

KENYA CERTIFICATE OF BASIC EDUCATION

SENIOR SCHOOL ASSESSMENT

DECEMBER ASSIGNMENT 2026

GRADE 10 – INFORMATION COMMUNICATION TECHNOLOGY

Time: 2 Hours

LEARNER'S DETAILS

Name: _____ School: _____

Assessment Number: _____ Date: _____

School Code: _____ Signature: _____

INSTRUCTIONS TO CANDIDATES

1. Write your details as required in the spaces provided above.
2. This paper consists of two sections: A and B.
3. Answer all questions in section A and section B.
4. Answer the questions in English.
5. All answers MUST be written in the spaces provided in the paper.
6. Do NOT remove any page from this question paper.

FOR OFFICIAL USE ONLY (EXAMINER'S USE)

SECTION	SECTION A	SECTION B	% SCORE	EE1	EE2	ME1	ME2	AE1	AE2	BE1	BE2
SCORE RANGE	30 MARKS	50 MARKS		90-100	75-89	58-74	41-57	31-40	21-30	11-20	1-10
POINTS				8 POINTS	7 POINTS	6 POINTS	5 POINTS	4 POINTS	3 POINTS	2 POINTS	1 POINT
LEARNER'S TOTAL SCORE											

SECTION A (35 MARKS)

Answer ALL questions in this section.

1. a) Define the term **digital technology**. (1 mark)

- b) State **two ways in which ICT contributes to economic development** in Kenya. (2 marks)

- i. _____
- ii. _____

- c) Give **two challenges that may arise from increased use of ICT in society**. (2 marks)

- i. _____
- ii. _____

2. Study the diagram below and answer the questions that follow.



Q



R



S



T

a) Identify **any two devices** that could be represented by A, B, C or D. (2 marks)

Q: _____

R: _____

S: _____

T: _____

b) State **one function of an input device**. (1 mark)

c) State **one function of an output device**. (1 mark)

d) Give **one example of a storage device**. (1 mark)

3. a) Distinguish between **system software** and **application software**. (2 marks)

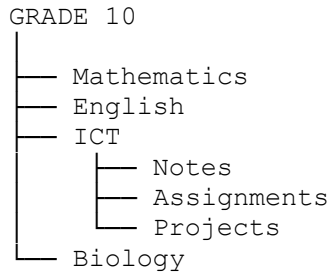
b) Give **one example of system software**. (1 mark)

c) Give **two examples of application software** commonly used by learners. (2 marks)

i. _____

ii. _____

4. A learner has organised schoolwork on a computer as shown below:



a) What is the name given to **Grade 10** in this arrangement? (1 mark)

b) Name **two subfolders** found inside the ICT folder. (2 marks)

- i. _____
ii. _____

c) State **two benefits of organising files into folders**. (2 marks)

- i. _____
ii. _____

5. A learner uses a public computer to access an online learning account. After completing the work, the learner leaves the account open and walks away.

a) Identify **one security risk** in this situation. (1 mark)

b) State **two actions the learner should have taken before leaving the computer**. (2 marks)

- i. _____
ii. _____

c) Explain **two characteristics of a strong password**. (2 marks)

- i. _____
ii. _____

6. a) What is meant by **digital ethics**? (1 mark)

b) State **two ways of respecting intellectual property when using digital materials**. (2 marks)

- i. _____
ii. _____

c) Give **two examples of unacceptable online behaviour**. (2 marks)

- i. _____
ii. _____

SECTION B: 50 MARKS

Answer ALL questions in this section.

7. A school ICT teacher asks learners to prepare a report titled:

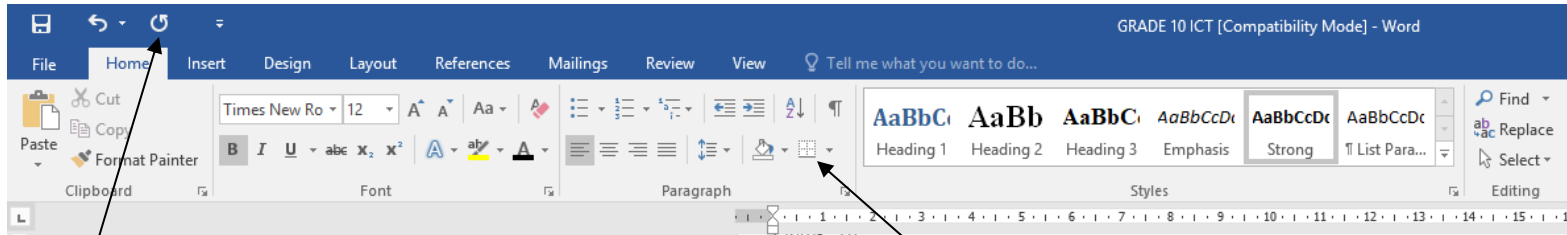
THE IMPORTANCE OF DIGITAL LITERACY

The report should contain a title, headings, paragraphs, a table and page numbers.

