

UT1

1- Relate each software document to its corresponding function:

Installation guide --> Install and configure the application in your environment

Usage guide --> Manage the application and understand its messages

Technical guide --> Project memory, basis of maintenance

Logbook --> It is not a document

2. The application execution environment is composed of ____ and the programming language virtual machine.

API .

3. It is most convenient that software tests be carried out only on the complete system, since we would not detect errors in each piece individually. True or false?

False

4. They are application documents:

Use guide., Technical guide., Installation guide

5. At what stages do L-CASE offer help ?

Coding., Testing

6. Which component is vital for joining files in the generation of the executable?

Linker

7. Conducting ____ testing allows us to detect errors in each part of the program separately

Unitary

8. Having deficiencies in the ____ phase is the main cause of the large percentage of failures in software projects

Analysis

9. What is the process of translating source code to object code called?

Compilation

10. The document that culminates the design stage is the ERS . True or false?

False

11. In a practical case, what type of requirement is the client's desire to include product stock control in the warehouse in the application?

Functional

12. Desirable characteristic of all code:

Easy to read

13 The set of virtual machine and API is called:

Runtime environment

14 Main functions of a virtual machine in executing programs:

Make applications portable., Communication with the system where the application is installed., Memory reservation required for the application

15 What language is directly executable by the computer?

Machine

16 What is the name of the change that consists of improving the functionality of all software ?

Perfective

17 Relate each characteristic to its corresponding language

Use of ones and zeros --> machine

Use of control structures --> C.

Use of objects and classes --> java.

Use of mnemonics --> assembly

18 The technical guide document contains information

For developers and end users to install the application., So that analysts and developers can maintain the application.

19 They are types of software:

OS., Programming software ., Applications.

20 Relate each stage to the type of code obtained:

Interpretation --> Direct executable code.

Text editor --> Source code

Virtual machine or linker --> Executable code

Compilation --> Object code

21 When are Beta Test tests usually carried out ?

In the same productive environment of the application, once installed

22 The stage consisting of dividing the general problem into parts with defined functions is:

Design

23 You always have to make an algorithm before coding a program. True or false?

True

24 Life cycle that allows you to go back through its stages to modify some parameter or data
Spiral., Incremental iterative., Cascade with feedback.

25 In computing, two large groups of software tests are distinguished :

Unitary., Integration

26 Of all the types of software , ____ is responsible for managing the hardware resources of a computer

Operating system

27 The compiler receives source code and generates

Object code

28 Relate each life cycle model to its main characteristic:

Cascade with feedback. → Passage from one stage to the next is sequential and lets you go back.

In cascade. → It does not allow you to go back a step in the project.

Incremental evolutionary. → Each new version is more perfect than the previous one

Spiral. → Project is divided into several regions.

29 The virtual machine allows the application to run on any computer. True or false?

True

30 Examples of object-oriented languages are:

C++ language ., Java language., PowerBuilder language

UT2

1 Relate each component of a development environment to its main characteristic:

The correct answer is: Graphic interface. → Increases functionality, allowing programming in several languages in the same IDE.

Text editor. → Makes writing code easier

Compiler/Interpreter. → Syntax error detection

Debugger. → Monitoring of variables in execution.

2 Relates each environment to the operating systems under which it can be installed

Microsoft Visual Studio → Windows.

Anjuta → Linux

XCode → Mac

NetBeans → Windows, Linux, Mac.

3 Relates each order to the type of action that is obtained during the installation of NetBeans :

`sudo chmod 755 netbeans` → We give execute permission to the file

`sudo` → From that order onwards, we are considered the root

`sudo ./netbeans` → We execute the file

`.../sudo mv` → Invalid order on Linux.

4 Relate each JDK installation order to its corresponding function

`sudo chmod 755 jdk` → Give execute permissions to the file.

`ls /usr/local` → List the contents of that directory to verify that the file has been moved correctly

`sudo mv jdk /usr/local` → Move the installation file to the correct location.,

`sudo ./jdk` → Run the file.

5 What is the name of the change that consists of improving the readability of programs, without altering its functionality?

Refactoring

6 What is the name of the first software that was considered the precursor of current IDEs, in the 70s?

Master

7 What is the process of altering code to improve its readability, without changing its associated functionality, called?

Refactoring

8 What is adding plugins without leaving the IDE called?

On-line

9 Which of the following environments are proprietary?

C++ Builder ., JCreator.

10 Of the four following functionalities, three of them can be achieved by adding plugins to our environment. Which are?

Possibility of importing projects from other programming languages., Program refactoring., Utilities for testing software.

11 The file named ____ is the main file of a Java application

Main.java

12 The ____ language is considered to be the first to use an IDE.

BASIC

13 Regarding the removal of plugins , we have two options

Deactivation., Uninstallation.

14 In Linux we can install the environments:

NetBeans., Eclipse., Gambas.

15 At what point is a program executed?

Once the program has been corrected, compiled and debugged.

16 Main functions of the text editor in the IDE:

Highlight and color code syntax., Automatic insertion of parentheses and brackets., Propose problem-solving suggestions.

17 The ____ extension is characteristic of projects packaged in Java.

.jar

18 The extension of the modules and plugins in NetBeans is:

.nbm.

19 Which component is responsible for tracking variables at runtime?

Debugger

20 What IDE components allow you to write code?

Text editor

21 What is the so-called manifest file ?

Special file that identifies a module.

22 Examples of object-oriented languages are:

C++ language., Java language., PowerBuilder language .

23 They are free development environments:

Eclipse., NetBeans., Geany.

24 They are proprietary development environments:

Visual Studio., Xcode.

25 Having previously installed ____ is essential to be able to install and run NetBeans .

JDK

26 The plugin necessary to update plugins online in NetBeans is called Portal Update Center . True or false?

True

27 Code refactoring consists of changing the functionality of small statements to increase the performance of the program. True or false?

False

28 You always have to compile before running a program. True or false?

True

29 You must always have a platform installed to be able to install a development environment. True or false?

True

30 One of the options for customizing the environment settings for a Java project is to change the color of the code classes. True or false?

False