

## CCEE Mock-II | ADS & DBT

Total points 22/40 ?

I hope you all came prepared for this and going to take this test seriously. Consider this as your actual CCEE and don't fall in any of the malpractices because obviously this is for your preparation purpose only. Also, do analyse the concept where you lagged in this paper. All the best.

The respondent's email (**amolgavit158121@gmail.com**) was recorded on submission of this form.

0 of 0 points

Name \*

Amol Gavit

PRN (12 Digits) \*

250240320013



Centre \*

Dropdown

Kharghar ▼

## Questions

22 of 40 points

✓ Which of the following conditions has to be satisfied for INNER JOIN to work? \*1/1

- ☐ A. Columns used for joining must have same name
- ☒ B. Columns used for joining can have same or different name
- ☐ C. Columns used for joining must have different names
- ☐ D. Columns used for joining must have different names



✓ To specify a normal join, using the keyword inner is? \*

1/1

- ☐ A. Mandatory
- ☒ B. Optional
- ☐ C. Independent
- ☐ D. Free



✓ The following query produces same result like Equi Join  
`SELECT * FROM table1 JOIN table2 ON table1.column_name =  
table2.column_name`

\*1/1

- ☒ a. True
- ☐ b. False
- ☐ c. Tukka Zindabaad
- ☐ d. Jai mata di



✓ Consider the following tables and answer the question 1 to 2.

\*1/1

Table: TRAVEL

NO	NAME	TDATE	KM	CODE	NOP
101	Janish Kin	2015-11-13	200	101	32
103	VedikaSahai	2016-04-21	100	103	45
105	Tarun Ram	2016-03-23	350	102	42
102	John Fen	2016-02-13	90	102	40
107	Ahmed Khan	2015-01-10	75	104	2
104	Raveena	2016-05-28	80	105	4

1 SELECT COUNT (\*), CODE FROM TRAVEL GROUP BY CODE HAVING  
COUNT(\*)>1 ;

What will be output of following query

☐ a. 1, 102

☒ b. 2, 102

☐ c. 2, 101

☐ d. 2, 105



✓ 2. Select min(TDATE) from travel \*

What will be the output of following query?

1/1

- ☐ a. 2015-11-13
- ☐ b. 2016-04-21
- ☐ c. 2016-02-13
- ☒ d. 2015-01-10



✓ The data in MongoDB has a flexible schema? \*

1/1

- ☒ a. True
- ☐ b. False
- ☐ c. Mongo ka to nhin pta but I am flexible
- ☐ d. Resume m bhi likha h



✓ A record in MongoDB is a \_\_\_\_.\*

1/1

- ☒ a. Document
- ☐ b. Table
- ☐ c. Application
- ☐ d. None of the mentioned above



✓ Consider attributes ID, CITY and NAME. Which one of this can be considered as a super key?

\*1/1

- ☐ a) NAME
- ☒ b) ID
- ☐ c) CITY
- ☐ d) CITY, ID



✗ Course(course\_id,sec\_id,semester) \*0/1

Here the course\_id,sec\_id and semester are \_\_\_\_\_ and course is a \_\_\_\_\_

- ☐ a) Relations, Attribute
- ☐ b) Attributes, Relation
- ☒ c) Tuple, Relation
- ☐ d) Tuple, Attributes

✗

Correct answer

- ☒ b) Attributes, Relation

✓ The CREATE TRIGGER statement is used to create the trigger. THE \_\_\_\_\_ \*1/1  
clause specifies the table name on which the trigger is to be attached.  
The \_\_\_\_\_ specifies that this is an AFTER INSERT trigger.

