



DEPARTMENT OF
EDUCATION

UPPER SECONDARY
SCHOOL CERTIFICATE
EXAMINATIONS

INFORMATION
COMMUNICATION
TECHNOLOGY

Tuesday

16 October 2012

Time allowed:

2 hours and 30 minutes

(11:00am – 1:30 pm)

NO EXTRA TIME

(NO OTHER TIME)

Candidates are advised to fully
utilise the allocated time

INSTRUCTIONS TO CANDIDATES

To be read by the external invigilator to all candidates

1. The **subject code** for **Information Communication Technology** is **16**
2. There are **15** printed pages in the question booklet.
3. An Electronic Answer Sheet and a **6 printed** pages of answer booklet are inserted in the centre of the question booklet.
4. There are two sections in this paper.

Section A : Multiple Choice (Question 1 – 30) 30 marks

This section will be electronically marked.

All answers to the Multiple Choice Section **MUST** be answered on this Answer Sheet.

Carefully following the instructions, fill in your Candidate Information and Subject Information.

Section B: Short Answer (Question 31 – 40) 70 marks

Write your name, your school name and complete your 10 digit candidate number on the Section B Answer Booklet provided.

5. You are required to only write the correct answer in the space provided.
6. Answers written on the question paper or any other paper will not be marked. Write answers neatly in spaces as allocated on the answer booklet. Answer **ALL** questions.
7. **ALL** working must be shown step by step to get full marks. Students may lose marks for writing down final answers only.
8. Correction Fluid is not allowed on the answer sheet. Where you have made an error, cross out all the working and start on a new line.

**PENALTY FOR CHEATING OR ASSISTING TO CHEAT IN NATIONAL
EXAMINATIONS IS NON-CERTIFICATION.**

ICT

**DO NOT TURN OVER THE PAGE
AND DO NOT WRITE
UNTIL YOU ARE TOLD TO START.**

SECTION A: MULTIPLE CHOICE (QUESTIONS 1 TO 30) 1 MARK EACH

Answer each question by shading in with HB pencil the circle directly under the correct alternative A, B, C or D.

If you make a mistake, rub it out completely using an eraser rubber and shade the correct answer on the ELECTRONIC ANSWER SHEET.

QUESTION 1

The basic function performed by a computer is the execution of a program. A program can be defined as a set of instructions stored in the

- A. processor. B. main memory. C. secondary memory. D. hard disk.

QUESTION 2

Language is often contextual—you use different words and phrases in a marketing brochure than you would in a letter requesting immediate payment of an invoice or in an informal memo about a social gathering after work.

To help you ensure that you are using the words that best convey your meaning in any given context. Word provides a thesaurus where you can look up alternative words called _____ for a selected word.

- A. originals B. antonyms C. synonyms D. template

QUESTION 3

The term used in Microsoft Office to refer to a combination of colours, fonts and effects that project a certain feel or tone in a document is

- A. theme. B. style. C. one. D. impression.

QUESTION 4

Microsoft Office uses a variety of toolbars to accomplish tasks. Figure 1 below depicts one of the tool bars used by Microsoft Office.

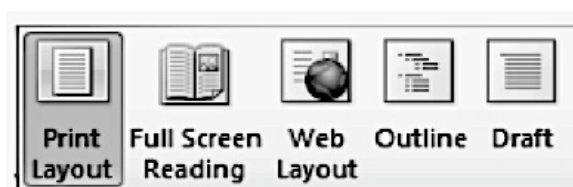


Figure .1. Microsoft Office Toolbar

The toolbar depicted in figure 1 is used to change the way the document is

- A. printed. B. drafted. C. reviewed. D. viewed.

QUESTION 5

Studies show unsolicited e-mail known as _____ accounts for roughly half of all e-mail messages received.

- A. Spam B. Junk C. Chain Emails D. Trojan Horses

QUESTION 6

The intersection of a row and a column in a Microsoft Excel document can be defined as a/an

- A. Field. B. Entry. C. Cell. D. Entity.

QUESTION 7

The Microsoft Excel interface contains a variety of components to accomplish specific tasks.

Figure 2 below depicts one of the components used by Microsoft Excel.

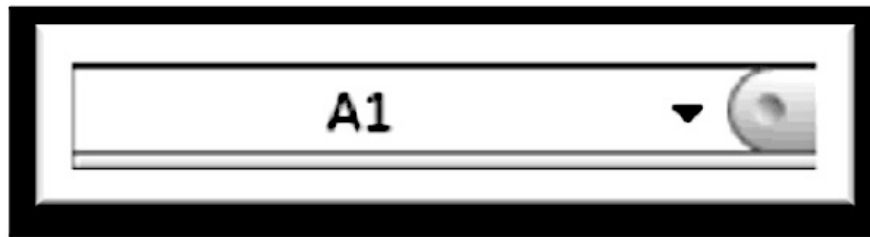


Figure .2. Microsoft Excel Component 1

What is the name of the Microsoft Excel component depicted in figure 2?

- A. Cell Dialog Box B. Cell Name Box C. Formula Bar D. Active Cell

QUESTION 8

The Microsoft Excel interface contains a variety of components to accomplish specific tasks. Figure 3 below depicts one of the components used by Microsoft Excel.



Figure .3. Microsoft Excel Component 2

What is the purpose of the Microsoft Excel component highlighted in figure 3?

- A. Minimize the Excel application. B. Minimize the current file.
 C. Close the Excel application. D. Close the current file.

QUESTION 9

Microsoft Access can be best described as a

- A. Relational Database Management System.
- B. Database Management System.
- C. Database Application.
- D. Relational Database Application.

QUESTION 10

The field or group of fields in a Microsoft Access table that uniquely identifies each record can be defined as a _____ Key.

- A. Foreign
- B. Primary
- C. Candidate
- D. Composite

QUESTION 11

The Field Size property in a Microsoft Access database limits a text field to a specific

- A. number of characters.
- B. number of letters.
- C. range of numbers.
- D. range of special characters.

QUESTION 12

The Microsoft Access interface contains a variety of controls on forms to accomplish specific tasks. Figure 4 below depicts one of the controls of a form created in Microsoft Access.

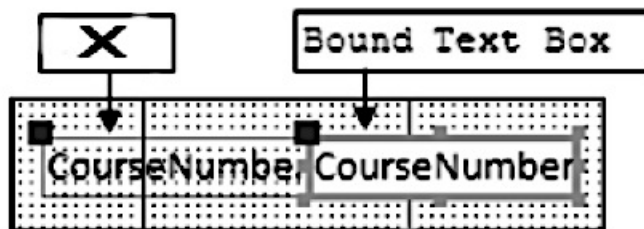


Figure .4. Microsoft Access Form Control 1

What is the name of the Microsoft Access control labeled X in figure 4?