a) State **two word-processing features** that can be used to prepare the report professionally. **(2 marks)**

- i. _____
- ii. _____

b) Identify the role of part labelled S and T **(2 marks)**



S: _____

T: _____

c) Explain the difference between **Save** and **Save As**. **(2 marks)**

Save	Save As

d) Describe **two ways of inserting a table into a word-processing document**. **(2 marks)**

- i. _____
- ii. _____

e) State **two reasons for using headings in a long document**. **(2 marks)**

- i. _____
- ii. _____

8. A learner is preparing a presentation on:

ICT IN EDUCATION



- Online learning
- Digital resources
- Collaboration

NEXT →

a) Identify **two elements of the slide** shown in the diagram. (2 marks)

-
-

b) State **three guidelines for selecting images for a presentation**. (3 marks)

-
-
-

c) Explain **two advantages of using presentation software in teaching and learning**. (2 marks)

-
-

d) State **three features that can be used to make a presentation interactive or engaging**. (3 marks)

-
-
-

9. The ICT Club wants to design a flyer advertising an **ICT INNOVATION DAY**.



a) Identify **two publication elements** shown in the flyer. (2 marks)

- i. _____
- ii. _____

b) State **three factors** that should be considered when selecting images and graphics for a publication. (3 marks)

- i. _____
- ii. _____
- iii. _____

c) Explain **two ways** in which alignment improves the appearance of a publication. (2 marks)

- i. _____
- ii. _____

d) State **three types of publications** that can be created using desktop publishing software. (3 marks)

- i. _____
- ii. _____
- iii. _____

10. A learner wants to research information about **climate change in Kenya** using the Internet.

The learner follows this process:

```
Learner
  ↓
Open Web Browser
  ↓
Enter Search Terms
  ↓
Search Engine
  ↓
Search Results
  ↓
Select Relevant Sources
  ↓
Read and Evaluate Information
  ↓
Record Sources
```

a) What is a **web browser**? (1 mark)

b) What is a **search engine**? (1 mark)

c) Give **two examples of web browsers**. (2 marks)

- i.

- ii.

d) State **three criteria the learner should use to determine whether an online source is reliable**. (3 marks)

- i.

- ii.

- iii.

e) Explain **three reasons why a learner should acknowledge online sources when using information in an assignment**. (3 marks)

- i.

- ii.

- iii.

11. A Grade 10 class is working on a group ICT project. The members are in different locations and need to communicate, share documents and work together online.

a) Name **three digital communication methods** that the learners could use. **(3 marks)**

- i. _____
- ii. _____
- iii. _____

b) State **two digital tools that can support collaborative work**. **(2 marks)**

- i. _____
- ii. _____

c) Explain **two advantages of using cloud-based collaboration tools in education**. **(2 marks)**

- i. _____
- ii. _____

d) State **three rules that learners should follow when communicating in an online group**. **(3 marks)**

- i. _____
- ii. _____
- iii. _____

GRADE 10 ICT

MARKING SCHEME / ANSWERS

SECTION A — 30 MARKS

QUESTION 1: ICT AND SOCIETY

(5 marks)

a) Define digital technology.

Digital technology refers to electronic technology that uses **digital signals/data to create, process, store, retrieve and communicate information.**

(1 mark)

b) Two ways ICT contributes to economic development in Kenya:

Any two:

- Creates employment opportunities.
- Facilitates e-commerce and online businesses.
- Improves productivity and efficiency.
- Promotes innovation and entrepreneurship.
- Facilitates access to financial services.
- Enables businesses to reach wider markets.
- Supports development of digital skills.

2 × 1 = 2 marks

c) Two challenges arising from increased use of ICT:

Any two:

- Cybercrime and online fraud.
- Loss of privacy.
- Cyberbullying.
- Digital addiction.
- Unemployment resulting from automation in some sectors.
- Spread of misinformation.
- Digital divide.
- Exposure to inappropriate content.