- ☐ a) for insert, on
- ☒ b) On, for insert
- ☐ c) For, insert
- ☐ d) None of the mentioned

✓

✓ Create procedure dept\_count proc(in dept name varchar(20),  
out d count integer)  
begin  
select count(\*) into d count  
from instructor  
where instructor.dept name= dept count proc.dept name  
end

\*

1/1

Which of the following is used to call the procedure given above ?

a)Declare d\_count integer;

b)Declare d\_count integer;  
call dept\_count proc('Physics', d\_count);

c)Declare d\_count integer;  
call dept\_count proc("Physics");

d)Declare d\_count;  
call dept\_count proc('Physics', d\_count);

☐ A

☒ B

☐ C

☐ D





✗ Create function dept count(dept\_name varchar(20)) \*

0/1

```
begin
declare d count integer;
select count(*) into d count
from instructor
where instructor.dept_name= dept_name
return d count;
end
Find the error in the the above statement.
```

- ☐ a) Return type missing
- ☐ b) Dept\_name is mismatched
- ☐ c) Reference relation is not mentioned
- ☒ d) All of the mentioned

✗

Correct answer

- ☒ a) Return type missing

✓ Point out the wrong statement. \*

1/1

- ☐ a) Stored procedure can accepts input and output parameters
- ☒ b) Stored procedure can returns multiple values using input parameters ✓
- ☐ c) Using stored procedure, we can Select,Insert,Update,Delete data in database
- ☐ d) None of the mentioned

✗ Which statement is correct to remove an Index from MySQL Database? \* 0/1

- ☐ a. DROP INDEX Index\_Name;
- ☐ b. ALTER TABLE Table\_Name DROP INDEX Index\_Name;
- ☒ c. DROP INDEX Index\_Name ON Table\_Name; ✗
- ☐ d. DROP INDEX Table\_Name.Index\_Name;

Correct answer

- ☒ b. ALTER TABLE Table\_Name DROP INDEX Index\_Name;

✗ Select the correct syntax of SELECT TOP clause? \*

0/1

- ☐ a. SELECT TOP name
- ☒ b. SELECT TOP column
- ☐ c. SELECT TOP FROM
- ☐ d. SELECT TOP Number

✗

Correct answer

- ☒ d. SELECT TOP Number

✓ Which of the following clause cannot be optional in SQL SELECT Statement?

\*1/1

- ☐ a. WHERE
- ☐ d. GROUP BY
- ☐ c. ORDER BY
- ☒ d. None of the above

✓

✓ Using TIME\_FORMAT() function, time can be retrieved in – \*

1/1

- ☐ a. 12-hour format
- ☐ b. 24-hour format
- ☒ c. Both A. and B.
- ☐ d. None of the above



✗ Savepoint command is used with \_\_\_\_ command. \*

0/1

- ☐ a. Commit
- ☒ b. Transaction
- ☐ c. Rollback
- ☐ d. None of the above



Correct answer

- ☒ c. Rollback

✓ Which of the following is TRUE about SQL Concatenate?

\*1/1

- a. It is also possible to combine more than two strings into one string.
- b. Two columns of the table may be used to store the strings that are to be combined, or they may just be stored individually without being stored into the table.
- c. When the concatenated strings are stored in separate columns of a table, they are stored in the column in which they were initially stored.
- d. All of the above

- ☐ A
- ☐ B
- ☐ C
- ☒ D



✓ Which of the following is among the 12 Codd's Rules? \*

1/1

- a. View Updating Rule
- b. Relational Level Operation Rule
- c. Distribution Independence Rule
- d. Relational Data Integrity Rule
- e. Guaranteed Information Updating Rule

- ☐ Only d
- ☐ d & e
- ☒ a,b,c
- ☐ All of the above



✗ A binary search tree  $T$  contains  $n$  distinct elements. What is the time complexity of picking an element in  $T$  that is smaller than the maximum element in  $T$ ? \*0/1

- ☐ 1.  $\Theta(1)$
- ☐ 2.  $\Theta(n \log n)$
- ☒ 3.  $\Theta(\log n)$
- ☐ 4.  $\Theta(n)$

✗

Correct answer

- ☒ 4.  $\Theta(n)$

✗ Convert the pre-fix expression to in-fix: \*  
-\*+ABC\*-DE+FG

0/1

- ☐ 1.  $(A-B)*C+(D*E)-(F+G)$
- ☐ 2.  $(A+B)*C-(D-E)*(F+G)$
- ☐ 3.  $(A+B-C)*(D-E)*(F+G)$
- ☒ 4.  $(A+B)*C-(D*E)-(F+G)$

✗

Correct answer

- ☒ 2.  $(A+B)*C-(D-E)*(F+G)$

✗ What is the worst case time complexity of inserting  $n$  elements into an empty linked list, if the linked list needs to be maintained in sorted order? \*.../1