- A. Name
- B. ID
- C. Label
- D. Field Name

QUESTION 13

Each host computer on the Internet has a unique number, called an IP address. IP addresses are in the format xxx.xxx.xxx.xxx, where each xxx is a number ranging from

- A. 1 to 256
- B. 1 to 255
- C. 0 to 255
- D. 0 to 256

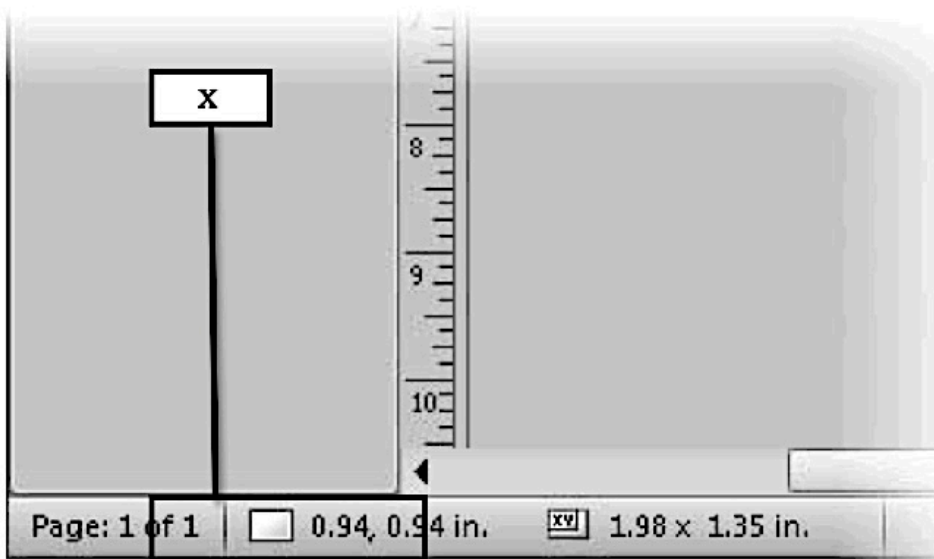
QUESTION 14

In a Microsoft Publisher document what is the name given to the  icon?

- A. Information Icon
- B. Error Icon
- C. Warning Icon
- D. Update Icon

QUESTION 15

The Microsoft Publisher interface contains a variety of controls on its interface to accomplish specific tasks. Figure 5 below depicts one of the interface controls from Microsoft Access.



The Microsoft Publisher interface control labeled X in figure 5 indicates the

- A. Object's anchor point.
- B. Text boxes' anchor point.
- C. Object's dimensions.
- D. Text boxes' dimensions.

Figure .5. Microsoft Access Form Control 2

QUESTION 16

What is the purpose of the  control in Microsoft Publisher?

- A. Changes the selected text to small cap text, all cap text or back to normal text.
- B. Changes the spacing between the selected text characters.
- C. Changes the selected text colour.
- D. Clears all formatting from the selected text, leaving only plain text.

QUESTION 17

Which of the following is the network term used to define a set of rules established for network users to utilize when exchanging information over a network?

- A. Topology
- B. Policy
- C. Proxy
- D. Protocol

QUESTION 18

A token-ring network is described as a deterministic network because each computer connected to the network is

- A. not assured access for the transmission of its messages at regular or fixed time intervals.
- B. assured access for the transmission of its messages at regular or fixed time intervals.
- C. possibly assured access for the transmission of its messages at regular or fixed time intervals.
- D. never assured access for the transmission of its messages at regular or fixed time intervals.

QUESTION 19

Figure 6 depicts one of the most common types of network topology.

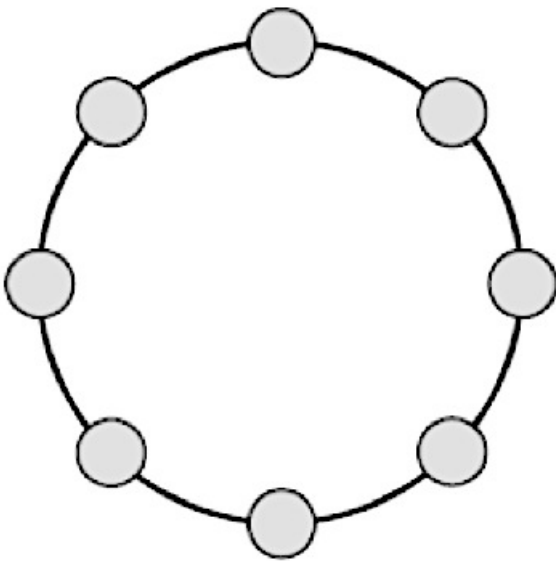


Figure .6. Network Topology

What is the name of the type of network topology depicted in figure 5?

- A. Star Topology
- B. Ring Topology
- C. Bus Topology
- D. Mesh Topology

QUESTION 21

In Microsoft Access, what does the '∞' symbol indicate?

- A. Boundlessness
- B. Eternity
- C. Infinity
- D. Many

QUESTION 22

Microsoft Office PowerPoint comes with several categories of built-in animation effects.

Which of the following is not a type of animation effect supported by Microsoft Office PowerPoint?

- A. Entrance
- B. Motion Paths
- C. Prominence
- D. Exit

QUESTION 23

Figure 7 below is an illustration from Microsoft Access.

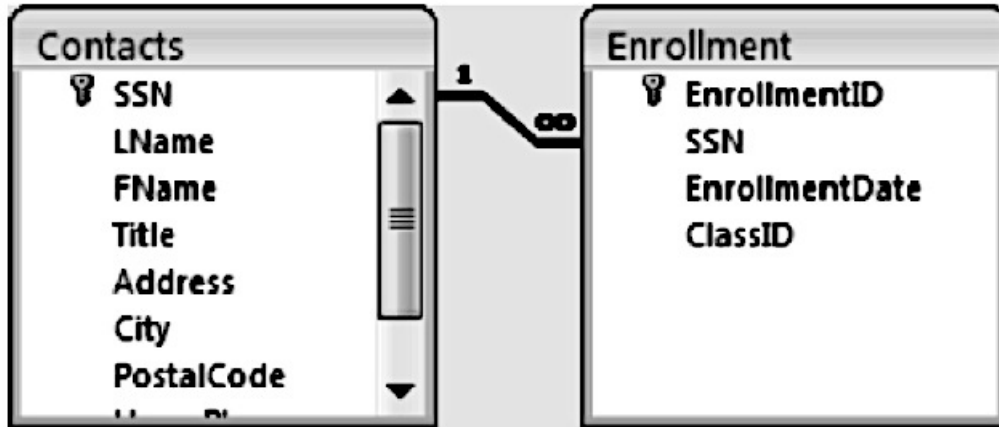


Figure .7. Microsoft Access Illustration

What does figure 7 represent?

