

## भारतीय प्रौद्योगिकी संस्थान कानपुर

## INDIAN INSTITUTE OF TECHNOLOGY KANPUR

औद्योगिक एवम् प्रबन्ध अभियन्त्रण विभाग DEPARTMENT OF INDUSTRIAL & MANAGEMENT ENGINEERING

> पत्रालयः आई०आई०टी०, कानपुर - 208016 (भारत) P.O.: I.I.T., KANPUR - 208016 (India)

## Sealed Quotation is invited for the following items (All items together)

Item Name	Qty	Specifications
DVD for Engineering Design: Understanding the Principles.	1	The DVD outlines the elements of design including the colour, size, texture, line and shape. It teaches how to combine them to achieve the principles of design. It offers examples of design principles in architecture, interior design and product design.
DVD for Strategy by Design: How design Thinking Builds Opportunities.	1	This introduces to three stages of design: inspiration, ideation, and implementation. It shows how to use design thinking process to create products that are desirable to customers.
DVD for Sustainable Green Industrial Design With Ergonomics: Principles and Examples.	1	This set explores design in terms of ergonomic principles and rules. It discusses human factors engineering, aesthetics and usability. It also offers technical interviews and practise demonstrations with designers, manufacturing engineers, and program managers.
DVD for Ergonomics for the 21 <sup>st</sup> century.	1	The DVD offers information designed to prevent ergonomic-related accidents and injuries. It covers basic principles of ergonomics, discusses repetitive strain injuries, and looks at the components of a safety program.
DVD for Gears and Gear Manufacturing	1	This examines the various types of gears, explores gear functions, and traces the production of gears. It defines gear and gear tooth terms and dimensions, including base circle, pitch circle, outside circle, root circle, pitch point, line of action, pressure angle, addendum, dedendum and tooth thickness.
DVD for Manufacturing Process	1	Introducing manufacturing process, this DVD covers topics such as casting, sand casting, permanent mold casting, centrifugal casting, die casting, forging, extrusion, forming, and wire drawing.
DVD for Methods of Production: Job, Batch, and Continuous Flow.	1	This program introduces the different methods of production. It looks at job, or "one off", production; batch production, which uses the same basic equipment to make batches of different products; and continuous flow or mass, production, which is the most well known type of manufacturing. This offers examples of each production method.
DVD for Design for Manufacturing.	1	This program explains how design for manufacture (DFM) policies reduce costs and lower part counts using case studies from Storage Technology, Caterpillar, Xerox, and IBM. It also shows how using such standardized components as predesigned building blocks can expedite product development.
DVD for Rapid Prototyping	1	This DVD discusses the basic principles of rapid prototype and rapid

