

PGDCA 2ND Sem IT Trends & Technologies Important Questions

Unit – 1

1. Explain the PPP Model in detail.
2. Explain the following briefly.
 - Digital Locker
 - Governance
 - E Democracy

Unit – 2

1. What is E-Payments? Explain the types of E-Payment.
2. Explain the technology used in e-commerce.
3. Explain the following in brief.
 - Payment Gateway
 - Internet Banking
 - Nose
4. What is Internet Banking? Tell the advantages and disadvantages of Internet banking.

Unit – 3

1. What is the difference between 2G, 3G, 4G and 5G services?
2. What is a mobile switching office?
3. What are the uses of Bluetooth communication?
4. Briefly explain the following:
 - Handsoff
 - Base Station
 - IMEI
 - WiMAX

Unit – 4

1. What do you understand by Artificial Intelligence and explain its applications?
2. What do you understand by Expert System and explain its applications?
3. Describe the different types of cloud system architectures.

Unit – 5

1. What is MIS? Explain in detail.
2. What do you understand by decision table and decision tree?
3. What is a data dictionary? Explain its uses in data management.

IT Trend and Technologies PGDCA 2nd SEM

Unit 1: Basic of IT & E-Governance

- **E-Governance:** Explain the meaning, objectives, and advantages.
- **Types of E-Governance:** Detail the models like G2G, G2C, G2B, and G2E.
- **IT Act:** Describe the major provisions and objectives of the Information Technology (IT) Act, 2000.
- **Computer Networks:** What is a network? Describe the differences between LAN, MAN, and WAN. PPP Model.

Unit 2: Emerging Technologies (IoT, AI & Cloud Computing)

- **Cloud Computing:** Define cloud computing, its deployment models (Public, Private, Hybrid), and service models (IaaS, PaaS, SaaS).
- **Internet of Things (IoT):** Explain the architecture, components, and real-world applications of IoT.
- **Artificial Intelligence (AI):** Describe AI, its applications, and how it differs from traditional programming.
- **Mobile Computing:** What is mobile computing? Discuss its key characteristics and limitations.]

Unit 3: Cyber Security & Data Privacy

- **Cyber Threats:** Explain the differences between viruses, worms, Trojan horses, and ransomware.
- **Cyber Security Measures:** Detail the use of firewalls, encryption, digital signatures, and anti-virus software.
- **Data Privacy:** Why is data privacy important in modern IT, and what are the basic guidelines for protecting personal data?
- **Cyber Crime:** What is cybercrime? Discuss various types of cybercrimes, including phishing and identity theft.

Unit 4: Data Communication & Social Media

- **Data Transmission:** Differentiate between guided (Twisted-pair, Coaxial, Fiber-optic) and unguided (Radio, Microwave, Infrared) transmission media.
- **Social Media & Networking:** Explain how social networking sites work and their impact on modern communication and business.
- **Video Conferencing & VoIP:** Describe how VoIP and video conferencing technologies operate and their practical benefits.
- **Mobile Generations:** Briefly explain the differences and evolution from 1G to 5G technologies.

Unit 5: E-Commerce & Payment Systems

- **E-Commerce Models:** Differentiate between B2B, B2C, C2C, and C2B e-commerce models.
- **Electronic Payment Systems:** Explain the working of credit/debit cards, smart cards, and digital wallets.
- **EDI (Electronic Data Interchange):** What is EDI? Describe its architecture, components, and benefits in business.
- **Security in E-Commerce:** Explain security protocols like SSL (Secure Sockets Layer) and SET (Secure Electronic Transaction)

PGDCA 2nd Semester Internet and Web Designing

Unit – 1

1. What do you understand by Internet? Explain the evolution of the Internet.
2. What is WWW? Explain its history and function.
3. Explain the difference between Internet and Intranet.
4. Explain the following brief:
 - Web Protocol
 - VSAT
 - URLs
 - ISP

UNIT – 2

1. What do you understand by HTML? Explain the basic tags of HTML with examples.
2. What is a list tag in HTML? Explain its types with example.
3. Explain the different types of formatting tags used in HTML with examples.
4. Explain Table tag in HTML with example.

Unit – 3

1. What do you understand by CSS?
2. What do you understand by JavaScript, Explain its functions?
3. Explain Variable and Array objects in JavaScript.
4. Explain effects In CSS with example.

