मैट्स विश्वविद्यालय मुक्त एवं दूरवर्ती शिक्षा कार्यक्रम आरंग, रायपुर (छ0ग0)

MATS UNIVERSITY OPEN & DISTANCE LEARNING CENTRE ARANG, RAIPUR (C.G.)

सत्रीय कार्य / Assignment Work – 2016 - 17

BCA (1ˢᵗ Year)

Max Marks – 30   Min Marks – 10

निर्देश : सत्रीय कार्य के प्रत्येक विषय में कुल 30 अंक हैं । सभी प्रश्नों के अंक समान होंगे । सभी प्रश्न हल कीजिए । (Assignment Work of each paper carries 30 Marks. All questions carry equal marks. Attempt all questions.)

WINDOWS AND M. S. OFFICE - I

1. Explain the different types of views of files and folders in Windows XP.
2. What do you understand by Linking and Embedding?
3. Write notes on **(Any three):** (a) Menu Bar, (b) Customizing Spelling Check, (c) Autocorrect, (d) Mail Merge and (e) Advanced Text Formatting.
4. What is Pivot Table? Explain the process of creating a Pivot Table.
5. Explain the steps for performing following tasks:
   (a) Replying and Forwarding Messages in Outlook, (b) Inserting Header and Footer in a slide, and (c) Publishing a presentation or HTML file to the Web.

COMMUNICATIVE ENGLISH - II

1. What is Language? Describe various means of communication.
2. How many different phases a group discussion can be categorically divided into?
3. How do you indentify different tenses in a sentence? Give examples of present perfect, past perfect and future perfect tense.
4. What are the six points of form in all kinds of letters to be taken care of? What are they?
5. Draft a specimen of British style C.V.

FUNDAMENTALS OF COMPUTER & INFORMATION TECHNOLOGY - III

1. What are super computers? Differentiate between analog and digital computers?
2. What is Memory? Explain main memory and its types in detail.
3. What is DOS? Explain various internal commands available in DOS.
4. What do you understand by character representation, binary arithmetic, dragging and scanner?
5. (a) Write down the steps of booting process in Linux?
   (b) Explain functions of the following commands: PATH, CHKDSK, MODE, RENAME and VOL.

OBJECT ORIENTED PROGRAMMING WITH C++ - IV

1. What is OOPS? Explain its core concept in detail.
2. What is an array? Explain its memory map and input output operation with example.
3. Explain all types of operators used in C++?
4. With the help of algorithm, write a program to add two matrix of 2x2.
5. What are the different types of constructor? Explain destructor in detail.

DISCRETE MATHEMATICS - V

1. Explain the characteristics of Λ and V as binary operators.
2. If B = [1,2,3,6,7,14,21,42] and for a,b,c,B,a+b and a.b denote the LCM and GCD then show that triple [B,+,.] is a Boolean Algebra.
3. If $A \subseteq B$, then prove that (A X B) $\cap$ (B X A) = A^2.
4. Show that if $f : G \to G^*$ defined from group (G , 0) to (G* , *) is an isomorphism then show that $f\text{-}^1$ = G* $\to$ G is also isomorphism.
5. (a) Show that transformation T = $R^3 \to R^2$ defined by T (a$_1$, b$_2$, c$_3$) = (a - b, a - c) is linear.
   (b) Show that transformation T : $R^2 \to R^3$ given by T (a, b) = (a – b, b – a, - a) is linear.

INTERNET PROGRAMMING - VI

1. Write short notes on: **(Any three)** (a) Proxy Server, (b) URL, (c) ATM, (d) Attachment, and (e) CC & BCC.
2. How many types of hyper text links are there? Explain.
3. Using wizard, explain the process of creating a new website.
4. Explain the entire process of uploading web pages using cute FTP.
5. Write short notes on: (a) Unicode support in JavaScript, (b) Calling Functions, and (c) Uses of Object References.

DIGITAL COMPUTER ORGANIZATION - VII

1. Convert the following decimal numbers into binary numbers:
   (a)$(16)_{10}$ (b) $(0.3125)_{10}$ (c) $(125)_{10}$.
2. What do you understand by ASCII Code? Explain with an example.
3. Using NAND and NOR gates, implement AND, OR and NOT gates.
4. What is Flip-Flop? Explain different types of Flip-Flop.
5. Write short notes on the following:
   (a) Addressing Modes (b) Multiplexer and Demultiplexer, and (c) RAM.

ENVIRONMENTAL STUDIES - VIII

1. What is genetic diversity? What are the threats to bio-diversity?
2. What is the effect of the use of ground water on environment?
3. Define the word pollution. What are the different types of pollution? Explain.
4. What is sustainable development? What are the different effective ways of water harvesting?
5. Describe disaster management and its types.

OPERATING SYSTEM - IX

1. What is an operating system? Explain the tasks performed by an operating system.
2. What is scheduler? Differentiate between Long term scheduler and Short term scheduler.
3. Explain swap space management.
4. What are the methods to solve mutual exclusion? What is semaphore and where is it used?
5. Define file attributes. Explain different file structures.

PROGRAMMING IN "C" - X

1. Write features of C programming. Explain the basic structure of C program.
2. What is Cohesion and Coupling? Explain types of Coupling in detail.
3. What are loops? Differentiate between entry controlled & exit controlled loops. Write a C program using 'for loop'.
4. What do you mean by error? Write down the difference between syntax and logical errors.
5. What is Function? Explain its benefit along with call by value and call by reference.

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