- ☐ 1.  $\Theta(n)$
- ☐ 2.  $\Theta(n \log n)$
- ☒ 3.  $\Theta(n^2)$
- ☐ 4.  $\Theta(1)$

✗

No correct answers



✗ The average number of key comparisons required for a successful search \*0/1 for sequential search on n items is

☒ 1.  $n/2$

✗

☐ 2.  $n-1/2$

☐ 3.  $n+1/2$

☐ 4. None

Correct answer

☒ 3.  $n+1/2$

✗ The height of a tree is the length of the longest root-to-leaf path in it. The \*0/1  
maximum and minimum number of nodes in a binary tree of height 5 are

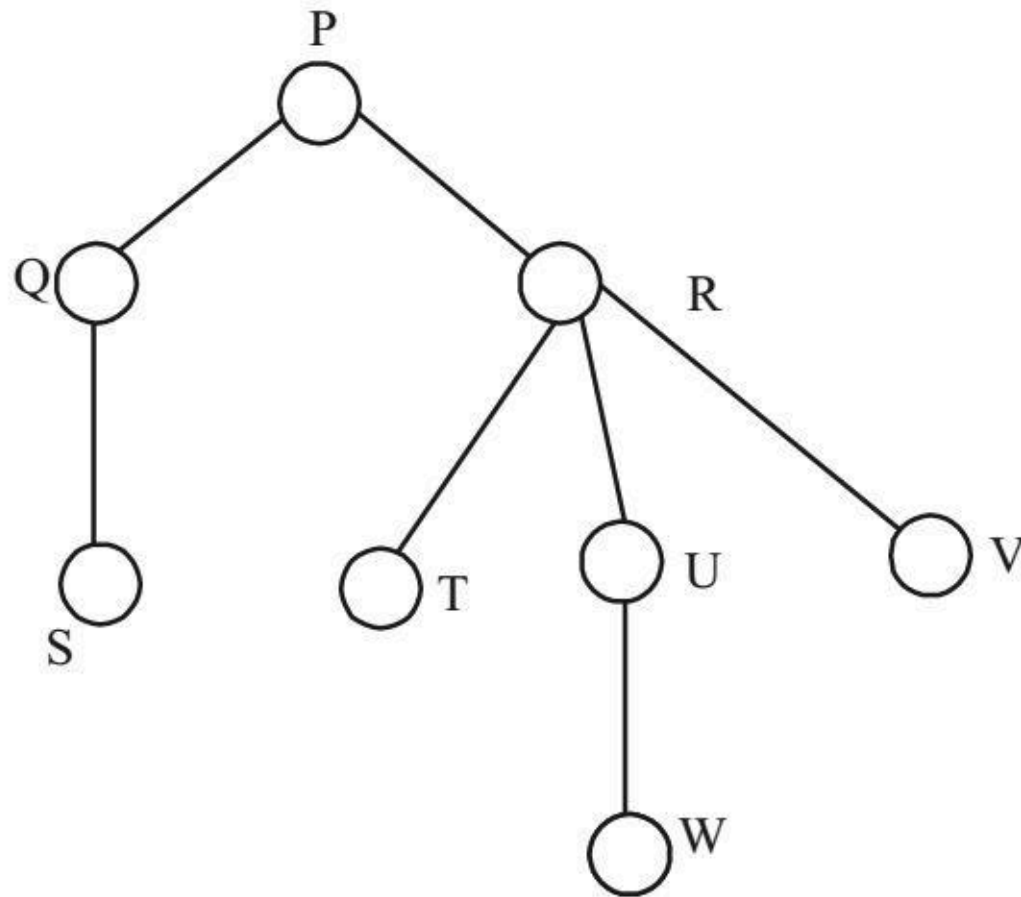
- ☐ 1. 63 and 6, respectively
- ☒ 2. 64 and 5, respectively
- ☐ 3. 32 and 6, respectively
- ☐ 4. 31 and 5, respectively

