**Mark the following statements as *True* or *False*.**

**1.** Relative to their cost, desktops have the most amount of power, speed, storage and upgradeability. **True / False**

**2.** Laptops are the easiest to upgrade and repair. **True / False**

**3.** Desktops have a lot of cables and are not as portable as laptops. **True / False**

**4.** The most common Mac people purchase is the iMac.  **True / False**

**5.** Laptops called ‘desktop replacements’ are not as powerful as their desktop counterparts. **True / False**

**6.** Tablets are designed to be network based devices. **True / False**

**Key**

1 T 2 F 3 T 4 T 5 F 6 T

**Fill in the blanks with the words below.**

mouse paper used considered accessories cables

Special Agent Nickolaos Contaxakis gives his advice on what **1)** \_\_\_\_\_\_\_\_\_ you should buy with your next computer purchase. The ones that should be **2)** \_\_\_\_\_\_\_\_\_ a necessity he calls necessaries. For example, **3)** \_\_\_\_\_\_\_\_\_ is necessary if someone wants to print. Certain **4)** \_\_\_\_\_\_\_\_\_ like those that attach the printer to the computer are also necessary. The keyboard and **5)** \_\_\_\_\_\_\_\_\_ are also considered very vital components. Mice also come in different sizes for different purposes. The ones **6)** \_\_\_\_\_\_\_\_\_ for gaming , for example, are larger and faster.

**Key**

1 accessories 2 considered 3 paper 4 cables 5 mouse 6 used

**Mark the following statements as *True* or *False*.**

**1.** Most computers come with an operating system, such as Windows. **True / False**

**2.** Microsoft Office for Macintosh includes email and messenger software. **True / False**

**3.** Most computers also come with Malware Protection, which protects the computer from viruses, spam and Trojans. **True / False**

**4.** Norton 360 is a complete protection package which also offers online backups. **True / False**

**5.** Kaspersky is Norton’s biggest competitor because it offers the exact same things except system tune ups. **True / False**

**6.** McAfee Anti-Virus Plus is the most complete anti-virus program out of the three and the most popular. **True / False**

**Key**

1 T 2 T 3 F 4 T 5 F 6 F

**Choose the best word to complete the following sentences.**

**1.** Binary **instructions / switches** which are read and executed by the CPU are called machine code.

2. Punch cards replaced tube plugs in order to make the jobof **running / creating** a program easier.

**3.** In the 1960s computers began to **screen / store** code anddata onelectronic mediums, such as magnetic tape.

**4.** An assembly language translates binary instructions into **data / mnemonics**, which makes it easier for humans to read.

**5.** A linker is a program that helps us produce an actual **object / executable** file.

**6.** Modern operating systems like Windows® and Linux allow **programs / libraries** to link in code from other files during execution.