1 | Page

and Rapid Manufacturing: A Virtual Laboratory Tour and Presentation by the Hong		manufacturing. Featuring case studies and interviews with experts from the Hong Kong PolyU Industrial Centre, it examines methods, tools, and technologies.
Kong PolyU Industrial Centre.		
DVD for Mass Customization: Conversations With Innovators in Manufacturing.	1	This program presents case studies in mass customization that demonstrate why companies must rethink outdated assumptions regarding efficiency and competitiveness.
DVD for Inside a Factory: The New Mini	1	This program examines the process of manufacturing cars. It tours BMW's Mini factory in Oxford, England, and explores the steps of the production process, from order to final assembly. The DVD emphasizes the importance of quality control and shows how the factory uses just-in-time principles to order parts.
DVD for Advanced Difficult Manufacturing Technology Challenges and Working Solutions	1	This set offers complex manufacturing process and system demonstrations involving such advanced methods and tools as practical computer-controlled machines, robotics, and real-time inspection.
DVD for Failure Mode Effects Analysis	1	Explaining the difference between a product and a process risk, this DVD shows how manufacturers can use Failure Mode Effects Analysis (FMEA) documents to reduce the risk of product failure. It includes a case study.
DVD for What Lean Means	1	This program explores the current and potential uses of lean manufacturing. It features George Koenigsaecker, president of Lean Investments, LLC, and Lean Sensei, who analyzes lean concepts as they relate to the operations of Shingo Prize-winning company Hearth & Home Technology and discuss the current state and employee culture of the lean company. The DVD also looks at the management behaviour at Toyota.
DVD for Building a Lean Culture	1	This program shows how HID-Connecticut uses team-work, community involvement, and social interaction among employees to spawn new ideas for improved quality, cost, and delivery. It explains the roles of integrated quality controls and training simulations in 5S, kanban, and value stream mapping.
DVD for Mapping Your Value Stream	1	This DVD shows how the Donnelly Corporation used value stream mapping to reduce inventory and create one-piece flow in assembly. It illustrates such lean manufacturing concepts as kanban card systems, and lights, and inventory trigger points.
DVD for CNC and Robot Integrated Cells and Flexible, Agile, Reconfigurable Manufacturing Systems 1	1	Featuring animations and real-life examples, this set illustrates the basic principles of numerical control (NC) and computer numerical control (CNC) and discusses machine components. It covers CNC machine and robot integrated cells; flexible, agile, reconfigurable manufacturing systems; and CMMS and robots.
DVD for Energy and Resources	1	This DVD examines the uses and consequences of burning coal, oil, and natural gas. It also explores the development of such alternative energy sources as nuclear, hydroelectric, and wind power.
DVD for Alternative Energy Sources	1	This DVD discusses the potential for and development of alternative energy sources. It explores various sources of alternative energy, including wind, solar, biomass, hydropower, and geothermal resources. It also discusses fuel cells.
DVD for Renewable Energy: Wind, Water, and Solar Rays	1	This program explores sources of renewable energy, including solar, biomass, and wind, and looks at means of power generation. It evaluates each source in terms of efficiency in receiving, storing, and

		providing energy.
DVD for Solar Energy: An Inexhaustible Resource.	1	This program considers the potential of solar energy as an alternative to fossil fuels. It questions whether solar energy can satisfy the energy needs of the world production.
DVD for The Science of Sustainability	1	Explains that the earth renews and sustains itself through cycles, this program shows how human interference and consumption interrupt these cycles. It outlines ways to help protect and sustain life on earth.
DVD for Green Science: The Science of Climate Change	1	This DVD explores careers and degrees related to climate change, endangered species, sustainability, energy, recycling, and green design
DVD for Extemporaneous Speaking	1	This DVD offers guidelines for extemporaneous speaking that reduce the anxiety associated with impromptu speaking engagements. It explains such key elements of public speaking as audience identification, writing, and research and discusses preparation and time management.
DVD for The Formal Technical Report	1	Explaining the importance of quality technical reporting, this performance-based program teaches the skills necessary to prepare formal technical reports.
DVD for Technical Speaking: Presentation Skills for Engineering and Technical Professionals	1	This program teaches essential aspects of delivering a presentation, including the importance of understanding the audience and the power of a strong opening and closing. It explains how to create engaging presentations, present technical information to a non-technical audience, use body language effectively, and employ PowerPoint for maximum impact.
DVD for Killer Presentation Skills Everything You Need to Know	1	In this program, J. Douglas Jeffreys shows how to increase and improve presentation clarity and impact. He covers such topics as using gestures for maximum impact and organizing content to improve audience retention. This DVD discusses gesture, inflection, and eye contact; explains how to establish an immediate rapport with an audience; offers techniques to create trust in an audience; and explores methods for eliminating fear and nervousness associated with public speaking.
DVD for The Basics of How to Plan, Write, and Give a Winning Presentation	1	This program teaches how to plan, write, and deliver presentations. It covers such topics as understating the audience and managing anxiety.
DVD for Professionalism and Ethics	1	Presenting illustrative vignettes, this program explores ethical issues relevant to professional engineering. It covers protecting the public interest, acting as a faithful agent for an employer, and avoiding conflicts of interest.
DVD for Professional Ethics and Engineering	1	This program explores common ethical dilemmas that engineers face in the work environment. It explains that the Accrediting Board of Engineering and Technology insists that ethics continue to play an important role in educating young engineers.
DVD for Business Ethics and Social Responsibility	1	Using such examples as Enron, Martha Stewart and The New York Times, this program examines the failures of business to maintain ethical standards. It discusses ethical theories, codes of ethics, ethical decision making and the social responsibilities of business.
DVD for Critical Thinking : Analyzing Problems and Decisions	1	This program with John Caffee uses illustrative vignettes and group discussions to explore the problem solving process of accepting the problem, defining the problem, considering alternatives, devising solutions and plans of action, and evaluating the efficiency of solutions.
DVD for Strategic Thinking Skills	1	In this lecture series, Stanley Ridgley of Drexel University investigates the skills, tactics, and techniques of strategic thinking. He discusses the