A Microsoft Access Relationship between two tables with

- A. Referential Integrity Set.
- B. A Relationship Join Line.
- C. Cascade Update Related Fields Set.
- D. Cascade Delete Related Fields Set.

QUESTION 24

Microsoft Office uses a variety of toolbars to accomplish tasks.

Figure 8 below displays one of the toolbars used by Microsoft Access.

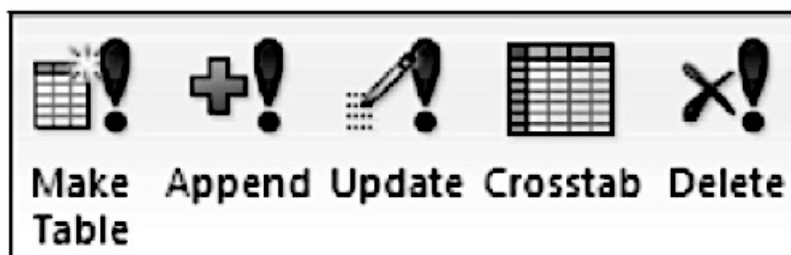


Figure .8. Microsoft Access Toolbar

What is the toolbar depicted in figure 8 used for?

- A. To manipulate queries in a Microsoft Access database.
- B. To update queries in a Microsoft Access database.
- C. To delete queries in a Microsoft Access database.
- D. To customize queries in a Microsoft Access database.

QUESTION 25

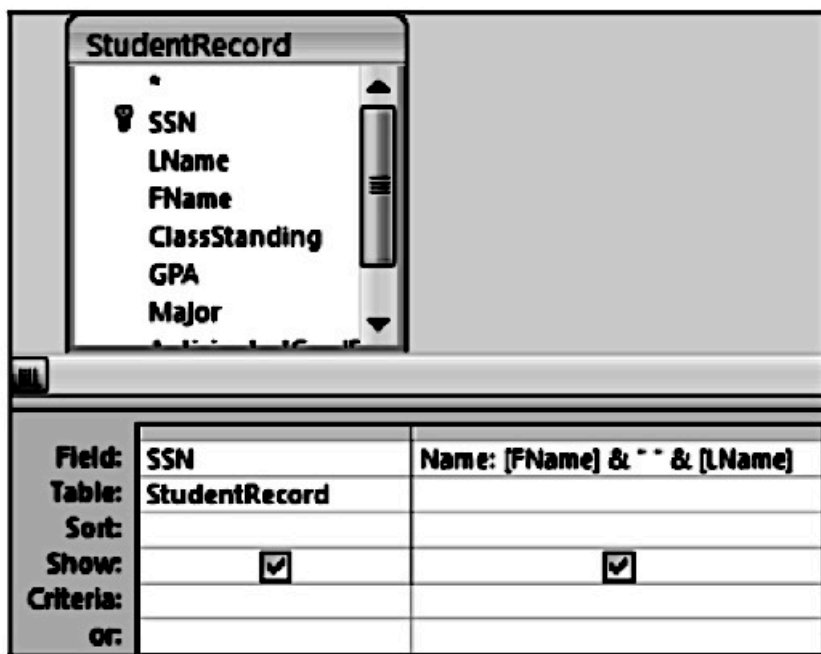
In Internet terminology, what does the acronym XHTML stand for?

- A. eXtensible HTML
- B. eXtensible Hypertext Markup Language
- C. eXtensible HTML
- D. eXtensible Hypertext Markup Language

QUESTION 26

Queries form a core component of a Microsoft Access database.

Figure 9 below depicts the creation of a Microsoft Access database query.



What is the name given to the type of query that is being created in figure 9?

- A. Parameter Query
- B. Cross Tab Query
- C. Find Duplicates Query
- D. Concatenation Query

Figure .9. Microsoft Access Query

QUESTION 27

In Internet terminology, the Uniform Naming Convention can be defined as the standard way of identifying shared resources on

- A. Microsoft networks.
- B. Unix networks.
- C. Mac networks.
- D. Any computer networks.

QUESTION 28

The text that enables you to jump from a Web document to another location can be defined as

- A. Hypertext.
- B. URL.
- C. Hyperlink.
- D. Shortcut.

QUESTION 29

Microsoft Office uses a variety of option menus to accomplish specific tasks.

Figure 10 below displays one of the many option menus used by in Microsoft PowerPoint.

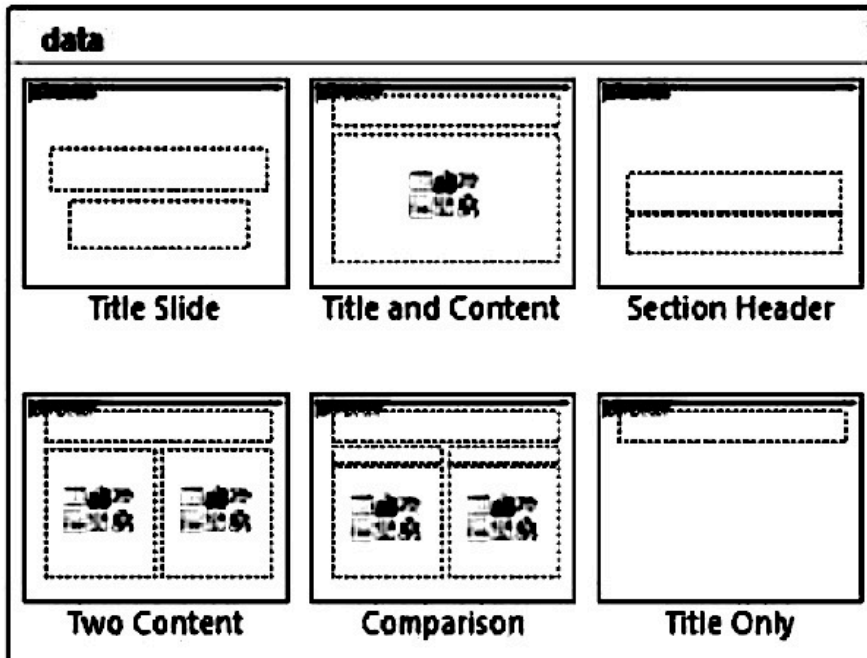


Figure .10. Microsoft Powerpoint Option Menu

What is the name given to the option menu depicted in figure 10?

