



## **COLLEGE OF BUSINESS PEACE LEADERSHIP & GOVERNANCE**

**COURSE TITLE: HIT100– Introduction to Information Technology**

**1ST SEMESTER: FINAL EXAMINATION 1 2018**

**LECTURER: MR J.CHINZVENDE**

**TIME: 2 HOURS**

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### ***INSTRUCTIONS***

Answer questions instructed in each section

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Start **each** question on a new page.

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The marks allocated to **each** question are shown at the end of the section.

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**Create a folder on your desktop and put your student number as the name of the folder (for example 170708)**

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Credit will be awarded for logical, systematic and neat presentations.

Section A Microsoft Word [30 marks]

Type the text below as it is and save in your folder at the desktop. The name of the file should be your student number [10]

Systems Development Requirements

1.1 System Development Life Cycle

The software life cycle models describe phases of the software cycle and the order in which those phases are execute. ~~Each phase produces deliverables required by the next phase in the life cycle.~~ Scope-μ and Ω. After coding and development, the testing verifies “in 1980 the deliverable of the implementation phase against requirements. The testing team follows Software Testing Life Cycle (STLC) which is similar to the development cycle followed by the development team

(x + a)^n = \sum\_{k=0}^n \binom{n}{k} x^k a^{n-k}

1.2 Governing Board

- Africa University Systems Development Board (AUSDB) For Standards

1.3 Required Step by Step Stages

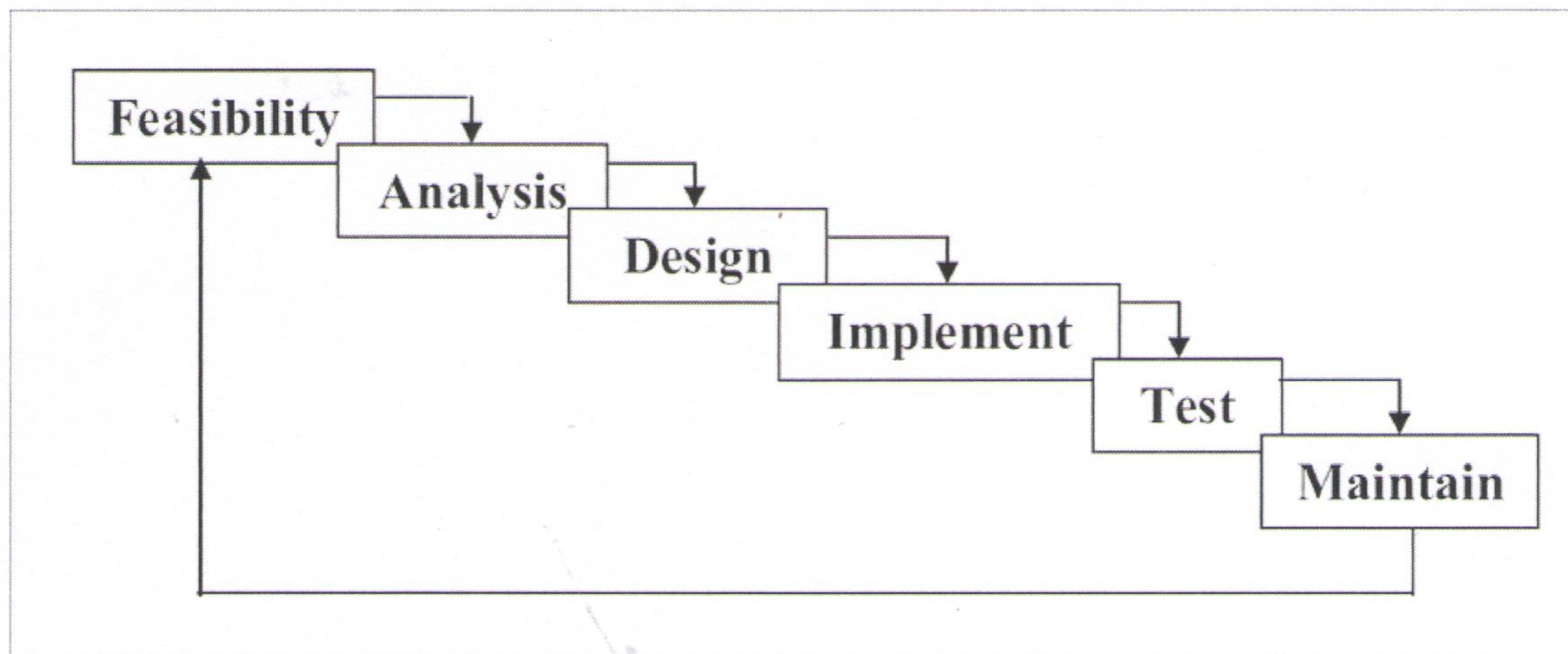
|                                                  |                 |                 |                    |                     |                                               |
|--------------------------------------------------|-----------------|-----------------|--------------------|---------------------|-----------------------------------------------|
| Requirements                                     | Planning        | Design          | Coding and Testing | Implementation      | Deployment                                    |
| Systems Analyst                                  | Director ICT    |                 |                    |                     | Required Required                             |
| Web Developer                                    | Project manager | Systems Analyst | Programmer         | Implementation team | Relevant Expertise Decision making Resolution |
| Above is the list of stages and relevant people: |                 |                 |                    |                     |                                               |