✗

Correct answer

- ☒ 1. 63 and 6, respectively

Consider the following rooted tree with the vertex labeled P as the root :



✓ Consider above image : \*1/1  
The order in which the nodes are visited during an in-order traversal of the tree is

- ☒ 1. SQPTRWUV
- ☐ 2. SQPTUWRV
- ☐ 3. SQPTWUVR
- ☐ 4. SQPTRUWV



✗ Which of the following is/are correct inorder traversal sequence(s) of binary search tree(s)? \*0/1

I. 3, 5, 7, 8, 15, 19, 25

II. 5, 8, 9, 12, 10, 15, 25

III. 2, 7, 10, 8, 14, 16, 20

IV. 4, 6, 7, 9 18, 20, 25

☐ a. I and IV only

☐ b. II and III only

☒ c. II and IV only

☐ d. II only

✗

Correct answer

☒ a. I and IV only

✗ What are the worst-case complexities of insertion and deletion of a key in  $\Theta(n)$  a binary search tree?

Note :  $\Theta = \text{theta}$

- ☐ a)  $\Theta(n)$  for both insertion and deletion
- ☐ b)  $\Theta(\log n)$  for both insertion and deletion
- ☒ c)  $\Theta(n)$  for insertion and  $\Theta(\log n)$  for deletion
- ☐ d)  $\Theta(\log n)$  for insertion and  $\Theta(n)$  for deletion

✗

Correct answer

- ☒ a)  $\Theta(n)$  for both insertion and deletion

✗ Which of the following is TRUE? \*

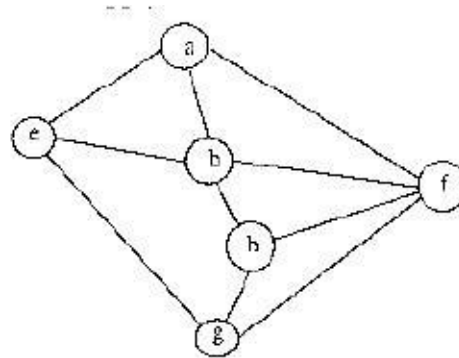
0/1

- ☐ 1. The cost of searching an AVL tree is  $\theta(\log n)$  but that of a binary search tree is  $O(n)$
- ☒ 2. The cost of searching an AVL tree is  $\theta(\log n)$  but that of a complete binary tree is  $\theta(n \log n)$  ✗
- ☐ 3. The cost of searching a binary search tree is  $O(\log n)$  but that of an AVL tree is  $\theta(n)$
- ☐ 4. The cost of searching an AVL tree is  $\theta(n \log n)$  but that of a binary search tree is  $O(n)$

Correct answer

- ☒ 1. The cost of searching an AVL tree is  $\theta(\log n)$  but that of a binary search tree is  $O(n)$

Consider the following graph



✓ Among the following sequences:

\*

1/1

(I) a b e g h f

(II) a b f e h g

(III) a b f h g e

(IV) a f g h b e

Which are depth first traversals of the above graph?

☐ Option 1 a) I, II and IV only

☐ b) I and IV only

☐ c) II, III and IV only

☒ d) I, III and IV only





✗ In a binary tree, the number of internal nodes of degree 1 is 5, and the number of internal nodes of degree 2 is 10. The number of leaf nodes in the binary tree is \*0/1

☐ 1. 10

☐ 2. 11

☒ 3. 12

☐ 4. 15

✗

Correct answer

☒ 2. 11

✓ The result evaluating the postfix expression  $10\ 5 + 60\ 6 / * 8 -$  is \* 1/1

☐ 1. 284

☐ 2. 213

☒ 3. 142

☐ 4. 71

✓

✓ Which of the following is essential for converting an infix expression to the postfix form efficiently ? \*1/1

- ☒ 1. An operator stack
- ☐ 2. An operand stack
- ☐ 3. An operand stack and an operator stack
- ☐ 4. A parse tree



✓ Consider the following statements:

\*1/1

- i. First-in-first out types of computations are efficiently supported by STACKS.
- ii. Implementing LISTS on linked lists is more efficient than implementing LISTS on an array for almost all the basic LIST operations.
- iii. Implementing QUEUES on a circular array is more efficient than implementing QUEUES on a linear array with two indices.
- iv. Last-in-first-out type of computations are efficiently supported by QUEUES.

