



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

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

सत्रीय कार्य / Assignment Work – 2014-15

**M.Sc (IT) FINAL YEAR**

Max Marks – 30

Min Marks-12

**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.)

**Operation Research - I**

1. What is a operations research model? Discuss the advantages of limitation of good Operations Research model .
2. What is linear programming model? Define property of linear programming modal.
3. Explain sequencing model? Which types of sequencing model?
4. Explain the application of sequencing model .mention different types of sequencing problem you come across.
5. What is a decision? Differentiate between programmed and non programmed decisions

**Advanced Java - II**

1. What is java? Explain basic features of java.
2. What do you mean by looping? What are the different types of loop in the java programming language .briefly explain with their syntax.
3. Discuss the java API Packages.
4. What is a constructor? How do we invoke a constructor? What are its special properties?
5. How to create an array? Explain Multidimensional array.

**Microprocessor and Assembly Language Programming - III**

1. Explain the terms micro operation, control bus, address bus, data bus in computer system.
2. What is difference between microprocessor and micro controller? With Example.
3. What is interrupt in microprocessor? Explain.
4. Comment on different generations of micro processor?
5. Write two names of microprocessors from each generation.

**Numerical Methods and Statistical Analysis - IV**

1. Define decision making instructions in C.
2. Define errors? Explain types of error with example.
3. Define errors in Numerical computations.
4. Find a real root of the equation  $x^3 + 2x - 1 = 0$  by using the iteration method.
5. Find the double root of the equation.

$$x^3 - 2x^2 + 1 = 0$$

**Artificial Intelligence - V**

1. Explain properties of environment.
2. Explain why problem formulation must follow goal formulation.
3. Explain heuristic function.
4. Define Evaluation function.
5. Write short notes on :-  
(1) Logic (2) inference

**Computer Graphics - VI**

1. Describe different areas of applications of computer graphics.
2. Describe the different types of plotters.
3. Explain the steps in DDA line drawing algorithm.
4. What is point clipping and line clipping?
5. Write a short note on perspective projection

**Simulation and Modeling - VII**

1. What is the difference between static and dynamic models?
2. What is an exponential distribution? Explain with an example.
3. What is discrete simulation?
4. What is continuous simulation?
5. Derive an expression for exponential decay models and give one example where it is used.

**Software Engineering - VIII**

1. How do you personally feel about software maintenance? Would you enjoy doing it?
2. What are the skills required to collect, analyze and record software requirements.
3. What is modularity and why is it important?
4. What is data flow design. Explain creation of a structure chart.
5. At What stage do you stop the process of refactoring?

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