UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, July 2020

Course: Computer Applications   Semester: IInd
Program: B.Sc. (Food, Nutrition and Dietetics)   Time 03 hrs.
Course Code: HSCC1009   Max. Marks: 100

Instructions: Read the paper carefully. All sections are compulsory

Multiple Choice Questions/True or False/ Fill in the blanks/ Multiple answer questions

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	MC Which unit is answerable for changing over the information got from the client into a computer understandable format? Memory Unit incorrect Arithmetic and Logic Unit incorrect Input Unit correct Output Unit incorrect	**CO1**	
	MC Which of the following is certifiably not a positional number system? Roman Number System correct Octal Number System incorrect Binary Number System incorrect Hexadecimal Number System incorrect		
	MC Convert the binary number (11111111) to its hexadecimal equivalent. FF correct FFFF incorrect 1FFF incorrect 0FFF incorrect		
	MC The maximum value of a single digit in an octal number system? 8 incorrect 7 correct 6 incorrect 5 incorrect		
	MC The corresponding decimal number of the given binary number (1010101010) is: 622 incorrect 682 correct 684 incorrect 680 incorrect		
	MC Identify the maximum count of bits sufficient to represent a hexadecimal number in binary: 4 correct 3 incorrect 7 incorrect 8 incorrect		
	MC The other name given to context diagram is: Level-0 DFD correct Level-1 DFD incorrect Level-2 DFD incorrect All of the mentioned incorrect		
	MC The symbol directed arc/line in DFD represents Data Store incorrect Data Process incorrect Data Flow correct All of the mentioned incorrect		
	MC Out of the following what will be the first step in the software development life cycle? Analysis incorrect Design incorrect		

Problem/Opportunity Identification correct **Development and Documentation** incorrect **MC Debugging refers to: creating program code** incorrect **finding and correcting errors in the program code** correct **identifying the task to be computerized** incorrect **creating the algorithm** incorrect **MC Brainstorming is divided into how many phases? Two** incorrect **Three** correct **Four** incorrect **All of the mentioned** incorrect		
MC Which of the following provides ability to query data from the database and to insert tuples into, delete tuples from, and alter tuples in the database? **DML(Data Manipulation Langauge)** correct **DDL(Data Definition Langauge)** incorrect **Query** incorrect **Relational Schema** incorrect **MC Using which language can a client demand data from a database?** **Query** correct **Relational** incorrect **Structural** incorrect **Compiler** incorrect **MC A relational database comprises of a collection of:** **Tables** correct **Fields** incorrect **Records** incorrect **Keys** incorrect **MC Which is a multivalued attribute out of these?** **Phone_number** correct **Name** incorrect **Date_of_birth** incorrect **All of the mentioned** incorrect **MC Which of coming up next is a solitary esteemed attribute** **Register_number** correct **Address** incorrect **SUBJECT_TAKEN** incorrect **Reference** incorrect **MC Preformatted text is defined by which element?** **<p>** incorrect **<pre>** correct **<hr>** incorrect **<ins>** incorrect **MC Identify the first step of requirement elicitation? Identifying Stakeholder** correct **Listing out Requirements** incorrect **Requirements Gathering** incorrect **All of the mentioned** incorrect **MC "Consider a system where, a heat sensor detects an intrusion and alerts the security company." What kind of a requirement the system is providing ?** **Functional** correct **Non-Functional** incorrect **Known Requirement** incorrect **None of the mentioned** incorrect **MC HTML and XHTML cannot be differentiated by which of the following?** **Charset in html is "text/html" where as in xhtml it is "application/xml+xhtml"** incorrect **Charset in both html and xhtml is "text/html"** correct **Tags and attributes are case-insensitive in HTML but not in XHTML** incorrect **Special characters must be escaped using character entities in XHTML unlike HTML** incorrect **MC How the content in file is identified as HTML content.** **The extension of the file ".html"** incorrect **The "content-type" header** correct **Both ".html" extension and "content-type" header** incorrect **The "content_type" header** incorrect	**CO2**	