- A. Slide Layout Options
- B. Slide Theme Options
- C. Slide Print Preview Options
- D. Slide Display Options

QUESTION 30

The feature of Microsoft Office PowerPoint that allows users to visualize how a different typeface, size or colour will appear within a presentation is called

- A. Preview
- B. Live Preview
- C. Review
- D. Live Review

SECTION B: SHORT ANSWER (QUESTIONS 31 to 40) 70 Marks

For each Question, write the final answer in the space provided on the ANSWER BOOKLET. Each questions is worth 7 Marks.

QUESTION 31

Figure 11 below depicts the functional view of a computer system.

- i. Study the figure and fill in the missing labels represented by the letters **P, Q, R** and **S** with generic terms. (4 Marks)

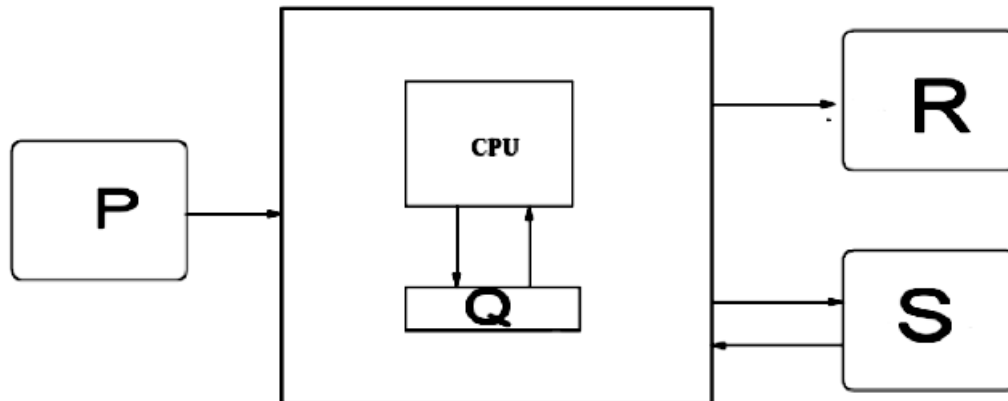


Figure 11. Functional View of a Computer System

- ii. What are the three major components of a computer system? (3 marks)

QUESTION 32

The following questions refer to Figure 12 below which depicts the cells of an Excel spreadsheet.

| | A | B | C | D |
|---|----|----|----|---|
| 1 | 40 | 45 | 30 | |
| 2 | | | | |

Figure 12. Microsoft Excel Spreadsheet

- i. What inbuilt Microsoft Excel function would a user have to type in cell D1 to calculate the sum of the data in cells A1 to C1 and display that sum in cell D1? (2 Marks)
- ii. What inbuilt Microsoft Excel function would a user have to type in cell D1 to calculate the average of the data in cells A1 to C1 and display that average in cell D1? (2 Marks)
- iii. What inbuilt Microsoft Excel function would a user have to type in cell D1 to return the largest number out of the range cells A1 to C1 and display that number in cell D1? (2 Marks)
- iv. Briefly explain what the #REF! (Error code in a Microsoft Excel spreadsheet) means. (1 Mark)

QUESTION 33

Figure 13 depicts the Microsoft Office Word interface.

Study the figure and fill in the missing labels represented by the numbers 1, 2, 3, 4, 5, 6 and 7 with the most appropriate terms. (7 Marks)