**Key**

1 instructions 2 running 3 store 4 mnemonics 5 executable 6 programs

**Mark the following statements as *True* or *False*.**

**1.** Shinni Queue started a blog with her fashion designs just recently. **True / False**

**2.** PicsArt is a creative photo editing tool that is quite expensive. **True / False**

**3.** The PicsArt camera app allows you to choose pictures from your gallery or take new ones. **True / False**

**4.** With AirView you are able to view effects after trying them out.  **True / False**

**5.** Callout is a tool in the edit menu which allows you to apply speech bubbles. **True / False**

**6.** The app has a collage option which allows you to turn a number of pictures into one. **True / False**

**Key**

1 F 2 F 3 T 4 F 5 T 6 T

**Revision Test**

**Choose the correct answer.**

**1.** Once the software is installed, it needs to be … to see if there are any errors.

**A** designed **B** tested **C** written

**2.** The programming-in-the- … project involves a small group of students.

**A** small **B** artifact **C** large

**3.** Thomas is trying to … the new software.

**A** evaluate **B** install **C** write

**4.** Software engineers are responsible for … and developing software.

**A** evaluating **B** designing **C** investigating

**5.** A … would be very useful when I need to work on the train.

**A** server **B** laptop **C** desktop

**6.** … are becoming more and more popular because they are very small and easy to carry around.

**A** Tablets **B** PCs **C** Desktops

**7.** The company has connected all of the computers to the same … .

**A** server **B** workstation **C** notebook

**8.** A(n) LED mouse uses a … wheel.

**A** flat **B** wireless  **C** scroll

**9.** … printers are preferable in the office because they are fast, and many papers can be printed per cartridge.

**A** Inkjet  **B** Laser **C** Wireless

**10.** Flash … have flash memory which allows data to be saved to them and deleted from them.

**A** wheels **B** panels  **C** drives

**11.** The … printer is an electronic printer that blows small amounts of ink onto paper.

**A** inkjet  **B** laser  **C** optical

**12.** The … supply provides electricity to the computer system by converting AC from a wall outlet to DC.

**A** port **B** power **C** heat

**13.** A … is the major, underlying circuit board of a computer.

**A** case **B** processor **C** motherboard

**14.** The … helps prevent the various computer parts inside the computer from overheating.

**A** case **B** fan **C** port

**15.** The … drive allows the computer to house and execute important files and programs.

**A** CD **B** hard  **C** heat sink

**16.** … systems run a computer without direct commands from a user.

**A** Operating  **B** Manual **C** Device

**17.** The benefit of a … system is that it simplifies computer operations.

**A** control **B** windowing **C** hardware

**18.** Users need to type their commands into the computer … .

**A** systematically **B** operationally  **C** manually

**19.** Scan all the files that you download for viruses and … prior to installing them on your system.

**A** spyware **B** firewalls **C** removals

**20.** If your computer is infected, it is important to … any dangerous files.

**A** quarantine **B** deny **C** permit

**21.** To protect your computer against security threats, users can install various types of… software.

**A** malware **B** virus **C** security

**22.** If you don’t remember your password, then the system is programmed to … access.

**A** permit **B** deny  **C** quarantine

**23.** A(n) … is used for finding and correcting errors in code.

**A** compiler  **B** linker  **C** debugger

**24.** Text editors are a type of … code editor.

**A** source  **B** software **C** programming

**25.** An interpreter is used for translating code written in a different … language.

**A** debugging **B** text  **C** programming

**26.** A … is used for decoding program instructions.

**A** linker **B** compiler  **C** debugger

**27.** … software will help you keep track of your budget on a monthly or weekly basis.

**A** Accounting **B** Video editing **C** Enterprise

**28.** By using video and … software, you can edit and save your pictures and videos.

**A** enterprise **B** office **C** image

**29.** An office suite includes a word … and a spreadsheet application.

**A** publisher  **B** browser  **C** processor

**30.** Software engineers create simple and complex programs for fields like … , which is becoming more and more popular.

**A** management  **B** bioinformatics **C** mobile apps

**31.** Travelers can benefit from the satellite … software which allows them to create a map of the world.

**A** data  **B** multimedia **C** navigation

**32.** The software engineer is working on a mobile app for cost … .

**A** analyses **B** payroll **C** planning

**33.** You should click on an item to … it.

**A** select  **B** type **C** run

**34.** You can easily move the … either by using the mouse, or by using the arrow keys on the keyboard.

**A** cursor **B** menu **C** icon

**35.** Just click on the … menu to make the lists of options appear.

**A** folder **B** dropdown **C** right

**36.** What is eighty … seven?

**A** equals **B** hundred  **C** minus

**37.** Six … four is twenty-four.

**A** minus **B** times  **C** plus

**38.** Four plus six … ten.

**A** divided **B** equals  **C** adds

**39.** ¼ is a … and 0.25 is a decimal number.

**A** percentage **B** fraction **C** point

**40.** In the fraction ¼, 4 is the … .

**A** denominator **B** numerator  **C** decimal number

**41.** In the fraction ¼, 1 is the … .

**A** numerator **B** decimal number  **C** denominator

**42.** Company profits have not only increased but … since the release of the new programs.

**A** decreased **B** declined **C** doubled

**43.** Orders for the new computers are rising, after several months of … decline.

**A** steady **B** stabilized **C** fluctuated

**44.** Certain program demands … according to the season.

**A** recover  **B** fluctuate **C** predict

**45.** Don’t forget to … the main points of your presentation at the end.

**A** project  **B** summarize **C** contact

**46.** I could tell from her … that she was really embarrassed.

**A** body language **B** note cards **C** visual aids

**47.** She … her options before making a final decision.

**A** projected **B** reviewed  **C** signposted

**48.** The courses in the foundation education will help students prepare for more advanced … courses.

**A** linear **B** control **C** programming

**49.** The engineer has a … degree in computer science.

**A** calculus **B** circuit **C** bachelor’s

**50.** During the … year, software engineering students study mathematics including calculus and linear algebra.

**A** programming **B** foundation **C** analysis

**Key**

1 B 2 A 3 B 4 B 5 B 6 A 7 A 8 C 9 B 10 C 11 A 12 B 13 C 14 B 15 B 16 A 17 B 18 C 19 A 20 A 21 C 22 B 23 C 24 A 25 C 26 B 27 A 28 C 29 C 30 B 31 C 32 A 33 A 34 A 35 B 36 C 37 B 38 B 39 B 40 A 41 A 42 C 43 A 44 B 45 B 46 A 47 B 48 C 49 C 50 B

