

Punjab Engineering College (Deemed to be University), Chandigarh

**Quiz III (19201)**

Subject: Python Programming (CSN213)

Class: B.Tech. (CSE) 3rd Sem

MM: 10              Time allowed: 30 min

Name: \_\_\_\_\_

SID: \_\_\_\_\_

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**Schema: Customers, Employees, Orders, Order\_details, Products**

1. Count current and discontinued products.
  2. Find Product list (name, minimum\_reorder\_quantity, quantity\_per\_unit) where target\_level is less than the reorder\_level.
  3. Find Product list (name, category) of five most expensive products (standard\_cost) in descending order.
  4. Find the product\_name whose order\_detail\_status is 'Allocated'.
  5. Update first\_name of customers from "Frank" to "Franklin".
  6. Delete rows from orders where order\_status is 'On Hold'.
  7. Find list of customers, the OrderID and date of any orders they have made.
  8. Find the customer who has placed the maximum number of orders.
  9. Find the product details on which discount is greater than 5.
  10. Find the employee detail is 'Shipped'.
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3.	<p><b>Write the code with output:</b></p> <p>(i) Write a function named <i>check_repeated</i> that picks a random word from the list that does not have any repeated letters. Input should be a list of at least ten words, some of which have repeated letters and some which don't.</p> <p>(ii) Write a function named <i>ordered_three</i> that is passed three integers, and returns true if the three integers are in order from smallest to largest, otherwise it returns false.</p>	5+5
4.	<p>"collections" implements specialized container datatypes providing alternatives to Python's general purpose built-in containers, dict, list, set, and tuple. One of the specialized container datatypes is "deque" which supports functionality of double ended queue. Below are initialization and some methods supported by "deque" with their definitions.</p> <p><i>class collections.deque([iterable[, maxlen]]):</i> Returns a new deque object initialized left-to-right (using <i>append()</i>) with data from <i>iterable</i>. If <i>iterable</i> is not specified, the new deque is empty. If <i>maxlen</i> is not specified or is None, deques may grow to an arbitrary length. Otherwise, the deque is bounded to the specified maximum length.</p> <p><i>append(x):</i> Add <i>x</i> to the right side of the deque.</p> <p><i>appendleft(x):</i> Add <i>x</i> to the left side of the deque.</p> <p><i>extend(iterable):</i> Extend the right side of the deque by appending elements from the iterable argument.</p> <p><i>extendleft(iterable):</i> Extend the left side of the deque by appending elements from <i>iterable</i>. Note, the series of left appends results in reversing the order of elements in the iterable argument.</p> <p><i>index(x[, start[, stop]]):</i> Return the position of <i>x</i> in the deque (at or after index <i>start</i> and before index <i>stop</i>). Returns the first match or raise <i>ValueError</i> if not found.</p> <p><i>pop():</i> Remove and return an element from the right side of the deque. If no elements are present, raises an <i>IndexError</i>.</p> <p><i>popleft():</i> Remove and return an element from the left side of the deque. If no elements are present, raises an <i>IndexError</i>.</p> <p><i>remove(value):</i> Remove the first occurrence of <i>value</i>. If not found, raises a <i>ValueError</i>.</p> <p>Example.</p> <pre>&gt;&gt;&gt; from collections import deque &gt;&gt;&gt; d = deque([1,2,3]) &gt;&gt;&gt; d.pop() 3</pre> <p>Using above supported methods, implement stack and queue.</p>	5+5

**Punjab Engineering College (Deemed to be University), Chandigarh**  
**Mid-Term Examination 2019**

Programme: B.Tech.  
 Course Name: Python Programming  
 Maximum Marks: 40

Year/Semester: 2<sup>nd</sup> year/19201  
 Course Code: CSN213  
 Time: 1 Hr 30 Minutes

**Notes:**

- All questions are compulsory.
- Unless stated otherwise, the symbols have their usual meanings in context with subject. Assume suitably and state, additional data required, if any.

Q. No.		Marks
1.	<p>Write <b>one line</b> code for the following task. Code longer than one line will attract zero marks.</p> <p>a) List of elements at odd indices of a list L. Assume list L exists already.</p> <p>b) List of odd elements of a list L. Assume list L exists already.</p> <p>c) List of numbers between 2000 and 4000 (both included) which are either "divisible by 5" or "divisible by 3 and has 7 at the units place"</p> <p>d) Create a dictionary where value is square of key in range 1 to R(both included). Assume R exist already.</p> <p>e) List of list of size MxN where element is 0 if (row index + column index) is divisible by two else 1. Index starts from 0. Assume M and N exists already.</p>	5*2
2.	<p>There exist a file which stores pairs of name and JobType in following format i.e. name followed by its JobType in next line and so on.</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p><b>Name1</b>  <b>Assistant Professor</b>  <b>Name2</b>  <b>Associate Professor</b>  <b>Name3</b>  <b>Professor</b>  <b>Name4</b>  <b>Assistant Professor</b>                      ...</p> </div> <p>(i) Write the code, if the user enters a name, it outputs the JobType part of the first pair matching the name. If no match is found, it outputs "No match found".</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p><b>Input: Name1</b>  <b>Output: Assistant Professor</b></p> </div> <p>(ii) Using the created file, print all the names corresponding to the each JobType. Suppose, if the user enters JobTypes, it outputs all names matches. Which data structure would you use to print the output?</p> <div style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p><b>Output: JobType1: (&lt;Name1&gt;, &lt;Name2&gt;...), JobType2: (&lt;Name1&gt;, &lt;Name2&gt;...)</b></p> </div>	5+5