2 × 1 = 2 marks

QUESTION 2: ICT DEVICES AND THEIR FUNCTIONS

(5 marks)

a) Any two devices represented by A–D:

Accept:

- Scanner
- Microphone
- Webcam
- Projector

2 × 1 = 2 marks

b) One function of an input device:

- It is used to **enter data and instructions into a computer system.**
(1 mark)

c) One function of an output device:

- It presents or communicates **processed information/results to the user.**
(1 mark)

d) One storage device:

Any one:

- Hard disk drive
 - Solid-state drive
 - Flash disk/USB drive
 - Memory card
 - Optical disc
- (1 mark)**

QUESTION 3: COMPUTER OPERATING ENVIRONMENT

(5 marks)

a) Difference between system software and application software:

- **System software** manages and controls computer hardware and provides a platform for other software to operate.
- **Application software** is designed to help the user perform specific tasks.

2 marks

b) One example of system software:

Any one:

- Microsoft Windows
 - Linux
 - Android
 - macOS
 - iOS
- (1 mark)**

c) Two examples of application software:

Any two:

- Microsoft Word
- Microsoft Excel
- Microsoft PowerPoint
- Microsoft Publisher
- Web browser
- Media player
- Graphics software

2 × 1 = 2 marks

QUESTION 4: FILE MANAGEMENT

(5 marks)

a) Name given to "Grade 10":

- **Folder** / parent folder / main folder.
(1 mark)

b) Two subfolders in the ICT folder:

Any two:

- Notes
 - Assignments
 - Projects
- 2 × 1 = 2 marks**

c) Two benefits of organising files into folders:

Any two:

- Makes files easier to locate.
 - Reduces disorganisation.
 - Saves time when searching for files.
 - Helps separate files according to subjects/categories.
 - Makes file management easier.
 - Reduces chances of accidentally deleting or misplacing files.
- 2 × 1 = 2 marks**

QUESTION 5: DIGITAL SAFETY AND SECURITY

(5 marks)

a) One security risk:

- An unauthorised person could access the learner's account and personal information.
(1 mark)

Other acceptable answers:

- Account misuse.
- Identity theft.
- Data theft.
- Unauthorised changes to the account.
- Privacy breach.

b) Two actions before leaving the computer:

- Log out/sign out of the account.
 - Close the browser/application.
 - Clear sensitive session information where appropriate.
 - Lock the computer.
- 2 × 1 = 2 marks**

c) Two characteristics of a strong password:

Any two, suitably explained:

- It should be **long**, preferably containing several characters.
- It should combine **uppercase and lowercase letters**.
- It should contain **numbers**.
- It should contain **special characters**.
- It should not contain easily guessed personal information.
- A different password should be used for different important accounts.

2 × 1 = 2 marks

QUESTION 6: DIGITAL CITIZENSHIP AND ETHICS

(5 marks)

a) Meaning of digital ethics:

Digital ethics refers to the **principles and standards that guide responsible, respectful and morally acceptable behaviour when using digital technologies**.

(1 mark)

b) Two ways of respecting intellectual property:

Any two:

- Acknowledge/cite the original author or source.
- Obtain permission before using copyrighted material where required.
- Avoid plagiarism.
- Use legally licensed or openly licensed resources.
- Observe copyright conditions.

2 × 1 = 2 marks

c) Two examples of unacceptable online behaviour:

Any two:

- Cyberbullying.
- Online harassment.
- Identity theft.
- Spreading false information deliberately.
- Hacking.
- Sending threatening messages.
- Sharing someone's private information without permission.
- Online fraud.
- Plagiarism.

2 × 1 = 2 marks

SECTION B — 50 MARKS

QUESTION 7: WORD PROCESSING

(10 marks)

a) Four word-processing features:

Any four:

- Styles/headings

- Font formatting
 - Paragraph alignment
 - Line spacing
 - Page numbering
 - Tables
 - Headers and footers
 - Spell checker
 - Find and Replace
 - Bullets and numbering
 - Margins/page setup
 - Inserting images
- 2 × 1 = 2 marks**

b)

Icon	Name	Role
	Redo	Repeats or restores the last action that was undone.
	Borders	Adds, removes, or changes borders around selected text, paragraphs, tables, or cells.

2 × 1 = 2 marks

c) Difference between Save and Save As:

Save:

Updates/saves changes made to an existing document using its current file name and location.

Save As:

Creates a new copy of the document, allowing the user to specify a **different file name, location or file format**.