**Choose the correct answer.**

**1.** What is the video about?

**A** a mechanical engineer who makes games

**B** an industrial engineer who works for Career Trek

**C** a software engineer who works for EA games

**2.** When creating a new game, what part of the process does a software engineer do?

**A** tell your Xbox how to display code into a game

**B** tell your Xbox how to deconstruct the game

**C** tell your Xbox how to design the game

**3.** When did James know he wanted to do programming as a living?

**A** when he was in university

**B** when he was in middle school

**C** when he was in high school

**4.** When did he first start working at Electronic Arts?

**A** while he was still in school

**B** while he was still in university

**C** while he was still at his previous job

**5.** What programming language does James use?

**A** Pascal **B** Java **C** C++

**6.** What is the most important skill you must have as a software designer?

**A** creativity **B** a love of math **C** programming experience

**Key**

1 C 2 A 3 C 4 B 5 C 6 C

**Use the words below to complete the text.**

structure complied right developed design mechanized

Juval Lowy is a software architect who **1)** \_\_\_\_\_\_\_\_\_ a process called the IDesign method. He created this process, because he believed that most software architecture actually comes down to a simple **2)** \_\_\_\_\_\_\_\_\_ that can be applied to any project. The method is a highly structured and highly **3)** \_\_\_\_\_\_\_\_\_ approach for design. As a process, it helps point you in the **4)** \_\_\_\_\_\_\_\_\_ direction of how to decompose a system, and once the decomposition is done, the method can mechanize the rest of the **5)** \_\_\_\_\_\_\_\_\_ . The method also enables an inspection review, where someone can check if the developers have actually 6) \_\_\_\_\_\_\_\_\_ with the design, while simultaneously it offers the platform to disseminate the design knowledge across the team.

**Key**

1 developed 2 structure 3 mechanized 4 right 5 design 6 complied

**Mark the following statements as *True* or *False*.**

**1.** Before you start programming, you can outline program algorithms using flow diagrams. **True / False**

**2.** The oval designs only indicate end processes in a flow diagram. **True / False**

**3.** The trapezoidal designs indicate the program will need input or output from a user. **True / False**

**4.** The diamond shapes indicate that an output will be given by the program. **True / False**

**5.** The non-descript rectangles indicate that a process or operation needs to be done. **True / False**

**6.** Branching and looping both require the programmer to follow exactly the same steps. **True / False**

**Key**

1 T 2 F 3 T 4 F 5 T 6 F

**Mark the following statements as *True* or *False*.**

**1.** Structural or static diagrams are good at representing the lifetime of an object. **True / False**

**2.** A sequence diagram describes a particular part of an entire system. **True / False**

**3.** You only need to write down the returned messages when they add value to the cart. **True / False**

**4.** Sequence diagrams offer an overview of the important parts of a process. **True / False**

**5.** Activation boxes, or method called boxes, are most commonly drawn on paper or on a whiteboard. **True / False**

**6.** It is very important to use a sequence diagram for every part of your application. **True / False**

**Key**

1 F 2 T 3 T 4 T 5 F 6 F

**Revision Test**

**Choose the correct answer.**

**1.** He has no … in Software Development.

**A** commitment **B** ability **C** expertise

**2.** Software engineers must have the ability to think critically and solve problems in a(n) … manner.

**A** logical **B** curious **C** innovative

**3.** He is so creative and … ; he always comes with new methods and ideas.

**A** innovative **B** goal-oriented **C** dedicated

**4.** He is completely … to his work.

**A** curious **B** logical **C** dedicated

**5.** I was interested in Tom’s … of the situation.

**A** procedure **B** identification **C** analysis

**6.** Social networking has … the meaning of “friend”.

**A** approached **B** redefined **C** addressed

**7.** I’m not sure how to … the problem.

**A** approach **B** redefine **C** analyze

**8.** The software is on its third … .

**A** identification **B** synthesis  **C** iteration

**9.** … occurs when an amount of something is used or destroyed.

**A** Consumption  **B** Generation **C** Quantity

**10.** … systems always maintain constant mass.

**A** Open **B** Closed  **C** Initial

**11.** … systems allow mass to pass in and out of the system.

**A** Closed  **B** Initial  **C** Open

**12.** Before the software is made, the documents are given validation and … to ensure that all data in the document is accurate.

