COMPUTING (CS,IT,IS,SWE,MIS) COLLEGE
NATIONAL EXIT EXAM WORK SHEET

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Department: CS: ◯   IT: ◯   SWE: ◯   IS: ◯   MIS: ◯
Program: Regular: ◯   Night/Extension: ◯

Hint:

✓ This work sheet to be cover the whole CS, IT, IS, MIS and SWE department major courses starting from year 1 up to year 5/4.
✓ The exam work sheet questions to be online for 1 week only.
✓ The question to be sectioned with terms (each term contains 20-30 questions in each)
✓ Each question have one mark
✓ It continues until April 20/2014E.C
✓ You can submit your answer with E-Mail:yonas23495176@gmail.com or in telegram by scanning or screen shooting with your filled profiles of aboves
✓ I will send your result at the end of the week.
✓ The winner student and College or University to be awarded by sponsors at the end of the year.
✓ If there is a question, you can call with +251923495176 or through SMS in E-mail
✓ After term 10 we re-shape the question content into for only IT and CS departments

Term One:

Choose the best answer from the given alternatives

1. Which one of the following cryptographic or Symmetric Encryption Scheme ingredient refers to the original form of the message?
   A) Plaintext   B) Encryption   C) Secret Key   D) Ciphertext

2. Which layers of the OSI model are host-to-host layers?
   A) Transport, Session, Presentation, Application   B) Network, Transport, Session, Presentation
   C) Datalink, Network, Transport, Session   D) Physical, Datalink, Network, Transport

3. What is HTML?
   A) HTML describes the structure of a webpage
   B) HTML is the standard markup language mainly used to create web pages
   C) HTML consists of a set of elements that helps the browser how to view the content
   D) All of the mentioned

4. The protocol used to automatically assign IP address to a newly connected host in a network is called _____.
   A) Dynamic Host Configuration Protocol (DHCP)   B) Transmission Control Protocol (TCP)
   C) User Datagram Protocol (UDP)   D) File Transfer Protocol (FTP)

5. Apart from <b> tag, what other tag makes text bold ?
   A) <fat>   B) <strong>   C) <black>   D) <emp>

6. A collection of interrelated data is called_____.
   A) Database   B) Spreadsheet   C) Management information system   D) Text file

7. When pipelining or parallel processing does required?
   A) During instruction overlapping   B) During requesting large instructions
   C) During needs of improving throughput values of the processor   D) All

8. Network operating system runs on _____
   A) Every system in the network   B) Server
   C) Both server and every system in the network   D) None of the mentioned

9. _____ is the feature that allows the same operations to be carried out differently depending on the object.   A) Polymorphism   B) Abstraction   C) Inheritance   D) Encapsulation

10. Tags and test that are not directly displayed on the page are written in _____ section.
    A) <html>   B) <head>   C) <title>   D) <body>

11. Which one of the following is not an objective for any business plan?
    A) It identifies the nature and the context of the business opportunity.
    B) It presents the approach the entrepreneur plans to exploit the opportunity.
    C) It identifies the factors that will most likely determine the success of the venture.
    D) None

12. CPU scheduling is the basis of _____
    A) Multiprogramming operating systems   B) Larger memory sized systems
    C) Multiprocessor systems   D) None of the mentioned

13. Which is not an application layer protocol?
    A) HTTP   B) SMTP   C) FTP   D) TCP

14. Which of the sets of statements below will add 1 to x if x is positive and subtract 1 from x if x is negative but leave x alone if x is 0?
    A) If (x > 0) x++; else x--;   C) If (x > 0) x++; else if (x < 0) x--;
    B) If (x == 0) x = 0; else x++; x--;   D) X++; x--;

15. Which is the largest computer in terms of physical size?
    A) Mainframe computer.   B) Microcomputer.   C) Tower computer.   D) Supercomputer.