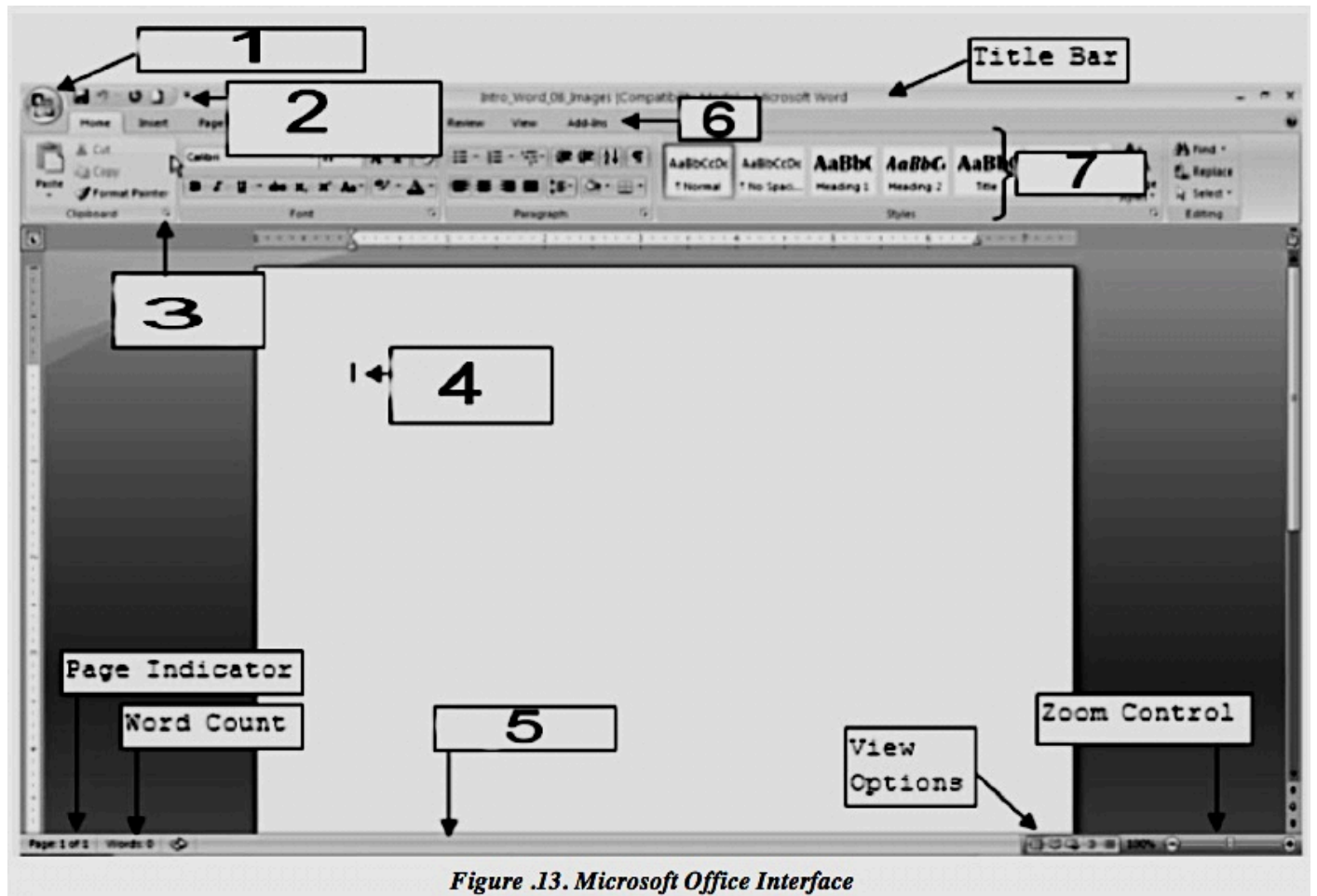


Figure .13. Microsoft Office Interface

QUESTION 34

- i. List the three (3) malware that pose security threats to modern computers. (3 Marks)
- ii. When malware has been identified on a computer system, what are the three (3) actions that can be taken by anti-virus software deal with the identified malware? (3 Marks)
- iii. Anti-virus software typically uses two different approaches to identify malware; the first method is by scanning the files. What is the second method? (1 Mark)

QUESTION 35

Figure 14 depicts the Microsoft Office Access interface.

- i. Study the figure and filling in the missing labels represented by the numbers 1, 2 and 3 with the most appropriate terms. (3 Marks)

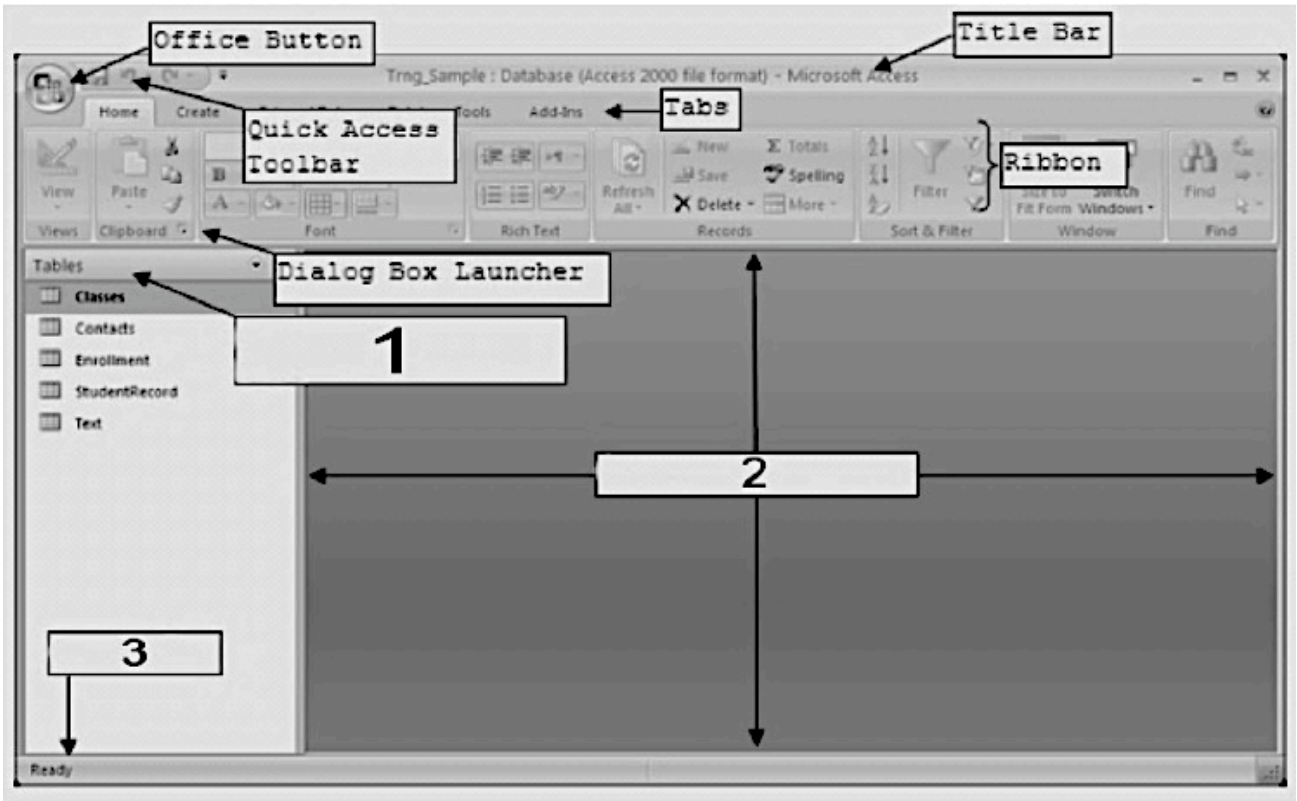


Figure.14. Microsoft Access Interface

- ii. Figure 15 depicts a control from Microsoft Office Access.

Study the figure and fill in the missing labels represented by the numbers 1, 2, 3 and 4 with the most appropriate terms. (4 Marks)