Unit – 4

1. What do you understand by a WYSIWG HTML editor? Explain the advantages of an HTML editor.
2. How to design a new page using Expression web?

Unit – 5

1. What is the difference between a post and a page in word press?
2. How do I get space on a hosting server for my website?
3. What do you understand by Protocol? Explain different types of Protocols.
4. How to add a theme to Word press?

1. Internet & Protocols

- What is the Internet? Explain its history, working, and applications.
- What is an ISP (Internet Service Provider)?
- Explain the following protocols and their functions:
 - TCP/IP (Transmission Control Protocol/Internet Protocol)
 - DNS (Domain Name System)
 - FTP (File Transfer Protocol)
 - HTTP / HTTPS
 - Telnet
- Explain the working of Search Engines, Web Browsers, and Web Servers.

2. Web Design Basics & HTML

- What is a static vs. dynamic website? Explain the differences.
- What is HTML? Explain the basic structure of an HTML document.
- Describe the difference between Container and Empty tags.
- Explain HTML formatting tags (e.g., ``, `<i>`, `<u>`, ``, `<sub>`, `<sup>`).
- Explain the procedure for linking web pages (Anchor `<a>` tag) and adding images to a webpage.

3. Advanced HTML (Forms & Tables)

- How do you create tables in HTML? Write the tags and attributes used for tables (e.g., `<table>`, `<tr>`, `<td>`, `<th>`, `colspan`, `rowspan`).
- Write an HTML code to create a student registration or feedback form (use `<form>`, `<input type="text/radio/checkbox">`, `<select>`, `<textarea`

4. CSS (Cascading Style Sheets)

- What is CSS? What are its advantages?
- Explain the three ways to include CSS in an HTML document: Inline, Internal, and External.
- Write short notes on CSS Selectors, Box Model, and Font properties.

5. Web Publishing & Scripting

- What is Web Hosting? Explain the different types of web hosting.
- What are WYSIWYG editors? Give examples.
- Write short notes on JavaScript and its role in web design.
- Explain the difference between client-side and server-side scripting.

PGDCA 2nd Semester DTP PageMaker & Photoshop

UNIT 1

1. Definition of DTP
2. Development of DTP and its importance
3. Difference between traditional printing and digital publishing
4. Components of DTP: Hardware, Software, and Design Principles
5. Common DTP software (PageMaker, Photoshop, CorelDraw, etc.)

UNIT 2

1. Overview of Adobe PageMaker Software
2. Creating a New Document
3. Page setup: margins, page size, orientation
4. Working with text: formatting, styles, paragraphs
5. Insert images, graphics, and tables
6. Understanding Master Pages and Templates
7. Printing and Exporting Files

UNIT 3

1. Working with layers and frames
2. Using a color model (RGB, CMYK)
3. Applying Styles to Paragraphs and Characters
4. Advanced text formatting and typographic techniques
5. Managing Graphics: Linking and Embedding
6. PageMaker Shortcuts and Tips for Efficiency

UNIT 4

1. An overview of Photoshop tools and interface
2. Image Resolution and File Format
3. Basic Image Editing: Cropping, Resizing, and Rotating
4. Working with Layers and Layer Masks
5. Using Filters and Effects
6. Image Color Correction (रंग सुधार): Levels, Curves, and Hue/Saturation

UNIT 5

1. Working with Selections: Lasso, Magic Wand, and Pen Tools
2. Retouching and Restoration of Images
3. Using brushes and painting tools
4. Creating Text Effects and Working with Typography
5. Layer Styles: Shadows, Glows, and Bevels
6. Manipulating Images for Creative Design

UNIT 6

1. Layout Composition and Grid System
2. Use of typography in design
3. Color Theory and its Application in Design
4. Principles of Visual Hierarchy
5. Creating Effective Posters, Brochures, and Flyers

PGDCA 2ND SEMESTER MULTIMEDIA WITH COREL DRAW PREMIER AND SOUND FORGE

UNIT 1

1. What is multimedia? Describe its elements.
2. Explain the various components of a multimedia system.
3. Explain the areas of use of multimedia.
4. Discuss the types of multimedia devices.

