect, wordpad, IBM Lotus word pro, K. Word, Kongsoft writer, Apache OpenOffice Writer, Bear, Calligra words, JWPee, LyX, Ted, WordGraph. etc.

[1/4 mark each x4 = 1 mark]

(ii) **EXAMPLES OF OPERATING SYSTEMS:**

Windows (XP, 08, 08 etc) UNIX, Linux, Disk Operating System (DOS), Macintosh Operating System (Mac OS), Solaris etc.

[1/4 mark each x4 = 1 mark]

(d) **BAD HABITS ASSOCIATED WITH TYPING**

- Slouching
- Reaching too far from the keyboard or the mouse
- Leaning your hand on the keyboard or the wrist support
- Bending your wrists forward, back, left or right
- Pounding the keys
- Looking at the keyboard
- Raising your elbows
- Raising your shoulders
- Keying with the wrong fingers

[4 marks @ 1 mark each]

PAPER ONE [40 marks]

1. C	6. B	11. B	16. B	21. B	26. B	31. C	36. C
2. D	7. C	12. A	17. B	22. C	27. C	32. A	37. A
3. A	8. A	13. A	18. B	23. D	28. D	33. A	38. B
4. B	9. C	14. D	19. A	24. C	29. C	34. A	39. D
5. D	10. B	15. D	20. A	25. A	30. D	35. D	40. A

[1 mark each=Total 40 marks]