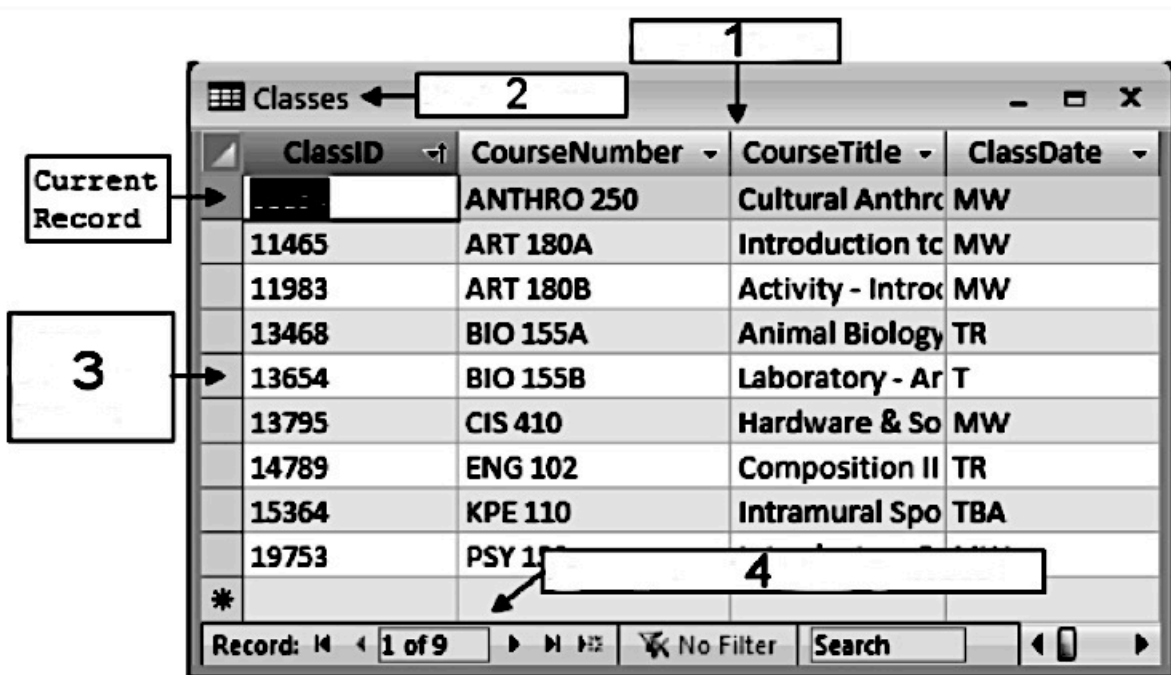


Figure.15. Microsoft Office Access Control

QUESTION 36

In order to create a professional-quality document that combines text and other visual elements in a non-linear arrangement for distribution, what are the basic steps you must follow?

Select the correct steps from table 1 below and list the steps in the correct order.

(7 Marks)

| | |
|-------------------------------|----------------------------------|
| Plan publication | Layout Publication |
| Create Graphics | Print out resources |
| Update Draft Publication | Correct publication errors |
| Print Graphics | Print Draft Publication |
| Collect appropriate resources | Print and Distribute Publication |

Table.1. Steps in the creation of a desktop publishing document

QUESTION 37

Figure 19 below depicts the printing preferences of Microsoft Office PowerPoint.

- i. Study the figure and **briefly explain** what each of the following options represented by the labels **A, B, C** and **D** are used for. (4 Marks)

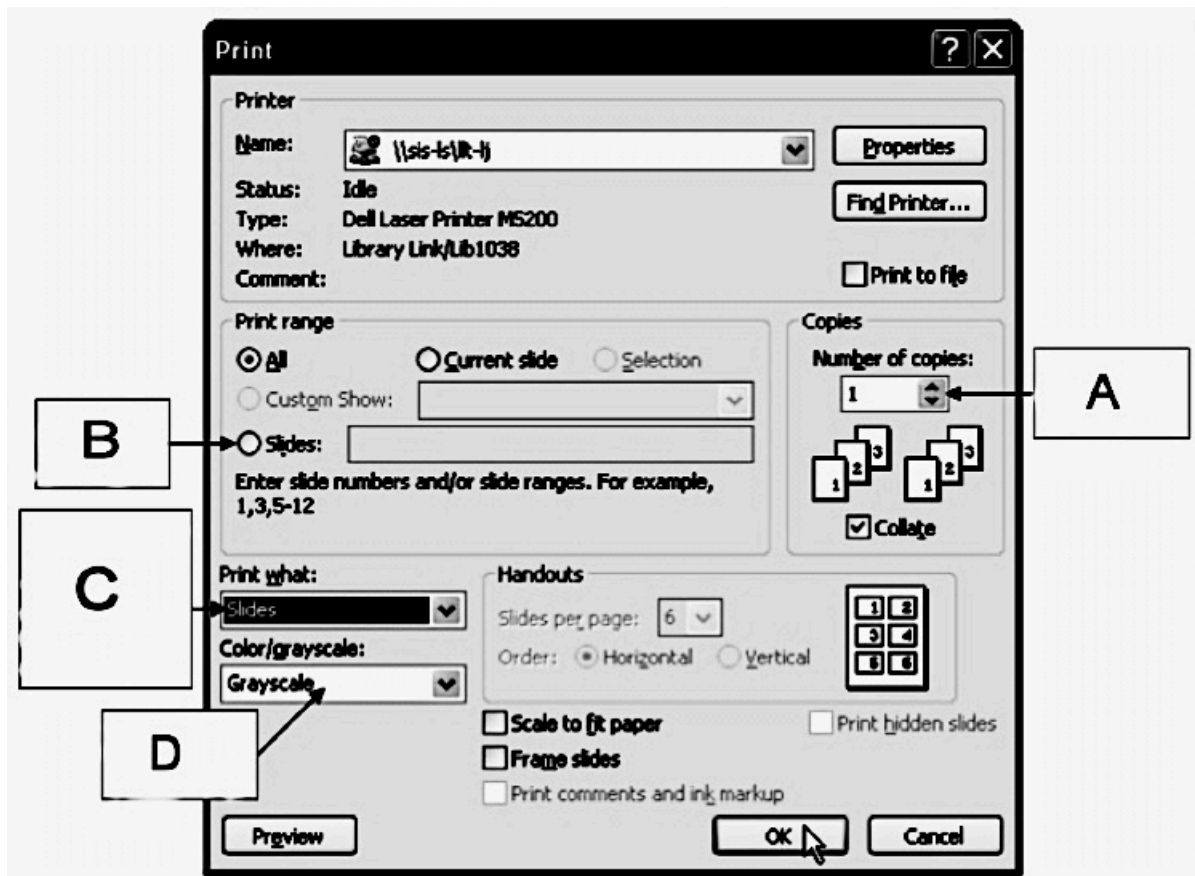


Figure.19. Microsoft Powerpoint Print Preferences

- ii. When creating a Microsoft PowerPoint presentation, list three (3) properties of an effective slide? (3 Marks)

QUESTION 38

State the network topology being used for each of the four network topologies depicted in figure 16 (below). (7 Marks)