	MC Which tag is used for the largest heading in HTML. h6 incorrect heading incorrect h1 correct head incorrect **MC** Identify the table tags out of the following? table, thead, tr, td correct colspan, table, tr incorrect table, tt, tr, td incorrect thead, colspan, td, tr incorrect **MC** In order to display date/time content which of the following attribute is used? time incorrect datetime correct date incorrect year incorrect **MC** To insert a video, we use a video tag and set its src attribute to a local or remote URL containing a playable movie. True correct False incorrect		
	MC Pharmacokinetics is otherwise called ADME correct MMME incorrect EEED incorrect ASED incorrect **MC** Which proclamation is right regarding E-prescribing facilitates: Decrease medication errors and improves efficiency correct Increase medication errors and improves efficiency incorrect Increase medication errors and reduce efficiency incorrect Decrease medication errors and reduce efficiency incorrect **MC** mHealth closely refers to which of the following? Mobile healthcare device correct To check health issues related to Respiration incorrect To provide healthy tips at your doorsteps incorrect None of the above incorrect **MC** The primary need for studying Bioinformatics is: Design and implementation of new algorithms and statistics which assess relationship among members of large data sets incorrect Analysis and interpretation of various data types, which includes nucleotide and amino acid sequences and structure of protein incoorect To develop computational tools and databases that enables efficient analysis, access and management of biologically significant information incorrect All of the above correct **MC** Administration error accounts for what percentage of medication errors? 5% to 12% incorrect 15% to 24% incorrect 26% to 32% correct 50% to 75% incorrect	**CO3**	
	MC Out of the following, identify the protein sequence database. DDBJ incorrect EMBL incorrect PIR incorrect GenBANK correct **MC** Out of the following, identify the sequence alignment tool. BLAST incorrect PRINT correct PROSITE incorrect PIR incorrect **MC** Alignment method suitable for aligning closely related sequence is: Multiple sequence alignment incorrect Pairwise alignment incorrect Global alignment correct Local alignment incorrect **MC** Information of all known nucleotide and protein sequence are available on: EMBL incorrect DDBT incorrect NCBI's GenBANK incorrect All of these correct **MC** Identify the data retrieving tool? ENTREZ correct EMBL incorrect PHD incorrect All of these incorrect	**CO4**	

	MC In chromatography, which of the following can be the mobile phase be made of: Solid or liquid incorrect Liquid or gas correct Gas only incorrect Liquid only incorrect MC In which type of chromatography the stationary phase held in a narrow tube and the mobile phase is forced through it under pressure? Column Chromatography correct Planar Chromatography incorrect Liquid Chromatography incorrect Gas Chromatography incorrect MC The visual output of chromatography is known as: Chromatograph incorrect Chromatogram correct Electropherogram incorrect Autoradiogram incorrect MC The paper is non-polar in paper chromatography: True incorrect False correct MC Which of the following is the computer based system that stores and manipulates data that are viewed from a geographical point or reference Geographical Information System (GIS) correct Database System (DS) incorrect Geographic System (GS) incorrect Software System (SS) incorrect MC Which of the following system ensures that proper stock of each item are maintain in an organization. Human resource information system incorrect An inventory control system correct Manufacturing information system incorrect Marketing information system incorrect	CO5	
	MC The only language which the computer understands is _____ Assembly Language incorrect Binary Language correct BASIC incorrect C Language incorrect MC The smallest unit of data in computer is _____ Byte incorrect Nibble incorrect Bit correct KB incorrect MC A special request originated from some device to the CPU to acquire some of its time is called _____ Disturbance incorrect Attenuation incorrect Interrupt correct Noise incorrectMC Components that provide internal storage to the CPU are _____ Registers correct Program Counters incorrect Controllers incorrect Internal chipsincorrect MC Saving data and instructions to make them readily available is the job of _____ Storage Unit correct Cache Unit incorrect Input Unit incorrect Output Unit incorrect MC _____ is the raw material used as input and _____ is the processed data obtained as output of data processing. Data, Instructions correct Instructions, Program incorrect Data, Program incorrect Program, Code incorrect MC The LSB and MSB of 1243247 are ____ and ____1, 7 incorrect 4, 7 incorrect 7, 1 correct 4, 1 incorrect MC The 2's complement of 15 is _____ 0000 incorrect 0001 incorrect 0010 correct 0100 incorrect MC The binary number 111 in octal format is _____ 6 incorrect 7 correct 8 incorrect 5 incorrect	CO1	

MC	ABC is a valid hexadecimal number.　　True　correct　　　　False incorrect		
MC	The binary number 111 in its 2's complement form is ＿＿＿＿＿＿＿ 010　incorrect　　001　correct　　　000　incorrect　　111 incorrect		
MC	2's complement is obtained by adding 1 to 1's complement of a number. True　correct　　　False　incorrect		
MC	A DFD is always accompanied by a data dictionary.　　True　correct False　incorrect		
MC	A description of each function presented in the DFD is contained in a ＿＿＿＿＿＿＿　　data flow　　incorrect　　process specification correct control specification incorrect　　data store　　incorrect		
MC	In the Analysis phase, the development of the ＿＿＿＿＿＿＿＿ occurs, which is a clear statement of the goals and objectives of the project.　　documentation　　incorrect　flowchart　　incorrect　　program specification　correct　　　design incorrect		
MC	＿＿＿＿＿＿＿ and ＿＿＿＿＿＿＿ are the two issues of Requirement Analysis.　Performance, Design incorrect　　Stakeholder, Developer　correct Functional, Non-Functional incorrect　　None of the mentioned incorrect		
MC	Requirements Analysis is an Iterative Process.　　True　correct False　incorrect		
MC	Requirements should specify 'what' but not 'how'.　　True　correct False　incorrect		
MC	The ＿＿＿＿＿＿ operator takes the results of two queries and returns only rows that appear in both result sets.　　Union incorrect　　Intersect correct　　　Difference　incorrect　　Projection　incorrect	CO2	
MC	A ＿＿＿＿＿＿＿ is a pictorial depiction of the schema of a database that shows the relations in the database, their attributes, and primary keys and foreign keys. Schema diagram　correct　　　Relational algebra incorrect　　Database diagram　incorrect　　Schema flow incorrect		
MC	A ＿＿＿＿＿＿＿ in a table represents a relationship among a set of values. Column　　incorrect　　Key　incorrect　　Row　correct Entry　incorrect		
MC	For each attribute of a relation, there is a set of permitted values, called the ＿＿＿＿＿＿＿ of that attribute.　　Domain　　correct　　　Relation incorrect　　Set　incorrect　　Schema　　incorrect		
MC	An ＿＿＿＿＿＿＿ is a set of entities of the same type that share the same properties, or attributes.　Entity set　　correct　　　Attribute set incorrect　　Relation set　incorrect　　Entity model incorrect		
MC	Entity is a ＿＿＿＿＿＿＿＿　　Object of relation　　incorrect　　Present working model　　incorrect　　Thing in real world　correct　　　Model of relation　　　incorrect		

