



MONAD University
N.H. 24, Delhi Hapur Road,
Village & Post Kastla, Kasmabad, P.O Pilkhuwa - 245304,
Dist. Hapur (U.P.), India

Assignment No: 1

Programme (Branch)/Sem:.....

Course Name:-.....

Submitted by :-

Candidate's Name:.....

Enrollment No.:-

Roll No. :-

Date of Submission:-

Submitted to:-

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Programme: B.Tech (CSE-IIIrd)
Course Name: Digital Logic Design
Course Code: BTCS-211
Assignment No: 1
Due date of submission: 11.09.2017

Instructions

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HoD within the due date.
3. Write your Name, Programme and Enrollment No. clearly at the top of page.

Question No. 1.

- a) Convert binary number $(11010.11)_2$ and hexadecimal number $(B65F)_{16}$ into decimal numbers $()_{10}$.
- b) Convert octal number $(673.124)_8$ and hexadecimal number $(306.D)_{16}$ into binary numbers $()_2$.

Question No. 2.

- a) Calculate the 9's and 10's complement of 546700 and 012398.
- b) Using 10's complement, subtract $72532-3250$ and $3250-72532$.



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Programme: B.Tech (CSE-IIIrd)
Course Name: Data Structures Using - C
Course Code: BTCS-212
Assignment No: 1
Due date of submission: 11.09.2017

Instructions

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HoD within the due date.
3. Write your Name, Programme and Enrollment No. clearly at the top of page.

Question No. 1.

a) As you are aware of Data Structure. You can define it and can explain the different data structures in detail. Do it.

b) As you are aware of analysis of algorithms. You can explain the asymptotic notations (Big O, Big Ω and Big θ) in detail with example of each. Do it.

Question No. 2.

a) As you are aware of an array. You will learn more, if you explain the insertion and deletion operation on 1-D array with example. Go ahead.

b) As you are aware of 2-D array. You can explain the matrix multiplication algorithm with example. Do it.



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Programme: B.Tech (CSE-IIIrd)
Course Name: Engineering Mathematics–III
Course Code: BTCS-213
Assignment No: 1
Due date of submission: 11.09.2017

Instructions

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HoD within the due date.
3. Write your Name, Programme and Enrollment No. clearly at the top of page.

Question No. 1.

- a) We know very well that harmonic function is a twice continuously differentiable function .If $f(z)$ is a harmonic function of z , show that

$$\left\{ \frac{\partial}{\partial x} |f(z)| \right\}^2 + \left\{ \frac{\partial}{\partial y} |f(z)| \right\}^2 = |f'(z)|^2.$$

- b) We know very well that, if $f(z)$ is analytic within and closed contour C except at finite no. of poles $z_1, z_2, z_3, \dots, z_n$ within in C and let γ being the circle $|z - z_0| = r$, then

$$\int_C f(z) dz = \int_{\gamma_1} f(z) dz + \int_{\gamma_2} f(z) dz + \dots + \int_{\gamma_n} f(z) dz$$

Use residue calculus to evaluate the following integral:

$$\int_0^{2\pi} \frac{1}{5 - 4\sin\theta} d\theta.$$

Question No. 1.

- a) In the mathematical field of complex analysis, contour integration is a method of evaluating certain integrals along paths in the complex plane. Contour integration is closely related to the calculus of residues, a method of complex analysis. By contour integration, prove that

$$\int_0^x \frac{\sin mx}{x} dx = \frac{\pi}{2}.$$

b) Fit a straight line to the following data:

X	0	1	2	3	4
Y	1.0	2.9	4.8	6.7	8.6



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Programme: B.Tech (CSE-IIIrd)
Course Name: Discrete Mathematical Structures
Course Code: BTCS-214
Assignment No: 1
Due date of submission: 11.09.2017

Instructions

1. Write the responses to the assignment in your own handwriting.
2. Submit the responses to your HoD within the due date.
3. Write your Name, Programme and Enrollment No. clearly at the top of page.

Question No. 1.

- a) As you are aware of the mathematical logics, briefly explain the statements and their types.
- b) What is tautology and contradiction?

Question No. 2.

- (a) As you are aware of the Boolean Algebra, explain AND, OR, NOT Operations.
- (b) What is the principle of duality?



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Programme: B.Tech (CSE-IIIrd)
Course Name: Web Technology
Course Code: BTCS-215
Assignment No: 1
Due date of submission: 11.09.2017

Instructions

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2. Submit the responses to your HoD within the due date.
3. Write your Name, Programme and Enrollment No. clearly at the top of page.

Q.1

- a) You are aware of Web Technology. You will learn more, if you explain the terminology of web technology in details with web page and web portal.
- b) Explain all table, list, formatting and heading tags.

Q.2

- a) As you are aware of form tag in html. So, explain all the form tags with examples and create student registration form in HTML.
- b) You are aware of frame. You will learn more, if you explain all use of frame with frameset. Go ahead.



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Programme: B.Tech (CSE-IIIrd)
Course Name: Essentials of Management
Course Code: BBA-111
Assignment No: 1
Due date of submission: 11.09.2017

Instructions

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2. Submit the responses to your HoD within the due date.
3. Write your Name, Programme and Enrollment No. clearly at the top of page.

Question No. 1.

- a) What is meant by planning? What is importance of planning in production?
- b) Write briefly about the functions of management.

Question No. 2.

- a) Labour and management-friends or foes? They cannot be friends because you do not do business with friends .They cannot be foes because they need each other. 'Discuss this statement and its applicability in the Indian context.
- b) What is missing in the organization relations system that is critical to make it harmonious and productive?