16. When data can transfer both side but at a time only one direction can send information is called_____.
    A) Half duplex   B) Simplex   C) Full duplex   D) Communication
17. Which program do web clients to view the web pages use?
    A) Web browser   B) Protocol   C) Web server   D) Search Engine
18. _____ is the process of finding errors and fixing them within a program.
    A) Compiling   B) Executing   C) Debugging   D) Scanning
19. Which computer device below is an example of an output hardware?
    A) Keyboard   B) Printer   C) Scanner   D) Microphone
20. In which computer classification does instructions are executed sequentially?
    A) SISD   B) SIMD   C) MISD   D) MIMD
21. What is a Firewall in Computer Network?
    A) The physical boundary of Network   B) An operating System of Computer Network
    C) A system designed to prevent unauthorized access   D) A web browsing Software
22. A loop that never ends is referred to as a(n)_____.
    A) While loop   B) Infinite loop   C) Recursive loop   D) for loop
23. All are correct about distributed database, Except:
    A) It is located on various sites that do not share physical components.
    B) A database that is not limited to one system.
    C) A database that is limited to a specific system for security purpose
    D) A database distributed to various remote and local locations through internet.
24. IPV4 Address is   A) 8 bit   B) 16 bit   C) 32 bit   D) 64 bit
25. Which one of the following software development model is an effective methodology to provide much quicker development and higher-quality results than the others?
    A) Spiral Model   B) Waterfall model   C) RAD model   D) Iteration Model
26. What is an operating system?
    A) An interface between the hardware and application programs
    B) A collection of programs that manages hardware resources
    C) A system service provider to the application programs
    D) All of the mentioned
27. What is the meaning of Bandwidth in Network?
    A) Transmission capacity of a communication channels   B) Connected Computers in the Network
    C) Class of IP used in Network   D) None of Above
28. A pointer is_____.
    A) The address of a variable   C) An indication of the variable to be accessed next
    B) A variable for storing addresses   D) The data type of an address variable
29. Which one of the following is a basic factor for improving the level of marketing in a small business?
    A) Need   B) Want   C) Demand   D) All
30. _____ means a computer information, which can be represent in audio, video and animated format in addition to traditional format.   A)Speech   B) Music   C) Film   D) Multimedia

Term Two

Choose the best answer from the given optionality

1. _____ is the process of creating new networks by stealing bits from the host portion of a subnet mask.   A, Subnetting   B, Configuring   C, Routing   D, Pinging
2. What is the average waiting and turnaround time respectively for the five process(P1(1, 7)   P2(3,3)P3(6,2), P4(7, 10)and P5(9.8) using SJF CPU scheduling algorithm? NB: The first number is the value for AT and the second is the value for BT for each process.
   A, 5.4 and 11.4   B, 4.4 and 12.5   C, 11.5 and 4.5   D, 12.5 and 11.4
3. Which one of the following features of an object-oriented programming hides the details of the data from developing any program?
   A, Inheritance   B, Abstraction   C, Encapsulation   D, Polymorphism
4. Which one of the following formula is necessary to determine the number of usable hosts per each networks?
   A, 2^n-2 B, 2^n C, 2^n-1 D, $n(n-1/2)$
5. Which one of the following components of any user defined function includes about the work of the function/body of the function/ as a whole?
   A, Function declaration   B, Function Calling   C, Function definition   D, Function Prototype
6. Which one of the following is a correct IP V4 address representation?
   A, 175.259.45.1   B, 10011110.010100010.10100100.00000011
   C, 192.168.14.2.10   D, None
7. The ability to query data, as well as insert, delete, and alter tuples, is offered by _____
   A, TCL (Transaction Control Language)   B, DCL (Data Control Language)
   C, DDL (Data Definition Language)   D, DML (Data Manipulation Language)
8. A virtual memory is a/an_____
   A, logical memory   B, memory management technique   C, illusion of a large main memory   D, All
9. Defining and declaring the same function name in the same class but have different in their set of parameter behaviors is called_____.
   A, Function overloading   B, Function overriding   C, Function overwriting   D, All
10. The basic locking method problem, which have a habit of waiting two or more transactions in a specified mode due to locking a shared resource, is called_____.
    A, Deadlock   B, Throughput   C, Scheduling   D, Share locking method
11. _____ is a set of one or more attributes taken collectively to uniquely identify a record.
    A, Primary Key   B, Foreign key   C, Super key   D, Candidate key
12. Which type of thread to be recognized only by OS and have a longer context switching time?
    A, User –level thread   B, Kernel-level thread   C, OS-level thread   D, LINUX/UNIX level thread
13. _____is the basic mechanisms of removing the unwanted and redundancy as well as ensuring the consistency of the data in the specified database.
    A, Data Integrity   B, Database Integrity   C, Domain Integrity   D, Normalization
14. Which one of the following protocol is used for remote terminal connection service?
    A, RARP   B, UDP   C, FTP   D, TELNET
15. Which relational algebra expression is correct to retrieve the whole male or IT department students?