**A** functionality **B** verification **C** specification

**13.** Documents organized by … describe how the software will operate in terms of the information that it will give to users.

**A** mode **B** response **C** user class

**14.** Software organized by … describes the way the software will function in different settings.

**A** user class **B** mode **C** response

**15.** All products are made exactly to the customer’s … .

**A** validation **B** elicitation  **C** specifications

**16.** In a … view, software is broken down into its major design elements to allow the interactions between those elements be examined closely.

**A** process  **B** deployment **C** conceptual

**17.** In a … view, software is examined in terms of its relationship to physical nodes.

**A** deployment **B** conceptual **C** process

**18.** A(n) … is a low level pattern that is specific to a programming language and can be used to perform a basic function.

**A** idiom **B** design pattern  **C** plan

**19.** A software engineer adds components and … after determining system requirements.

**A** structures **B** models **C** connectors

**20.** A(n)… structure is organized into seven layers where the most basic functions are on the bottom layers and the higher ordered operations are on the top.

**A** abstract data type **B** implicit invocation **C** layered

**21.** A(n) … designs a system that matches the structure of the data being processed.

**A** abstract data type **B** implicit invocation **C** layered

**22.** Engineers use call graphs to examine the system and correct errors before the system becomes too … .

**A** wicked **B** simple  **C** complex

**23.** A(n) … is what provides a broad plan before details have been decided.

**A** modularity  **B** abstraction  **C** call graph

**24.** A(n) … problem can have multiple causes and may be quite difficult to solve.

**A** wicked  **B** structure **C** inter-modular

**25.** A(n) … shows modules as well as the connections between modules.

**A** modularity **B** call graph  **C** abstraction

**26.** … programs split the higher-level functions of the software into smaller subfunctions.

**A** Designing **B** Functioning  **C** Decomposing

**27.** In a … design, a software engineer begins by creating the most primitive subfunctions of the design, and is less likely to have complex mistakes.

**A** top-down **B** bottom-up **C** functional

**28.** In a … design, a software engineer begins by defining the user functions the software and is more likely to have complex mistakes.

**A** top-down **B** bottom-up **C** functional

**29.** In the … stage, a system is represented graphically, and engineers make note of the modules of a system and the connections between the modules.

**A** implementation  **B** network  **C** modeling

**30.** In the … stage, engineers consider the real-world problems that their software needs to solve.

**A** implementation  **B** modeling **C** network

**31.** In the … stage, the system is transformed from a network of processes to a complete working design.

**A** implementation  **B** modeling **C** network

**32.** Structure charts use … logic to represent the objects and functions in a system.

**A** modeling **B** data flow **C** schematic

**33.** A … diagram depicts each object in a system in relation to a particular interaction.

**A** class  **B** collaboration **C** sequence

**34.** The … method is a popular model of object-oriented design which uses its own modeling language to describe objects in a system.

**A** interaction **B** Booch **C** Fusion

**35.** An object-oriented design is composed of its attitudes, … , and relationships.

**A** diagrams **B** methods **C** properties

**36.** Software engineers can find errors in code by detecting … .

**A** oracles **B** models  **C** faults

**37.** The … model ensures that software satisfies its specified purpose and is generally used at the early stages of development.