Noras		origin and relevance of ancient strategy, looks at the dawn of modern strategic thinking, covers strategic conflict, considers grand strategies and strategic intent, and highlights business strategies and the competitive advantage. The lectures also explore such issues as pathologies of execution, combat, strategic deception, reliable intelligence, cooperation, strategic intuition, and creative insight.
DVD for The Innovation Engine	1	In this program, Tina Seelig of the Stanford Technology Ventures Program introduces her model for the innovation Engine, which incorporates the internal strengths of imagination, knowledge, and attitude with the external forces of habitat, resources, and culture. She explains that every individual has the capacity for innovation and emphasizes the importance of creating business structures that set the stage for creativity. It covers topics such as reframing questions to allow for infinite solutions and using rapid prototyping.
DVD for How to Read and Understand a Research Study	1	This program teaches how to understand research studies and evaluate the quality of information presented. It outlines the structure of scientific paper; differentiates among such research method types as observational studies, true experiments, and quasi-experiments; and shows how to evaluate the quality of a study design. The program features interviews with experts, vignettes, and examples and defines key terms.
DVD for How Results Can Be Misleading: Problems With Reliability and Validity	1	This DVD examines potential problems that will decrease a study's real-world applicability and accuracy of measurement. It presents examples of inter-rater reliability, test-retest reliability, and internal consistency. This program also discusses construct validity, external validity, and internal validity and illustrates ways to counter threats to the validity of a study.
DVD for How Results Can be Misleading: Problems in Experimental Methodology	1 For	This program explores how the results of experimental research can be misleading, focusing on problems with sample section and the assignment of participants to groups. It discusses the importance of using random sampling and offers tips on the assignment of participants to research conditions.
DVD for The Research Process: Research Design (Power Point)	1	Outlining the entire research process, this comprehensive presentation examines research design. It discusses the questions a researcher must ask to determine the appropriate form of research to undertake; describes the components of a research design, including comparison, manipulation, control and generalizability; and introduces such research design types as experimental and combined designs. It offers over 130 slides.
DVD for Research Design: Observation and Correlational Studies	1	This DVD looks at the characteristics of observational and correlational studies and explains when to use these types of research designs. It considers the kinds of conclusions that can be drawn using observational and correlational methodology and discusses the benefits and drawbacks of each design form.
DVD for Data Collecting Techniques	1	The key to successful problem solving knows how to gather the right data. This program shows how to use sampling methods to save time and effort and explains how data can be accurately collected on a sampling basis.

## Notes:

- 1. All quotation must reach by 18.11.2013, addressed to: The Head of Department, IME Department, IIT Kanpur, Kanpur 208016, UP
- 2. Quotation must be valid till 40 days and delivery period will be 5 weeks. Extension of delivery period is not allowed.
- 3. All items should have a minimum warranty of one year. Warranty should be properly mentioned in your quotation.
- 4. Send technical detail and photograph of the product. The specified product should be quoted.
- 5. Participating firms should submit proof of documentation on authorized vendor for the product and eligible to provide the warranty. These documents will be cross verified.
- 6. Any firms with poor track record of installation services and lapses on warranty claims within IIT Kanpur will be rejected out rightly.
- 7. Payment term
  - a) For foreign currency through LC.
  - b) For Rupees payment 90% on delivery & 10% after satisfactory using /working

(Convener, Special Task Force)