

ANDHRA UNIVERSITY

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All Official letters,
packages etc, should be
addressed to the Registrar
by designation and not by
name.

Visakhapatnam,
Dt: 15-11-2021

No. L I (2)/U.G. Courses/MQP/2021

From: **THE REGISTRAR**

To

The Controller of Examinations,
Andhra University,
Visakhapatnam.

Sir,

Sub: Approval of Model Question Paper – Reg.

Ref: B.Sc. Model Question Paper, received from the Board of Studies in
Chairman, U.G. courses.

With reference to the above, I am by direction to inform you that the Choice Based
Credit System, U.G. Courses (w.e.f. 2020-2021) Model Question Paper ~~is~~ has been
approved as detailed below:

S.No.	Subject	Name & Designation	Name of the College/Others	Model question papers	Name of the Paper
1.	B.Sc. Bachelor of Computer Applications (BCA)	Chairman, Board of Studies in Computer Science (U.G.)	Prof. S. Pallam Setty, Computer Science and System Engineering, Andhra University	II-Semester	Data Structures using C

Hence, I request to arrange to circulate the same among the Teaching Staff and Students concerned and placed in A.U. website.

Yours faithfully,

(K. UMA MAHESWARI)
DEPUTY REGISTRAR (ACADEMIC)

Copies to:

1. The Dean of Academic Affairs, A.U., VSP.
2. The Dean, U.G. & P.G, Professional Courses, A.U., Vsp.
3. The Dean, CDC, A.U., Vsp.
4. The Dean, Confidential, A.U., Vsp.
5. All Principals, A.U. Affiliated Colleges Offered in U.G. courses.
6. The Superintendent S.I Section for taking necessary further action.
7. The Secretary to V.C., Rector Table, P.A. to Registrar, A.U., Vsp.
8. The Director, Computer Centre, A.U., Vsp.
9. O.C. & O.O.F.

Model paper
B.Sc with Computer Science
Data Structures using C

Answer any five questions first question compulsory.
Time:3hrs

Max Marks:75

- 1.a.Differentiate between linear and non linear Data-Structure? 5x3=15
b.What are the different applications of Queue and Stack?
c.What are binary trees?Expalin how it is represented?
d.with an example, explain the algorithms of postorder to inorder traversal?
e.Describe any two terms from the following : Node, Null pointer, empty list with respect to linear linked list with diagram?
- 2.a.What are the different Data types and their representations? 5x12=60
b.What are the different approaches to designing an algorithm?
- 3.a.What is Multidimensional Array.Explain in detail?
b.What is pointer.Write a simple C program?
- 4.a.Differantiate between array and stack?
b.Explain in detail about Circular Queues and Priority Queues?
- 5.a.What is Bubble Sort.Write a c program for Bubble Sort?
b.What is merge sort.Explain with an example?
- 6.a.What are binary trees?How it is represented.
b.What are the applications of Graphs?
- 7.a.Convert infix to postfix notation $a+(b*c-(d/e^f)*g)*h$?
b.What is inorder. How to Convert inorder to postorder with an example?
- 8.a.What is Spanning tree.Describe taking an example 'linked representation' of graph?
b.Distinguish between Breadth First Search(BFS) and Depth First Search in the conctect of graphs?

prof.S.Pallamsetty
Computer Science and System Enginerring
Andhra University