**A** demonstration **B** destruction  **C** evaluation

**38.** The … model attempts to prevent faults in all areas of software before occur.

**A** demonstration **B** prevention  **C** destruction

**39.** In … analysis, the code of the program is analyzed but the program is not executed.

**A** stepwise **B** static **C** dynamic

**40.** … is a process in which one engineer reads and edits code that another engineer wrote.

**A** Fagan inspection **B** Proof of correctness  **C** Peer review

**41.** In … analysis, testing is conducted while a program is being executed.

**A** dynamic **B** stepwise  **C** static

**42.** The … property ensures that programs are not only tested in isolation but also in simulated environments.

**A** anti-composition **B** monotonicity **C** applicability

**43.** The … property asserts that additional tests can always be performed on a software program.

**A** anti-composition **B** applicability **C** monotonicity

**44.** The … property states that sufficient test sets exist for every program.

**A** anti-composition  **B** applicability **C** monotonicity

**45.** Engineers can … software features and adapt them to new hardware or software.

**A** maintain  **B** enhance **C** repair

**46.** … maintenance is performed to fix faults in software.

**A** Preventive **B** Perfective **C** Adaptive

**47.** … maintenance is work that is done to make software adaptable to new technologies.

**A** Perfective **B** Preventive  **C** Adaptive

**48.** Software engineers are trying to identify errors and are … the user interface.

**A** recovering **B** revamping **C** renovating

**49.** … creates a new version of an existing program that exists at the same level of abstraction.

**A** Restructuring **B** Modernization **C** Redocumentation

**50.** … creates a new version of a program that is better organized than the original program.

**A** Design recovery **B** Reverse engineering **C** Functional equivalence

**Key**

1 C 2 A 3 A 4 C 5 C 6 B 7 A 8 C 9 A 10 B 11 C 12 B 13 B 14 A 15 C 16 C 17 A 18 A 19 C 20 C 21 A 22 C 23 B 24 A 25 B 26 C 27 B 28 A 29 B 30 B 31 A 32 C 33 B 34 B 35 C 36 C 37 A 38 B 39 B 40 C 41 A 42 A 43 C 44 B 45 B 46 B 47 C 48 B 49 C 50 A

**Mark the following statements as *True* or *False*.**

**1.** Fifty percent of chief information officers are expecting to migrate mission-critical software to OSS in the coming year. **True / False**

**2.** Open source software has a license permitting users to inspect, use, improve, expand, and distribute the source code freely. **True / False**

**3.** Google® and Facebook® are patrons of Linux-based open source software. **True / False**

**4.** The entire Internet infrastructure is based upon open source software. **True / False**

**5.** Many companies do not adopt OSS due to misconceptions and misinformation. **True / False**

**6.** All open source software is free of charge and allows its users to break free from old constraints. **True / False**

**Key**

1 F 2 T 3 T 4 F 5 T 6 F

**Choose the correct answer.**

**1.** Configuration management is a technical process that controls …

**A** the people involved with the specifications.

**B** projects that do not need a lot of control.

**C** the elements that constitute the design.

**2.** What does setting up a configuration management system include?

**A** organizing a budget

**B** creating a data base or a filing system

**C** identifying all the design specifications

**3.** Which of the flowing is not part of the configuration management?

**A** controlling the drawings

**B** controlling the document templates

**C** controlling the risk register

**4.** What does the ‘C’ in PICSA stand for?

**A** configuration control

**B** change request

**C** commercial change

**5.** The accounting part of configuration management is …

**A** keeping track of the auditing.

**B** keeping track of the changes.

**C** keeping track of the budget.

**6.** Why is auditing important?

**A** to make sure that the users remember PICSA.

**B** to make sure that there are still open change requests.

**C** to make sure that all requests have been processed.

**Key**

1 C 2 B 3 C 4 A 5 B 6 C

**Choose the best option to complete the sentences.**

**1.** The tasks tab in a cloud access account **allows / provides** you to keep track of who was responsible for which task.

2. In the process of creating a new project, you’ll be able to monitor and interact with the **users / programmers** through the tasks system.

**3.** Logging in to your cloud access account allows you to gain a better understanding of the project’s **progress / goals**.

**4.** Setting milestones ensures that the project is completed within the specified **timeframe / budget**.

**5.** The project manager is **unaccountable / responsible** for making sure the project is ready on time.

**6.** The **resources / notebook** tab allows you to share helpful links with the team developing the project.

**Key**

1 allows 2 programmers 3 progress 4 timeframe 5 responsible 6 resources

**Use the words below to complete the text.**

sell respond praises ethics terrible unethical

In software engineering and programming there is an issue in **1)** \_\_\_\_\_\_\_\_\_ regarding the user interface. Norbert explains that although people may know the marketing tricks that many companies use to **2)** \_\_\_\_\_\_\_\_\_ their products, that doesn’t mean they are immune to them. Stanford’s studies show that computer users **3)** \_\_\_\_\_\_\_\_\_ better to a computer program that praises them even though they know the **4)** \_\_\_\_\_\_\_\_\_ have nothing to do with their performance. Companies also use other **5)** \_\_\_\_\_\_\_\_\_ tricks such as making something seem private and elite at first, and once it has caught on opening it to the public. The best example of this was the Google email account and Facebook. Norbert believes that users are **6)** \_\_\_\_\_\_\_\_\_ at judging what is a good user interface and he encourages designers to produce ethical UI.