In order for the project to be successful, AU Systems Developers should follow the development life cycle which includes the following stages:

- ✓ Requirement
  - ✓ Business requirements are gathered in this phase.
  - ✓ This phase is the main focus of the project managers and stake holders
- ✓ Planning
  - ✓ Analyzing for their validity and the possibility of incorporating the requirements
  - ✓ What data should be input into the system

- ✓ Design and Coding
  - ✓ In this phase the system and software design is prepared from the requirement
  - ✓ Hardware and system requirements and also helps in defining overall system architecture
- ✓ Testing and Deployment
  - ✓ After the code is developed it is tested against the requirements
  - ✓ It should address the needs gathered in the requirement phase

SDLC diagram



- a. Bold ,underline and make the heading 'heading 1' [01]
- b. Make the all sub heading 1 to 5 sub heading 'heading 2' [01]
- c. Insert a table of content above the main heading of the paragraph [01]
- d. Insert your student Surname as a watermark [01]
- e. Perform word count for text in paragraph one and enter the details below it [01]
- f. Insert your Student number as footer and 'HIT100' as page header [01]
- g. Inset a hyperlink to [www.africau.edu](http://www.africau.edu) on the main heading [01]

## **SECTION B [10 marks]**

Design a Microsoft power point using the topic ‘**System Development Requirements**’ from A above.

The presentation should have the following

- a. At least five slides including introduction and conclusion
- b. Each slide should have a slide number and your student number as footer
- c. Theme and background style
- d. Slide transitions
- e. Animations and Rehearsal timing.

[10]

**SECTION C Microsoft Excel [30 Marks]**

**SECTION C Microsoft Excel Part 1 [10 Marks]**

Open Microsoft excel and type the following on sheet 1 ,NB No in cell A1 ,Name B1 etc

**Below are the sales of Udemmy Courses of the following programming languages  
Python, Java and Visual Basic by 8 students**

|   | A       | B      | C      | D    | E               | F     | G       | H | G |
|---|---------|--------|--------|------|-----------------|-------|---------|---|---|
| 1 | Name    | Gender | Python | Java | Visual<br>Basic | Total | Average |   |   |
| 2 | Freeman | M      | 80     | 60   | 60              |       |         |   |   |
| 3 | Loraine | F      | 70     | 50   |                 |       |         |   |   |
| 4 | Queen   | F      | 70     | 65   | 65              |       |         |   |   |
| 5 | Andrew  | M      | 80     | 60   | 90              |       |         |   |   |
| 6 | John    | M      |        | 80   | 90              |       |         |   |   |
| 7 | Keith   | M      | 90     | 60   | 55              |       |         |   |   |
| 8 | Dennis  | M      | 80     | 50   | 90              |       |         |   |   |
| 9 | Cynthia | F      | 90     | 70   | 80              |       |         |   |   |

- a. Find the total of the marks to the nearest whole number in column F [02]
- b. Find the average of the marks in column G [01]
- c. Use formulae to find the days of sales by a student in column H [01]
- d. Sort the averages in column G from the highest to the lowest [01]
- e. Validate column A to allow text only between 3 and 20 [01]
- f. Validate column C to allow numbers only between 0 and 100 [01]
- g. Insert a column graph of Name against Java sales [01]
- h. Use functions to count number of males and females column A [01]
- i. Insert formula in column G to show 'Good' if sales in column F are above 200 otherwise 'Bad' [01]
- j. Save file work in your folder on the desktop as 'Section C in sheet 1 [01]