2 marks

d) Two ways of inserting a table:

Any two:

- Use the **Insert** → **Table** command and select the required rows and columns.
 - Use the **Draw Table** function.
 - Insert a table by specifying the number of rows and columns in the table dialogue box.
- 2 × 1 = 2 marks**

e) Two reasons for using headings:

Any two:

- Organise information into sections.
 - Make the document easier to read.
 - Help readers locate specific information.
 - Improve navigation through a long document.
 - Give the document a clear structure.
- 2 × 1 = 2 marks**

QUESTION 8: PRESENTATION SOFTWARE

(10 marks)

a) Two elements shown in the slide:

Any two:

- Title
- Image/diagram
- Bulleted text
- Navigation button
- Slide content

2 × 1 = 2 marks

b) Three guidelines for selecting presentation images:

Any three:

- Images should be relevant to the topic.
- Images should be clear and of suitable quality.
- Images should be appropriately sized.
- Images should not overcrowd the slide.
- Images should be legally usable/appropriately sourced.
- Images should help explain or reinforce the message.
- Avoid distracting or inappropriate images.

3 × 1 = 3 marks

c) Two advantages of presentation software in education:

Any two:

- Makes lessons more visually engaging.
- Allows text, images, audio and video to be combined.
- Makes complex concepts easier to illustrate.
- Facilitates organised presentation of information.
- Makes teaching materials easy to edit and reuse.
- Supports interactive teaching.

2 × 1 = 2 marks

d) Three features that can make a presentation interactive/engaging:

Any three:

- Hyperlinks
- Buttons/action buttons
- Animations
- Transitions
- Audio
- Video
- Embedded graphics
- Interactive questions/quizzes
- Charts/diagrams

3 × 1 = 3 marks

QUESTION 9: DESKTOP PUBLISHING

(10 marks)

a) Two publication elements shown in the flyer:

Any two:

- School name
- Main title

- Image
- Date
- Venue
- Activities
- Contact information

2 × 1 = 2 marks

b) Three factors when selecting images/graphics:

Any three:

- Relevance to the publication.
- Image quality/resolution.
- Appropriate size.
- Copyright/licensing requirements.
- Suitability for the target audience.
- Clarity.
- Colour compatibility with the publication.

3 × 1 = 3 marks

c) Two ways alignment improves a publication:

Any two:

- Creates a neat and organised appearance.
- Makes information easier to read.
- Creates visual consistency.
- Helps establish relationships between related elements.
- Gives the publication a professional appearance.

2 × 1 = 2 marks

d) Three types of publications produced using desktop publishing software:

Any three:

- Posters
- Flyers
- Brochures
- Newsletters
- Magazines
- Invitations
- Business cards
- Certificates
- Calendars

3 × 1 = 3 marks

QUESTION 10: INTERNET AND WEB TECHNOLOGIES

(10 marks)

a) What is a web browser?

A web browser is a **software application** used to access, retrieve and display web pages and other resources on the **World Wide Web**.

(1 mark)

b) What is a search engine?

A search engine is an **online service/system that helps users find information and resources on the Internet using search queries.**

(1 mark)

c) Two examples of web browsers:

Any two:

- Google Chrome
- Mozilla Firefox
- Microsoft Edge
- Safari
- Opera

2 × 1 = 2 marks

d) Three criteria for determining whether an online source is reliable:

Any three:

- Check the **author/organisation** responsible for the information.
- Check the **date** of publication or updating.
- Check whether information is supported by **evidence/references**.
- Compare information with other reliable sources.
- Consider the reputation/authority of the website.
- Check whether the information is relevant and unbiased.

3 × 1 = 3 marks

e) Three reasons for acknowledging online sources:

Any three:

- Gives credit to the original author.
- Prevents plagiarism.
- Allows readers to verify the information.
- Demonstrates responsible academic practice.
- Helps distinguish the learner's own ideas from borrowed information.
- Respects intellectual property rights.

3 × 1 = 3 marks

QUESTION 11: DIGITAL COMMUNICATION AND COLLABORATION

(10 marks)

a) Three digital communication methods:

Any three:

- Email
- Instant messaging
- Video conferencing
- Voice calls/VoIP
- Discussion forums
- Social networking
- Learning management systems

3 × 1 = 3 marks

b) Two digital tools supporting collaboration:

Any two:

- Cloud-based document editors.
- Shared online drives/cloud storage.
- Learning management systems.
- Online project-management tools.
- Collaborative presentation tools.
- Shared spreadsheets.