**Key**

1 ethics 2 sell 3 respond 4 praises 5 unethical 6 terrible

**Mark the following statements as *True* or *False*.**

**1.** Storing data on a cloud actually means storing it online. **True / False**

**2.** Through Gmail® or Yahoo Mail®, you can access your emails anywhere you have an internet connection. **True / False**

**3.** Your photos can only be stored on the hard disk of your computer. **True / False**

**4.** Google Docs® allows you to create, edit, and save documents online without having to install any software on your computer. **True / False**

**5.** Storing your documents on a cloud, is safer than storing them on your hard disk. **True / False**

**6.** With cloud computing you are no longer responsible for updating software. **True / False**

**Key**

1 T 2 T 3 F 4 F 5 T 6 T

**Mark the following statements as *True* or *False*.**

**1.** Keeler Russell’s main field of study at university is computer engineering. **True / False**

**2.** Despite enjoying his course, Keeler finds the professors to be unsupportive. **True / False**

**3.** The classes 448 and 560 that Keeler mentions were enjoyable for him because they involved writing code. **True / False**

**4.** Keeler failed in his interview with Garmin, but does research in the math department of the university. **True / False**

**5.** Keeler will start working for IBM when he finishes his studies. **True / False**

**6.** He hopes to work on Windows, but he could end up working on something else. **True / False**

**Key**

1 T 2 F 3 T 4 F 5 F 6 T

**Revision Test**

**Choose the correct answer.**

**1.** Software engineers use a … view to imagine the different ways a user will interact with a system.

**A** cognitive **B** design **C** linguistic

**2.** Software engineers use different models and views to imagine their software which allows them to imagine all aspects of the … interface.

**A** mental **B** communication **C** user

**3.** Software engineers use a … view to examine the screens and hardware configurations that users need to interact with a system.

**A** linguistic **B** cognitive **C** design

**4.** The … component includes the spatial layout level and the apparatus level.

**A** communication **B** material **C** conceptual

**5.** The candidate must be good at task … and artistic design.

**A** presentation **B** analysis **C** paradigm

**6.** The software can be modified to suit the particular needs of the … user.

**A** model **B** end **C** layer

**7.** The … model splits software design into two distinct parts: itself and the software’s user interface.

**A** MVC **B** Seeheim **C** UVM

**8.** The … paradigm splits software design into three distinct parts, the model, the view, and the controller.

**A** Seeheim **B** UVM  **C** MVC

**9.** … reuse is an ad hoc method of software reuse during which an engineer takes a piece of code and modifies it according to his specific needs.

**A** Compositional  **B** Black-box **C** White-box

**10.** … reuse saves engineers time because they don’t need to make modifications to the code.

**A** Compositional **B** Black-box  **C** White-box

**11.** Since our research so far has not produced any answers to this problem, we need to adopt a different … to it.

**A** approach  **B** scope  **C** usage

**12.** Software … could make it easier for engineers to develop new software as it allows developers to derive parts of new software from pieces of code that have already been written.

**A** reuse **B** substance **C** crisis

**13.** A(n) … system is very useful for programmers because it has a high level of abstraction.

**A** MIL **B** ADL **C** VHLL

**14.** With … analysis, engineers can specify what kind of data or codes they need, and thus avoid scanning codes manually.

**A** program **B** domain **C** transformation

**15.** Engineers can use … program to find usable pieces of code for new applications.

**A** libraries **B** systems  **C** templates

**16.** … provides a network of connections between applications and operating systems for engineers to use.

**A** Code scavenging  **B** Transformation **C** Middleware

**17.** In … programming, if one program runs into an error, the other programs exist unharmed and provide a backup system for programs.

**A** standard **B** robust **C** N-version

**18.** The creation of recovery blocks is an important tactic in software … as these blocks save information from a program before a user action takes place.

