

## [FREQUENTLY ASKED QUESTIONS]

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#### Credits

#### **Subject Expert & Presenter**

Dr. M. N. Patel Professor, Dept. of Statistics, I/c Director, K. S. School of Business Management, Gujarat University, Ahmedabad.

#### Subject Co-ordinator

Dr. M. N. Patel Professor, Dept. of Statistics, I/c Director, K. S. School of Business Management, Gujarat University, Ahmedabad.

#### **Editing & Graphics**

Akash Choudhary

#### **Floor Assistant**

Hemant Upadhyaya

#### Multimedia

Gaurang Sondarva

## Camera

Maqbool Chavda

#### Technician

Mukesh Soni Kirit Dave

#### **Technical Assistants & Sound Recording**

Archana Patel Smita Bhatt

#### Helper & Support

Bharat Chauhan Jagdish Jadeja

#### Research

Pooja Khatri Assistant Professor, K. S. School of Business Management, Gujarat University, Ahmedabad.

#### Producer

Dr. P. P. Prajapati Dinesh Goswami

### **FREQUENTLY ASKED QUESTIONS**

#### A-1.What id Dynamic programming?.

A-1.Dynamic programming is a method of solving problem based on the theory of multistage decision process, in which a sequence of interrelated decisions has to be made.

#### Q-2. What is recursive function?

A-2. A function which links the measure of performance of interest of the current stage with the cumulative measure of performance of the previous stages/ succeeding stages as a function of the state variable of the current stage is known as the recurrence function of the current stage.

#### Q-3. What is best recursive function value?

A-3. In a given stage i, the lowest (minimization problem)/ highest (maximization problem) value of the recursive function for a given value of x<sub>i</sub> known as the best recursive function value.

#### Q-4. What is best alternative in a given stage i?

**A-4**. In a given stage i , the alternative corresponding to the best recursive function value for a given value of  $x_i$  is known on the best alternative for that value of  $x_i$ .

#### Q-5.What is backward recursive function?

A-5. Here computation begins from the last stage/ sub problem, and this stage will be numbered at stage 1, while the first sub problem will be numbered as the last stage. This type of recursive function is known as backward recursive function.

#### Q-6. What is forward recursive function?

A-6. While defining the stages of he original problem, the first sub problem will be numbered as stage 12 and last sub problem will be numbered as the last stage. Then , the recursive function will be defined as per this assumption. This type of recursive function is known as forward recursive function.

# Q-7. Which types of problems can be solved by dynamic programming?

A-7. Many types of decision making problems can be solved by dynamic programming. like: Capital budgeting problem, Cargo loading problem etc.