**SECTION C Microsoft Excel Part 2 [20 Marks]**

Type the following on sheet 2. **NB** Year is in cell 'A1' and the rest follows suite

|    | A               | B               | C                  | D                   | E            | F             | G |
|----|-----------------|-----------------|--------------------|---------------------|--------------|---------------|---|
| 1  |                 |                 |                    |                     |              |               |   |
| 2  | <b>Semester</b> | <b>Year</b>     | <b>Course Code</b> | <b>Credit Hours</b> | <b>Grade</b> | <b>Weight</b> |   |
| 3  |                 | <b>1st Year</b> | HCS101             | 3                   | A            | 4             |   |
| 4  |                 |                 | HFR111             | 3                   | B            | 3.2           |   |
| 5  |                 |                 | HIT100             | 3                   | B-           | 2.9           |   |
| 6  |                 |                 | TEV100             | 3                   | A            | 4             |   |
| 7  |                 |                 | SNHrs              | -                   |              | SWPts         |   |
| 8  |                 |                 | CNHrs              |                     |              | CWPts         |   |
| 9  |                 |                 | GPA                |                     |              |               |   |
| 10 | <b>1</b>        |                 | CGPA               |                     |              |               |   |
| 11 |                 |                 |                    |                     |              |               |   |
| 12 |                 |                 | HFR112             | 3                   | A            | 4             |   |
| 13 |                 | <b>2nd Year</b> | SLS105             | 3                   | B-           | 2.9           |   |
| 14 |                 |                 | NS305              | 3                   | C+           | 2.6           |   |
| 15 |                 |                 | TEV200             | 3                   | C            | 2.3           |   |
| 16 |                 |                 | SNHrs              |                     |              | SWPts         |   |
| 17 |                 |                 | CNHrs              |                     |              | CWPts         |   |
| 18 | <b>2</b>        |                 | GPA                |                     |              |               |   |
| 19 |                 |                 | CGPA               |                     |              |               |   |

- a. Design the table above in Microsoft Excel [03]
- b. Calculate the Notional hours(SNHrs) in cells D7and D16 [01]
- c. Calculate the Cumulative Notional Hours (CNHrs) in cells F8 , F16 F25 [01]
- d. Calculate the Semester Weighted Points (SWPts) in cells G7 and G16 [01]
- e. Cumulative Weighted Points (CWPts) in cells G8 and G17 [03]
- f. Calculate Grade Point Average (GPA) in cells F9,F17 and F26 [03]
- g. Calculate Cumulative Grade Point Average in cells H9,H17 and H26 [03]
- h. Round off the GPA and CGPAs to the 2 decimal places [01]
- i. Draw a bar graph of course Code against Weights for 1st semester [04]

Save your work in your folder on the desktop in 'SECTION C on sheet 2

**SECTION C Microsoft Access [40 Marks]**

a. Design a Tourism management system database using the following information

**Tourist**

| Field       | DataType  | Field |
|-------------|-----------|-------|
| IDNumber    | Text      | 10    |
| TouristName | Text      | 20    |
| DateOfBirth | Date/time |       |

**Destination**

| Field           | DataType | Field |
|-----------------|----------|-------|
| DestinationCode | Text     | 10    |
| DestinationName | Text     | 20    |
| Cost            | Real     |       |

**TravelCost**

| Field           | DataType   | Field |
|-----------------|------------|-------|
| TravelID        | Autonumber |       |
| IDNumber        | Text       | 10    |
| DestinationCode | Text       | 10    |
| TravelDate      | dateTime   | short |

NB IDNumber and DestinationCode fields should be lookup fields from the respective tables  
[20]

b. Design forms and enter the following data into the respective tables [10]  
Enter the following records into the **Tourist** table

| IDNumber | TouristName | DOB        |
|----------|-------------|------------|
| T001     | Samson      | 12/09/1997 |
| T002     | Enita       | 04/06/1992 |
| T004     | Clara       | 11/12/1988 |
| T003     | Thomas      | 06/09/1985 |
| T005     | Ellen       | 17/05/2003 |

Enter the following records into the **Destination** table

| DestinationCode | DestinationName | Cost\$ |
|-----------------|-----------------|--------|
| D001            | Victoria Falls  | 10     |
| D002            | Tanzania        | 15     |
| D003            | Matopo          | 30     |
| D004            | Cape Town       | 80     |

Enter the following records into the **TravelCost** table

| TravelID | TouristID | DestinationCode | TavelDate  |
|----------|-----------|-----------------|------------|
| 001      | 170159    | D001            | 01/08/2018 |
| 002      | 170160    | D102            | 11/09/2018 |
| 003      | 170158    | D100            | 07/10/2018 |

|     |        |      |            |
|-----|--------|------|------------|
| 004 | 170149 | D200 | 11/12/2018 |
| 005 | 170157 | D100 | 22/12/2018 |

- a. Design a query to get ALL **Destinations** costing less than \$30
- b. Design a query to get TouristName, DOB WHERE DOB is equal to 12/09/1997
- c. Design a query to get TouristName ,DestinationCode, DestinationName, TravelDate WHERE TravelDate IS NOT equal to 07/10/2018
- d. Design a report for the allocations

[10]