    A, π<Fname, LName, Sex, Department>(STUDENT)

    A, σ <Sex="Male" $\cap$ Department="IT">(STUDENT)

    C, σ<Sex="Male" $\cup$ Department="IT">(STUDENT)

    D, π<Fname, LName, Sex, Department>(σ <Sex="Male" $\cap$ Department="IT">((STUDENT))
16. What is the average waiting time for the six process(P1(0, 5), P2(1,6), P3(2,3), P4(3, 1)and P5(4.5) and P6(6, 4) using Round robin CPU scheduling algorithm with a time slice value of 2? NB: The first number is the value for AT and the second is the value for BT for each process.
    A, 11.4   B, 11.33   C, 17.41   D, 41.5

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17. Which database integrity deals about the primary key's uniqueness and have a not null feature in the table?
    A, Domain Integrity   B, Entity Integrity   C, Referential Integrity   D, Key constraints
18. Which type of menu displays a list of items in a vertical list which presents to the view that invoked the menu and useful to provide an overflow of actions that related to specific content?
    A, Popup menu   B, Push menu   C, Context menu   D, Option menu
19. Which one of the following is not include as a good database transaction properties?
    A, Atomicity   B, Concurrency   C, Isolation   D, Durability
20. Which one of the following term is specify the collection of networks that can be joined together?
    A, Intranet   B, Extranet   C, Internet   D, LAN
21. Which one of the following is an examples of WMAN?
    A, Wi-Fi   B, Bluetooth   C, Wi-MAX   D, Zigbee
22. Assume if two data items **A** and **B** are said to be in a determinant or dependent relationship and if certain values of data item **B** always appears with certain values of data item **A** and if the data item **A** is the determinant data item and **B** the dependent data item then which on is correct?
    A, "B is functionally dependent on A."   B, "A determines B"
    C, "B is a function of A"   D, "A functionally governs B."
23. What is the correct output for the program below?
    int num[]=new int[100],result;   A,36   B, Sum=21   C, 12   D, result=21
    for(int i=0; i<=6;i++){
    num[i]=i;
    if(i%3==0){
    result=num[i]+i;
    }}
    System.out.print(result);
24. What is the binary bit equivalency for the IP address 158.80.164.3?
    A, 10011110.01010000.10100100.00100011   B, 11111010.01010000.10100100.00000011
    C, 10011110.01010000.11100100.00000011   D, 10011110.01010000.10100100.00000011
25. Which type of iteration statement in java have at least one output even if the execution become false initially?
    A, for loop   B, Do while loop   C, While loop   D, for each loop
26. Which expression from below for the student class can be used as a method member?
    A, Name   B, Sex   C, Mark   D, Withdrawal
27. If an attribute which is not a member of the primary key is dependent on some part of the primary key (if we have composite primary key) then that attribute is _____on the primary key.
    A, Partially functionally dependent   B, Fully functionally dependent
    C, Transitive dependency   D, Optimally functionally dependent
28. Which one of the following page replacement policy/algorithm involves by replacing the "oldest" page in the memory, the one which was loaded before all the others?
    A, FIFO   B, OPT   C, LRU   D, LFU
29. Which one of the following IP network service principle determines the best path to a particular destination network?
    A, Subnetting   B, Configuring   C, Routing   D, Pinging
30. Which normalization form involves by removing the transitive dependencies between attributes?
    A, First normalization   B, Second normalization
    C, Third normalization   D, Boyce-Codd Normal Form