UNIT 2

1. What is CorelDraw and explain its main features.
2. How to create a new document in CorelDraw?
3. Explain how to add lines, shapes, and text in CorelDraw.
4. Explain the process of filling and defining colors in CorelDraw.
5. How to use gradients and shades in CorelDraw?
6. What are the ways to edit and transform graphics in CorelDraw?

UNIT 3

1. What is Adobe Premiere Pro? How is it used?
2. Explain the process of editing video clips in Adobe Premiere Pro.
3. Explain how to add and edit videos in the Timeline.
4. How to Use Transitions and Effects in Premiere Pro?
5. Explain how to export a video in Adobe Premiere Pro.

UNIT 4

1. What is Sound Forge? Explain its uses and key features.
2. Explain the process of recording an audio file in Sound Forge.
3. What tools are available for editing audio in Sound Forge?
4. How to apply Noise reduction and Echo effects in Sound Forge?
5. Explain how to export audio in Sound Forge.

UNIT 5

1. Explain the uses of multimedia in education, entertainment and business.
2. Provide important information regarding Internet and multimedia.
3. Discuss the future development direction of multimedia.
4. What is the difference between digital media and traditional media?

Unit I: Introduction to CorelDraw & Vector Graphics

Q1. What is CorelDraw? Explain its major applications, benefits, and importance in the field of multimedia designing.

Q2. Differentiate between Vector Graphics and Raster (Bitmap) Images with appropriate examples.

Q3. Describe the User Interface (UI) of CorelDraw. Explain components like the Title Bar, Menu Bar, Property Bar, and Status Bar.

Q4. What are Color Profiles? Explain how RGB and CMYK color modes are handled in CorelDraw.

Q5. Write short notes on:

- Workspaces in CorelDraw
- Layout Properties and File Formats

Unit II: Object Designing & Advanced Effects in CorelDraw

Q1. What is the difference between Artistic Text and Paragraph Text in CorelDraw? Explain text properties in detail.

Q2. Explain the function of the following editing tools in CorelDraw:

- Pick Tool
- Shape Tool
- Envelope Tool
- Fillet/Scallop/Chamfer Tool

Q3. How do you import external graphics and images into a CorelDraw layout? Step-by-step process.

Q4. Explain how to create Special Object Effects (such as Blend, Contour, Distort, Drop Shadow, and Extrude) in CorelDraw.

Q5. Explain the process of drawing and editing complex curves using the Pen tool or Bezier tool.

Unit III: Page Layout, Grid Systems & Masking

Q1. What is the relevance of Grids, Rulers, and Guidelines while planning a design layout in CorelDraw? How do you configure them?

Q2. Explain the process of Tracing Images (converting a bitmap image into vector graphics) in CorelDraw.

Q3. What is masking? Explain step-by-step how to apply masking effects with both Text and Objects (PowerClip feature).

Q4. How do you manage page arrangements, document borders, and multiple pages for a booklet or brochure design?

Q5. Differentiate between Combining, Welded, and Grouping objects in CorelDraw.

Unit IV: Video Editing with Adobe Premiere Pro

Q1. What is Adobe Premiere Pro? Explain its usage in the industry and the steps to set up a new video project.

Q2. Describe the Premiere Pro Workspace interface, explicitly detailing the functions of the Project Panel, Source Monitor, Program Monitor, and Timeline.

Q3. Explain the functionality of the following tools in the Premiere Pro toolbar:

- Selection Tool & Razor Tool
- Ripple Edit & Rolling Edit Tools
- Slip & Slide Tools

Q4. How do you apply Video Transitions and Video Effects to a clip on the timeline? Explain with examples.

Q5. Write down the complete process of Exporting a finished video project. Mention common video file formats (like MPEG, AVI, MP4).

Unit V: Audio Editing with Sony Sound Forge

Q1. What is Sound Forge? Explain its key features and interface layout.

Q2. Explain basic sound editing workflows in Sound Forge: Cutting, Copying, Pasting, Deleting, Cropping, and Mixing audio tracks.

Q3. How do you record fresh audio inside Sound Forge? Explain the functions of the Transport Toolbar.

Q4. What are Noise Reduction and Audio Normalization? Why are they essential in audio post-production?

Q5. Write short notes on the following functions in Sound Forge:

- Using Markers and Regions
- Echo and Reverb Effects
- Audio Exporting Formats (WAV, MP3)

