



Shree H.N.Shukla group of colleges

PHYSICS

T.Y.B.Sc. (Sem. V) (CBCS)

Unit Test examination

PAPER- 503

UNIT 4, 5 - TRANSDUCER & DIGITAL CIRCUIT

DATE :

Total marks :30

Instructions: All questions are compulsory.

The right side figure indicates total marks of the question.

Draw the figure wherever necessary.

Write answers of all the questions in main answer sheets.

SECTION-A

Q.1: One marks questions:

[5 MARKS]

- 1 Give the full form of LVDT.
- 2 Micro phone is an _____ transducer.
- 3 Full form of CRT_____.
- 4 Full form of CRO_____.
- 5 _____ FLIP FLOP has I input.

SECTION – B

Q.2 (A): Short Questions: Write all three : [2 Marks each]

[6 MARKS]

- 1 Explain the truth table and circuit daigram of R-S FLIPFLOP.
- 2 Explain the truth table and circuit daigram of D FLIPFLOP.
- 3 Define : Transducer.

Q.2 (B) : Short questions: Write all three: [3 Marks each]

[9 MARKS]

- 1 Explain resistive position transducer.
- 2 Explain Strain gauge .
- 3 Explain analog and digital instruments.

Q.2 (C): Write Detail Note on [Any two]: [5 Marks each]

[10 MARKS]

- 1 Describe the carbon microphone.
- 2 Explain 1 to 16 decoder.
- 3 Explain IC 555 in detail.
- 4 Write note on JK flip flop.