2 × 1 = 2 marks

c) Two advantages of cloud-based collaboration tools:

Any two:

- Allow several users to access and work on files remotely.
- Enable real-time collaboration.
- Make files accessible from different devices.
- Reduce the need to exchange multiple copies of documents.
- Facilitate sharing of files and resources.
- Changes can be synchronised across users.

2 × 1 = 2 marks

d) Three rules for online group communication:

Any three:

- Use respectful and appropriate language.
- Do not cyberbully or harass other members.
- Protect personal and confidential information.
- Avoid sharing false or unverified information.
- Respect other people's opinions.
- Do not share passwords.
- Avoid sending irrelevant messages/spam.
- Observe copyright when sharing materials.
- Respond appropriately and maintain professional communication.

3 × 1 = 3 marks

KENYA CERTIFICATE OF BASIC EDUCATION

SENIOR SCHOOL ASSESSMENT

TERM 3: PROJECT BASED ASSESSMENT 2026

GRADE 10 – INFORMATION COMMUNICATION TECHNOLOGY

LEARNER'S DETAILS



Name: _____ School: _____

Assessment Number: _____ Date: _____

School Code: _____ Signature: _____

PROJECT TITLE

“MY SCHOOL AND ITS DIGITAL FUTURE”

PROJECT SCENARIO

Your school is planning to create awareness among learners and parents about the school, its activities and the importance of ICT in education. You have been appointed as a student ICT designer to prepare three digital products using **Microsoft Word, Microsoft PowerPoint and Microsoft Publisher**.

TASK 1: MICROSOFT WORD – SCHOOL INFORMATION DOCUMENT (7 MARKS)

Create a **2-page school information document** using Microsoft Word.

Your document should contain:

1. **Title: MY SCHOOL AND ITS DIGITAL FUTURE – 1 mark**
2. A short introduction about your school of at least **100 words – 1 mark**
3. A section describing **four benefits of ICT in education – 2 marks**
4. Insert and appropriately position **one relevant picture – 1 mark**
5. Apply appropriate formatting, including:
 - Bold/appropriate font sizes
 - Headings
 - Paragraph alignment
 - Line spacing – **1 mark**
6. Add a **footer containing your name, school and page number – 1 mark**

Subtotal: 7 Marks

TASK 2: MICROSOFT POWERPOINT – ICT AWARENESS PRESENTATION (7 MARKS)

Create a **5-slide PowerPoint presentation** titled:

“THE ROLE OF ICT IN MODERN EDUCATION”

The presentation should contain:

Slide 1: Title slide containing your name, school and topic – **1 mark**

Slide 2: Four uses of ICT in education – **1 mark**

Slide 3: Four advantages of using computers in learning – **1 mark**

Slide 4: ICT safety rules and responsible use of technology – **2 marks**

Slide 5: Conclusion and a short message encouraging learners to embrace ICT – **1 mark**

Apply the following presentation skills:

- Appropriate slide design/theme
- Relevant pictures/graphics
- Consistent font and formatting
- Appropriate slide transitions – **1 mark**

Subtotal: 7 Marks

TASK 3: MICROSOFT PUBLISHER – SCHOOL PROMOTIONAL FLYER (6 MARKS)

Using Microsoft Publisher, design an attractive **one-page school promotional flyer**.

The flyer should include:

1. School name and an attractive title/slogan – **1 mark**
2. Brief information about the school – **1 mark**
3. At least **four school activities/programmes** – **1 mark**
4. At least **two relevant pictures/graphics** – **1 mark**
5. Appropriate use of:
 - Text boxes
 - Colours
 - Shapes
 - Alignment and spacing – **1 mark**
6. Include school contact information and an appropriate call to action, e.g. **“Join Us Today!”** – **1 mark**

Subtotal: 6 Marks

MARKING SUMMARY

Activity	Marks
Microsoft Word	7
Microsoft PowerPoint	7
Microsoft Publisher	6
TOTAL	20

EXPECTED COMPETENCIES

By completing the project, the learner should demonstrate ability to:

- Create and format a document using **Microsoft Word**.
- Organise and present information using **Microsoft PowerPoint**.
- Design and publish attractive information materials using **Microsoft Publisher**.
- Insert and manipulate text, images and graphical objects.
- Apply appropriate digital design and communication skills.
- Demonstrate creativity, accuracy and responsible use of ICT.

