

- Q.27 What are the sources of instrumental error?
- Q.28 Enlist the various alignment tests carried on a milling machine.
- Q.29 What are different sampling methods? Explain any one of them.
- Q.30 Give the difference between R chart and P chart.
- Q.31 What is normal distribution ? Explain.
- Q.32 What are histograms? Give their applications.
- Q.33 Explain quality control tools.
- Q.34 What are the main advantages and application of LVDT?
- Q.35 Distinguish between active and passive transducers.

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Explain the construction & working of profile projector with neat sketch in detail.
- Q.37 What are the control charts? Give the classification, consideration, objectives and their applications.
- Q.38 Explain the concept and evolution of ISO 9000. Give its advantages also.

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MSIL-121762/31762

**6th Sem / Mech. Engg. (MSIL)
Subject:- Inspection & Quality Control**

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Where the nodal point for National Measurement System is located ?
- a) Bangalore b) Patna
c) Bombay d) New Delhi
- Q.2 Which colour radiation of krypton 86 is selected for measurement?
- a) Yellow b) Green
c) Orange d) Blue
- Q.3 What is 'Go limit'?
- a) Upper limit of shaft and lower limit of a hole
b) Lower limit of shaft and hole
c) Lower limit of shaft and upper limit of hole
d) Upper limit of shaft and hole
- Q.4 Which of the following is not correct about plain gauges?
- a) Used to check threaded portions

- b) There is no scale in plain gauges
 - c) Indicated actual value of the inspected dimension
 - d) Can be used to check dimensions of manufactured part
- Q.5** The chart used to monitor attributes is
- a) Range chart b) Mean chart
 - c) p-chart d) All of the above
- Q.6** The least count of vernier caliper is
- a) 0.02 mm b) 0.002 mm
 - c) 0.001 mm d) 0.01 mm
- Q.7** Which of the following is a principle of TQM?
- a) Product-centered system
 - b) Customer-focus
 - c) Intermittent improvement
 - d) Decisions made by top executives only
- Q.8** Caliper gauge is a
- a) plug gauge b) snap gauge
 - c) ring gauge d) None of these
- Q.9** LVDT winding are wound on
- a) copper sheets b) aluminium sheets
 - c) ferrite sheet d) steel sheets
- Q.10** The principle of operation of LVDT is based upon
- a) mutual inductance b) self inductance
 - c) permeance d) reluctance

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Define interchangeability.
- Q.12 What are line standards of measurement?
- Q.13 What is comparators?
- Q.14 What are the two methods used for measurement of tooth thickness?
- Q.15 What is the other name of p-chart?
- Q.16 Define sampling plan.
- Q.17 Write down the full form of B.I.S
- Q.18 What is Kaizen?
- Q.19 Define transducer.
- Q.20 Write full form of LVDT.

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Write functions of inspection.
- Q.22 Explain line and wavelength standards.
- Q.23 What are straightness, flatness and parallelism? Explain.
- Q.24 What is the use of calipers? Name the various types of calipers.
- Q.25 Explain the effects of errors on quality.
- Q.26 Give the classification of gauges.