

Scheme – G

**Sample Test Paper - I**

**Course Name : Electronics and Video Engineering**

**Course Code : EV**

**Semester : Sixth**

**Subject Title : Video Engineering**

**Marks : 25**

**17668**

**Time: 01 Hour**

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**Instructions:**

1. All questions are compulsory.
2. Illustrate your answers with neat sketches wherever necessary.
3. Figures to the right indicate full marks.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.

**Q1) Attempt any THREE**

**9 Marks**

- a) Justify that the data holding capacity of DVD is more than CD.
- b) Differentiate DVD & CD on the basis of i) LASER operating wavelength, ii) Data storage/capacity per layer, iii) Compression technique.
- c) Why is audio signal generally not transmitted in CCTV.

**Q2) Attempt any TWO**

**8 Marks**

- a) Draw and label the block diagram of plan for CATV system.
- b) Name different motors used in VCD player. State the function of each.
- c) Draw the basic servo system and state the functions of each component in brief.

**Q3) Attempt any TWO**

**8 Marks**

- a) Draw the block diagram of a MP 3 Player and state functions of each block.
- b) Describe the modified TV standards adopted for HDTV service.
- c) State the value added features of CCTV(Any Four)

Scheme – G

## Sample Test Paper - II

Course Name : Electronics and Video Engineering

Course Code : EV

Semester : Sixth

Subject Title : Video Engineering

Marks : 25

# 17668

Time: 01 Hour

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### Instructions:

1. All questions are compulsory.
2. Illustrate your answers with neat sketches wherever necessary.
3. Figures to the right indicate full marks.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.

### Q1) Attempt any THREE

9 Marks

- a) State the features of BMP, PNG file formats.
- b) Why application of electric charge across the LCD either blocks or permits the passage of light through its layer?
- c) List the features of JPEG 2000 video compression technique?
- d) How is a plasma screen color television different from conventional CRT TV receiver?

### Q2) Attempt any TWO

8 Marks

- a) Draw the block diagram of LCD monitor and state the working of each block.
- b) Draw the constructional diagram and illustrate the working of Jumbo TV screen.
- c) State the features of standard VHS and Hi 8 video recording formats.

### Q3) Attempt any TWO

8 Marks

- a) Draw labeled block diagram of camcorder and state the function of each block.
- b) With the help of neat sketch illustrate the concept of projection TV system.
- c) Draw labeled block diagram of SVGA Monitor & state its working principle.

Sample Question Paper

Course Name : Electronics and Video Engineering

Course Code : EV

Semester : Sixth

Subject Title : Video Engineering

Marks : 100

17668

Time: 03 Hour

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**Instructions:**

1. All questions are compulsory.
2. Illustrate your answers with neat sketches wherever necessary.
3. Figures to the right indicate full marks.
4. Assume suitable data if necessary.
5. Preferably, write the answers in sequential order.

**Q1. (A) Attempt any THREE.**

**12 Marks**

- a) State the concept of video phone.
- b) Define Pay TV. State the need of scrambling & descrambling.
- c) List the four components of basic servo system used in CD player.
- d) Differentiate DVD and BD on the basis of i) LASER operating wavelength, ii) Data storage/capacity per layer, iii) Compression technique.

**Q1. (B) Attempt any ONE.**

**06 Marks**

- a) Draw a block diagram of cable TV system and illustrate working of it.
- b) With the help of diagram show how optical arrangement in three beam linear tracking pick –up assembly is used.

**Q2. Attempt any TWO.**

**16 Marks**

- a) With a neat block schematic illustrate working of camcorder.
- b) Draw the labelled block diagram of blu ray disc player and describe the function of each block.
- c) Draw the block diagram of basic MAC encoder and illustrate its working principle.

**Q3. Attempt any FOUR.**

**16 Marks**

- a) State the value added features of CCTV.(any four)
- b) State the principle of interactive TV with a neat diagram.
- c) How is a plasma screen color television different from conventional CRT TV receiver?
- d) Differentiate between LED and LCD monitor.(any 4 points)
- e) List any four applications of projection TV.

**Q4. A) Attempt any THREE.**

**12 Marks**

- i) Describe how bandwidth reduction is achieved in HDTV.
- ii) Illustrate the working of LED module in Jumbo TV screen.

- iii) State the principle of VHS video recording format.
- iv) Differentiate between digital video signal and analog signal.

**Q4. B) Attempt any ONE.**

**06 Marks**

- i) Draw the block diagram of a MP 3 Player and illustrate function of each block.
- ii) a) Identify the figure 1 diagram  
b) Draw waveforms at A, B and C points when S is open and S is closed

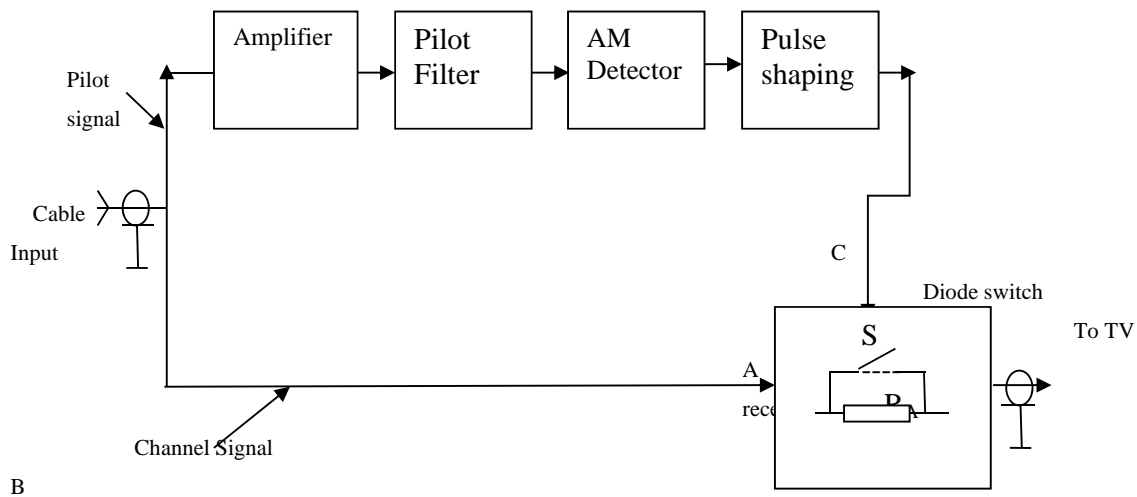


Figure 1

**Q.5 Attempt any FOUR.**

**16 Marks**

- a) Draw constructional diagram of blu ray disc and label it properly.
- b) Illustrate how a basic LCD can be created .Why application of electric charge across it either blocks or permits passage of light through its layers?
- c) Illustrate the difference between normal TV and projection TV on the basis of aspect ratio, resolution, number of lines and application.
- d) Describe why i) CCTV is wired system, ii) Audio signal is not transmitted in CCTV?
- e) State the advantages of DVD.(any four)

**Q6. Attempt any FOUR.**

**16 Marks**

- a) Illustrate the JPEG video compression technique.
- b) Draw labeled block diagram of two way cable system and illustrate its function.
- c) Which motor is used to drive the CD and why?
- d) Classify CRT monitors and state three specifications of monitor.
- e) State two merits and two demerits of plasma display.
- f) Draw the labeled block diagram of DTH TV and illustrate the function of each block.