	MC An attribute in a relation is a foreign key if the _____ key from one relation is used as an attribute in that relation. Candidate incorrect Primary correct Super incorrect Sub incorrect **MC** Each cell of the table can be represented by using _____ <tr> incorrect <td> correct <th> incorrect <thead> incorrect **MC** Requirements elicitation is a cyclic process True correct False incorrect **MC** Functional requirements capture the intended behavior of the system. True correct False incorrect **MC** Does software wear & tear by decomposition ? Yes incorrect No correct **MC** _____ contains the navigation menu, or other navigation functionality for the page. sectionincorrect headerincorrect nav correct aside incorrect **MC** To insert a video, we use a video tag and set its src attribute to a local or remote URL containing a playable movie. True correct False incorrect **MC** For displaying a list horizontally, we can use _____ <dd> incorrect display:inline correct <dt> incorrect type incorrect		
	MC Which statement related to barcode scanning is correct? Barcode scanning initially reduces medication administration time. incorrect Barcode scanning initially increases medication administration time. correct Barcode scanning has been found to be fail safe. incorrect Barcode scanning has been found to be too expensive for practical use. incorrect **MC** Some specialists recommend expanding the "five rights" of drug administration to include which other right? Right dosage incorrect Right reason correct Right time incorrect Right route incorrect **MC** Medication errors can be reduced by using which of the communication method: RABT incorrect SBAR correct SABT incorrect ABRS incorrect **MC** Which statement about barcode scanning is correct? Barcode scanning initially reduces medication administration time incorrect Barcode scanning initially increases medication administration time. correct Barcode scanning has been found to be fail safe. incorrect Barcode scanning has been found to be too expensive for practical use. incorrect **MC** Which of the following is not a mechanism for pharmacokinetic analysis? Compartment analysis incorrect Non compartment analysis incorrect Physiologic modeling incorrect Human model correct	**CO3**	
	MC Which is the sequence submission system in EMBL? Entrez incorrect Webin correct Sakura incorrect Seqin incorrect **MC** Analysing or comparing entire genome of species Bioinformatics incorrect Genomics correct Proteomics incorrect Pharmacogenomics incorrect	**CO4**	

	MC What is the approximate base pairs of human genome? 2 billion base pairs incorrect 3 billion base pairs correct 4 billion base pairs incorrect 5 billion base pairs incorrect **MC** Transcription process involves which of the following Conversion of DNA into mRNA correct Conversion of RNA into DNA incorrect Conversion of DNA into protein incorrect Conversion of protein into DNA incorrect **MC** Primary database defines which of the following? storing and making sequence data available. incorrect they can be accessed freely by anyone around the world incorrect DDBJ, NCBI, ENA forms a repository of Nucleotide Sequence Database Collaboration incorrect All of the above correct		
	MC Which of the following is a program that models the pattern recognition capability of human brain. An expert system incorrect Artificial intelligence incorrect Neural network correct Development engine incorrect **MC** The accounting system is _____ whereas the demand forecasting is _____. Deterministic, probabilistic correct Probabilistic, deterministic incorrect Open, close incorrect Close, open incorrect **MC** If a university sets up a web based information system that faculty could access to record student grade and to advice students, that would be an example of a/an: CRM incorrect Intranet correct ERP incorrect Extranet incorrect None of the above incorrect **MC** The general transformation phases for information is: Information to data to knowledge incorrect Knowledge to data to information incorrect Data to knowledge to information incorrect Data to information to knowledge correct None of the above incorrect **MC** The majority of publically available internet information sources are: Created in XML incorrect Structured information incorrect Normal information incorrect Unstructured information correct None of the above incorrect **MC** Which statement regarding records management is correct: Is a discipline limited to digitised paper documents incorrect Is a discipline limited to library books incorrect Is a discipline limited to paper documents incorrect Is a discipline limited to information contained in databases incorrect None of the above correct	**CO5**	