**A** reliability **B** redundancy  **C** domain

**19.** … software tends to minimize malfunctions.

**A** Exception **B** Fault-tolerant **C** Recovery

**20.** Most companies use… environments for small products.

**A** integrated **B** individual **C** state

**21.** For large products, companies use an environment with a(n) … level user scale.

**A** state **B** process-centered **C** individual

**22.** Environments should include a toolkit and a … for engineers so that they don’t need to worry about finding individual tools.

**A** scale **B** level  **C** workbench

**23.** This software has a good … programming environment for most basic back-end actions.

**A** unreserved  **B** visual  **C** reserved

**24.** … is a program that provides tools for engineers to use in developing other programs.

**A** MWB  **B** SSCS **C** PCTE

**25.** By using … checkout, lots of engineers can edit the same program at the same time.

**A** visual **B** reserved  **C** unreserved

**26.** A(n) … is a management workbench which is used by a product manager for the planning of a project.

**A** IPSE **B** MWB  **C** UNIX

**27.** … development allows engineers to work on identical copies of the same program by allowing them to isolate some elements and continue working.

**A** Configuration **B** Parallel **C** Version-oriented

**28.** The right software tools can improve … and productivity.

**A** flaws **B** workflow **C** configuration items

**29.** … methods identify a program by describing changes that have been made to it.

**A** Change-oriented  **B** Corresponding  **C** Version-oriented

**30.** … teams are teams of employees who share the same specific tasks, and are usually given very specific tasks to work on.

**A** Chief programmer  **B** Open structured **C** SWAT

**31.** Some companies organize their employees into a(n) … which makes it clear who is managing which parts of a project.

**A** integration  **B** hierarchy **C** organization

**32.** The … style is designed to promote maximum efficiency within a corporation.

**A** relation **B** commitment **C** separation

**33.** To improve its quality control, the company should focus more on quality … rather than quality factors.

**A** features  **B** criteria **C** practices

**34.** … focuses on the software development process and offers a set of directions and procedures for engineers to follow.

**A** IEEE **B** CMM **C** TQM

**35.** By setting better definitions of software … levels, engineers more easily understand the key process areas and key practices that they need to work on.

**A** assurance **B** quality **C** maturity

**36.** The … model uses a formula to estimate how much time and money it will take to complete a project.

**A** base **B** algorithmic  **C** comparison

**37.** The … model compares a new project to one that is already completed.

**A** algorithmic **B** base  **C** comparison

**38.** The company has drawn up a … for the coming financial year.

**A** method **B** formula **C** budget

**39.** A … chart shows the time frame of the project and organizes when certain tasks need to be accomplished.

**A** Pert **B** Gantt  **C** WBS

**40.** Degree of certainty is a scale from high to low. It is measured by product certainty, process certainty, and … certainty.

**A** resource **B** critical  **C** risk

**41.** Risk management is very important because it addresses how to identify and address risk … .

**A** paths **B** factors  **C** problems

**42.** If engineers don’t work with … , the client may not receive the best product possible.

**A** interests **B** judgement **C** integrity

**43.** A code of … is important so that all employees know what kind of behavior is expected of them.

**A** professionalism **B** welfare **C** ethics

**44.** It is important that engineers act according to the best … of the client.

**A** principles  **B** interests **C** standards

**45.** The software … is very economical and flexible because you pay as you go.

**A** distribution  **B** license **C** demand

**46.** Customers pay a … fee, which means they only pay for what they use.

**A** metered **B** online **C** software

**47.** You no longer need to install a program on your computer since you can now access the application in your Web … .

**A** browser **B** demand  **C** bandwidth

**48.** … are the engineers that are responsible for creating and designing software.

**A** Developers **B** Freelancers **C** Testers

**49.** The more experience and education you have, the more it will help you … your career.

**A** need **B** advance **C** support

**50.** … work in the academic environment, studying theories and methods for software use and development.

**A** Analysts **B** Contractors **C** Researchers

**Key**

1 C 2 С 3 С 4 B 5 B 6 B 7 B 8 C 9 C 10 B 11 A 12 A 13 C 14 B 15 A 16 C 17 C 18 A 19 B 20 B 21 A 22 C 23 B 24 C 25 C 26 B 27 B 28 B 29 A 30 C 31 B 32 C 33 B 34 B 35 C 36 B 37 C 38 C 39 B 40 A 41 B 42 C 43 C 44 B 45 B 46 A 47 A 48 A 49 B 50 C