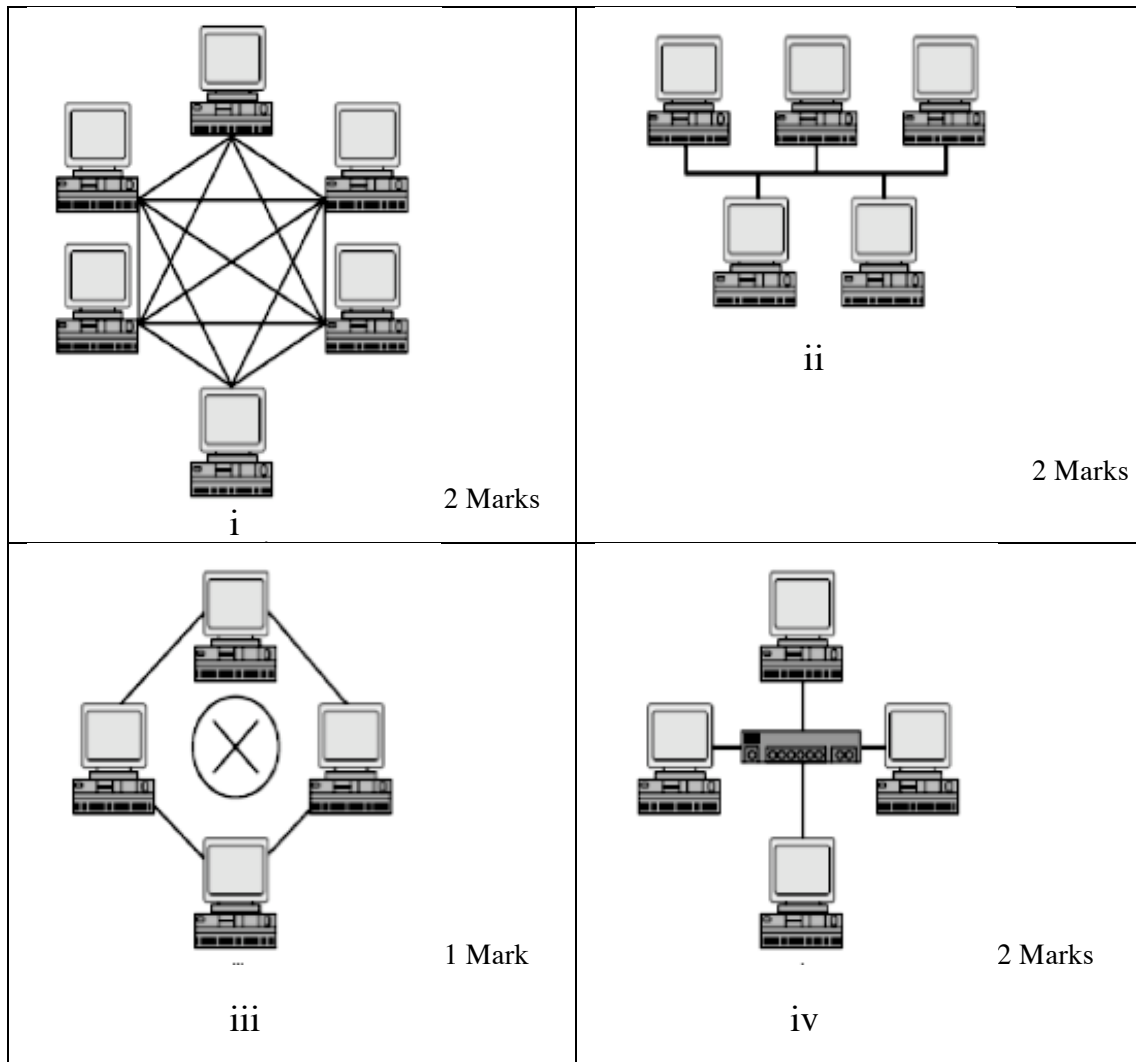


Figure .16. Network Topology

QUESTION 39

i. What type of query is being created in figure 17? (2 Marks)

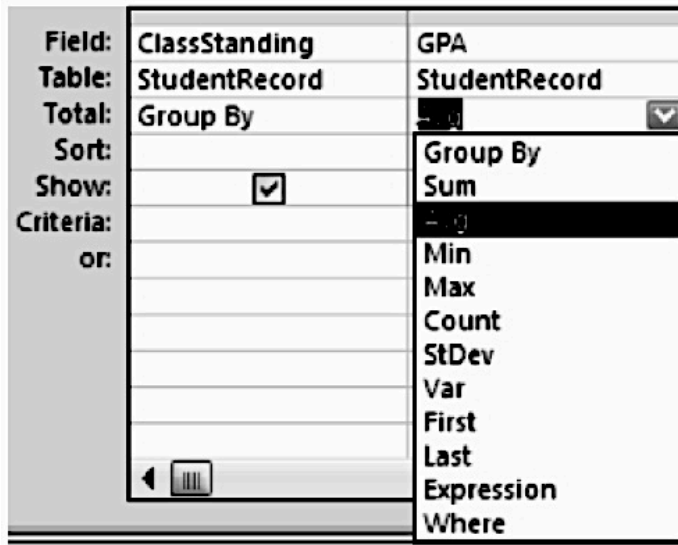


Figure.17. Microsoft Access Query

ii. What type of query is being created in figure 18? (2 Marks)

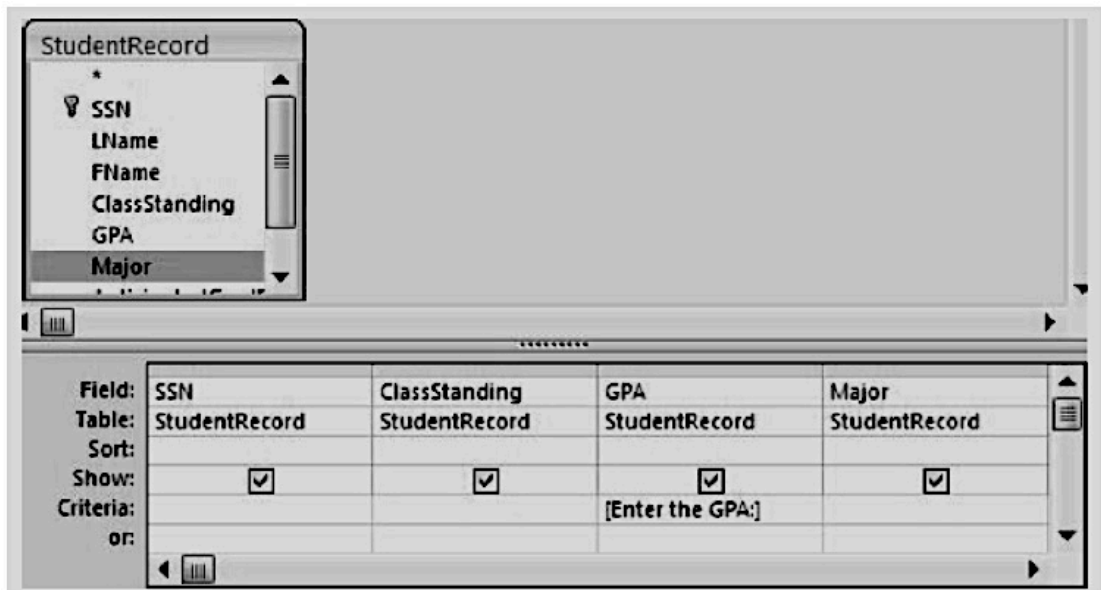


Figure.18. Microsoft Access Query

iii. What is the name of the Microsoft Access function to calculate the Standard Deviation of a field? (1 Mark)

iv. What is the name given to the Microsoft Access function to calculate the total number of items in a field?
- (1 Mark)

v. What is the name given to the Microsoft Access function to return the smallest number in a set of values?
- (1 Mark)