Which of the following is correct?

- ☒ 1. (ii) and (iii) are true
- ☐ 2. (i) and (ii) are true
- ☐ 3. (iii) and (iv) are true
- ☐ 4. (ii) and (iv) are true



✗ Which of the following is a bad example of recursion ? \*

0/1

- ☐ 1. Factorial
- ☐ 2. Fibonacci numbers
- ☐ 3. Tower of Hanoi
- ☒ 4. Tree traversal

✗

Correct answer

- ☒ 2. Fibonacci numbers

✗ The number of rotations required to insert a sequence of element 9,6,5,8,7,10 into an empty AVL tree is ?

\*0/1

- ☐ 1. 0
- ☐ 2. 1
- ☒ 3. 2
- ☐ 4. 3

✗

Correct answer

- ☒ 4. 3

✗ A Circular queue has been implemented using singly linked list where each node consists of a value and a pointer to next node. We maintain exactly two pointers FRONT and REAR pointing to the front node and rear node of queue. Which of the following statements is/are correct for circular queue so that insertion and deletion operations can be performed in  $O(1)$  i.e. constant time. \*0/1

- I. Next pointer of front node points to the rear node.
- II. Next pointer of rear node points to the front node.

- ☐ 1. I only
- ☐ 2. II only
- ☒ 3. Both I and II
- ☐ 4. Neither I nor II

✗

Correct answer

- ☒ 2. II only

✓ How many rotations are required during the construction of an AVL tree if \*1/1  
the following elements are to be added in the given sequence?  
35,50,40,25,30,60,78,20,28

- ☐ 1. 2 left rotations, 2 right rotations
- ☐ 2. 2 left rotations, 3 right rotations
- ☒ 3. 3 left rotations, 2 right rotations
- ☐ 4. 3 left rotations, 1 right rotations



✗ Consider the tree arcs of a BFS traversal from a source node W in an \*0/1  
unweighted, connected, undirected graph. The tree T formed by the tree  
arcs is a Data Structure for computing.

- ☒ 1. the shortest path present between every pair of vertices.
- ☐ 2. the shortest path from W to every vertex in the Graph.
- ☐ 3. the shortest paths from W to only those nodes that are leaves of T.
- ☐ 4. the longest path in the Graph



Correct answer

- ☒ 2. the shortest path from W to every vertex in the Graph.



✓ The worst case running times of Insertion sort, Merge sort and Quick sort, respectively, are: \*1/1

Note :  $n^2 = n \text{ square}$

- ☐ 1.  $\Theta(n \log n)$ ,  $\Theta(n \log n)$  and  $\Theta(n^2)$
- ☐ 2.  $\Theta(n^2)$ ,  $\Theta(n^2)$  and  $\Theta(n \log n)$
- ☐ 3.  $\Theta(n^2)$ ,  $\Theta(n \log n)$  and  $\Theta(n \log n)$
- ☒ 4.  $\Theta(n^2)$ ,  $\Theta(n \log n)$  and  $\Theta(n^2)$



Feedback

0 of 0 points

Difficulty level of mock \*

⌵ Dropdown

Moderate



From now onwards, I will give my best in everything in my life without any excuses. Because I know, problem is the part and parcel of life. We should always look for solutions. \*

☒ I PROMISE

How was your experience ?

Well the DBT part is easy, but ADS is quit difficult for me. It clearly indicates that i'm lacking in ADS. Need to study the time compaxities.

This content is neither created nor endorsed by Google. - [Contact form owner](#) - [Terms of Service](#) - [Privacy Policy](#).

Does this form look suspicious? [Report](#)

Google Forms