PROJECT SUBMISSION

The learner should submit:

1. **One Microsoft Word document (.docx)**
2. **One PowerPoint presentation (.pptx)**
3. **One Publisher flyer (.pub or exported PDF)**

Total: 20 Marks

GRADE 10 ICT PROJECT – MARKING SCHEME

Word Processing, Microsoft PowerPoint & Desktop Publishing

Total: 20 Marks

TASK 1: MICROSOFT WORD – SCHOOL INFORMATION DOCUMENT (7 MARKS)

No.	Assessment Item	Marks
1	Correct title “ MY SCHOOL AND ITS DIGITAL FUTURE ”	1
2	Introduction about the school of at least 100 words	1
3	Four benefits of ICT in education – ½ mark each	2
4	Insertion and appropriate positioning of one relevant picture	1
5	Appropriate formatting: font, headings, alignment and line spacing	1
6	Footer containing learner's name, school and page number	1
	Subtotal	7

Marking Details

- **1 mark:** Title correctly entered and appropriately formatted.
- **1 mark:** Relevant and well-organised introduction of at least 100 words.
- **2 marks:** Award ½ **mark for each correct benefit**, e.g.:
 - Easy access to learning materials.
 - Improves communication.
 - Supports online learning.
 - Makes learning more interactive.
- **1 mark:** Relevant picture inserted and properly positioned.
- **1 mark:** Overall document formatting is appropriate and consistent.
- **1 mark:** Correct footer with required information and page numbering.

TASK 2: MICROSOFT POWERPOINT – ICT AWARENESS PRESENTATION (7 MARKS)

No.	Assessment Item	Marks
1	Slide 1: Title, learner's name and school	1
2	Slide 2: Four uses of ICT in education	1
3	Slide 3: Four advantages of computers in learning	1
4	Slide 4: ICT safety rules and responsible use	2

5	Slide 5: Conclusion and ICT encouragement message	1
6	Appropriate theme/design, pictures and transitions	1
	Subtotal	7

Marking Details

Slide 1 – 1 Mark

- Correct presentation title – ½
- Learner's name and school – ½

Slide 2 – 1 Mark

Award ¼ **mark each** for any four correct uses:

- Research and accessing information.
- Online learning.
- Communication.
- Preparing assignments.
- Data storage.
- Educational simulations.

Slide 3 – 1 Mark

Award ¼ **mark each** for four correct advantages:

- Faster access to information.
- Improved research skills.
- Easy storage of information.
- Interactive learning.
- Improved communication.
- Development of digital skills.

Slide 4 – 2 Marks

Award ½ **mark each** for four appropriate safety/responsible-use rules:

- Keep passwords private.
- Avoid suspicious links/downloads.
- Protect personal information.
- Use strong passwords.
- Avoid cyberbullying.
- Use computers responsibly.
- Observe proper screen-time practices.
- Respect copyright.

Slide 5 – 1 Mark

- Appropriate conclusion – ½
- Relevant ICT encouragement message – ½

Design – 1 Mark

- Appropriate theme/layout – ¼
- Relevant pictures/graphics – ¼

- Consistent formatting – ¼
- Appropriate transitions – ¼

TASK 3: MICROSOFT PUBLISHER – SCHOOL PROMOTIONAL FLYER (6 MARKS)

No.	Assessment Item	Marks
1	School name and attractive title/slogan	1
2	Brief and relevant school information	1
3	Four school activities/programmes	1
4	Two relevant pictures/graphics	1
5	Appropriate use of text boxes, colours, shapes, alignment and spacing	1
6	Contact information and call to action	1
	Subtotal	6

Marking Details

1. School Name & Slogan – 1 Mark

- School name correctly displayed – ½
- Attractive and relevant slogan/title – ½

2. School Information – 1 Mark

- Clear and relevant description of the school – 1

3. School Activities – 1 Mark

Award ¼ **mark each** for four relevant activities, such as:

- Sports.
- Music and drama.
- Science and technology.
- Agriculture.
- Clubs and societies.
- Community service.

4. Pictures/Graphics – 1 Mark

- First relevant picture/graphic – ½
- Second relevant picture/graphic – ½

5. Design & Layout – 1 Mark

- Appropriate text boxes – ¼
- Effective use of colours – ¼
- Appropriate shapes – ¼

- Good alignment and spacing – ¼

6. Contact & Call to Action – 1 Mark

- School contact information – ½
- Appropriate call to action, e.g. “JOIN US TODAY!” – ½

OVERALL ASSESSMENT RECORD

Component	Maximum Marks	Learner's Score
Microsoft Word	7	_____
Microsoft PowerPoint	7	_____
Microsoft Publisher	6	_____
TOTAL	20	_____ / 20

Teacher's Comment:

Teacher's Name: _____

Signature: _____

Date: _____