QUESTION 40

Choose the most appropriate words from the list below to fill in the blank spaces.

Place the following words in their appropriate labeled blank spaces

(7 Marks)

Accurate, Assets, Authentic, Availability, Complete, Confidentiality, Information, Integrity, Secured, Security

The purpose of information and network security is to provide (i) _____, (ii) _____ and (iii) _____ of (iv) _____.

Information Integrity ensures that information or software is (v) _____, (vi) _____ and (vii) _____.

END OF EXAMINATION

INFORMATION COMMUNICATION TECHNOLOGY (ICT)

SECTION B – ANSWER BOOKLET

Write your name, province and school codes and your candidate number correctly and clearly in the space provided below.

| Yea | | Provinc | | Schoo | | | Candidate | | |
|-----|---|---------|--|-------|--|--|-----------|--|--|
| 1 | 2 | | | | | | | | |

Candidate Name:

School Name:

ANSWERS WRITTEN ON THE QUESTION PAPER OR ANY
OTHER PAPER WILL NOT BE MARKED.

WRITE ANSWERS NEATLY IN THE SPACES PROVIDED IN
THIS ANSWER BOOKLET

FOR MARKERS USE ONLY

| | Score | Markers' Initials | |
|--------------------|-------|-------------------|----------|
| | | Marker 1 | Marker 2 |
| SECTION B | | | |
| QUESTION 31 | | | |
| QUESTION 32 | | | |
| QUESTION 33 | | | |
| QUESTION 34 | | | |
| QUESTION 35 | | | |
| QUESTION 36 | | | |
| QUESTION 37 | | | |
| QUESTION 38 | | | |
| QUESTION 39 | | | |
| QUESTION 40 | | | |
| FINAL TOTAL | 70 | | |

START YOUR WORK ON THE NEXT PAGE

| Question 31 | Marks per Qs. | Marker 1 | Marker 2 |
|--------------------------|----------------------|-----------------|-----------------|
| i. P. | 1 | | |
| Q. | 1 | | |
| R. | 1 | | |
| S. | 1 | | |
| | | | |
| ii. a. | 1 | | |
| b. | 1 | | |
| c. | 1 | | |
| <i>Total Marks =></i> | 7 | | |

| Question 32 | Marks per Qs. | Marker 1 | Marker 2 |
|--------------------------|----------------------|-----------------|-----------------|
| i. | 2 | | |
| ii. | 2 | | |
| iii. | 2 | | |
| | | | |
| iv. | | | |
| | 1 | | |
| <i>Total Marks =></i> | 7 | | |

| Question 33 | Marks per Qs. | Marker 1 | Marker 2 |
|--------------------------|----------------------|-----------------|-----------------|
| 1. | 1 | | |
| 2. | 1 | | |
| 3. | 1 | | |
| 4. | 1 | | |
| 5. | 1 | | |
| 6. | 1 | | |
| 7 | 1 | | |
| <i>Total Marks =></i> | 7 | | |

| Question 34 | Marks per Qs. | Marker 1 | Marker 2 |
|--------------------------|----------------------|-----------------|-----------------|
| i. a. | 1 | | |
| b. | 1 | | |
| c. | 1 | | |
| | | | |
| ii. a. | | | |
| b. | 1 | | |
| c. | 1 | | |
| | | | |
| iii. | 1 | | |
| <i>Total Marks =></i> | 7 | | |

| Question 35 | Marks per Qs. | Marker 1 | Marker 2 |
|--------------------------|----------------------|-----------------|-----------------|
| i. 1. | 1 | | |
| 2. | 1 | | |
| 3. | 1 | | |
| | | | |
| ii. 1. | 1 | | |
| 2. | 1 | | |
| 3. | 1 | | |
| 4. | 1 | | |
| <i>Total Marks =></i> | 7 | | |

| Question 36 | Marks per Qs. | Marker 1 | Marker 2 |
|--------------------------|----------------------|-----------------|-----------------|
| 1. | 1 | | |
| 2. | 1 | | |
| 3. | 1 | | |
| 4. | 1 | | |
| 5. | 1 | | |
| 6. | 1 | | |
| 7. | 1 | | |
| <i>Total Marks =></i> | 7 | | |

| Question 37 | Marks per Qs. | Marker 1 | Marker 2 |
|--------------------------|----------------------|-----------------|-----------------|
| i. P. | | | |
| | 1 | | |
| Q. | | | |
| | 1 | | |
| R. | | | |
| | 1 | | |
| S. | | | |
| | 1 | | |
| | | | |
| ii. a. | 1 | | |
| b. | 1 | | |
| c. | 1 | | |
| Total Marks => | 7 | | |

| Question 38 | Marks per Qs. | Marker 1 | Marker 2 |
|--------------------------|----------------------|-----------------|-----------------|
| i. | 2 | | |
| ii. | 2 | | |
| iii. | 1 | | |
| iv. | 2 | | |
| Total Marks => | 7 | | |

| Question 39 | Marks per Qs. | Marker 1 | Marker 2 |
|--------------------------|----------------------|-----------------|-----------------|
| i. | 2 | | |
| ii. | 2 | | |
| iii. | 1 | | |
| iv. | 1 | | |
| v. | 1 | | |
| Total Marks => | | | 7 |

| Question 40 | Marks per Qs. | Marker 1 | Marker 2 |
|--------------------------|----------------------|-----------------|-----------------|
| i. | 1 | | |
| ii. | 1 | | |
| iii. | 1 | | |
| iv. | 1 | | |
| v. | 1 | | |
| vi. | 1 | | |
| vii. | 1 | | |
| Total Marks => | | | 7 |