CENTRAL BHARAT SEVAK SAMAJ

NATIONAL DEVELOPMENT AGENCY, ESTABLISHED IN 1952 BY PLANNING COMMISSION, GOVT. OF INDIA

CENTRAL BOARD OF EXAMINATIONS

BSS NATIONAL VOCATIONAL EDUCATION MISSION

AME023-CNC MACHINE OPERATION (TURNING & MILLING)

ONE YEAR EXAMINATION NOVEMBER-2025

AME023-02 TOOLS,MACHINERY & GAUGES

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) CNC - Write Expansion of this code?

2) MDI - Write Expansion of this code?

3) What is the meaning of MO 5?

4) Angle of Equilateral Triangle is _____

5) What is the meaning of 90° _____

6) What is the accuracy of Metric outside Micro meter?

7) Which part of the outside Micrometer is used to lock the spindle?

8) Which part of the outside Micrometer ensures a uniform pressure between the Mating surfaces?

9) One measuring Face of an inside Micrometer is anvil. Which is the other Measuring surface?

10) The difference between the maximum limit of size and the minimum limit of size is called?

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Define types of Measuring System?
2) How many Axis are CNC Lathe Axis?
3) Write Purpose of the gear drive?
4) Write different types of Jaws?
5) Write different types of Tool Holders?
6) Write the different types of control using by CNC Machine?
7) What is the use of the following measuring scale? i) Wooden Scale ii) Acrylic Scale or Plastic Scale iii) Steel Rule
8) Belt Drive
9) Belt Pulley
10) "V" Belt

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Write Advantages of CNC Machine?
2) What are the operations can be done by the CNC Lathe Machines?
3) Write the operational modes in CNC Machines?
4) Write the Lathe work supporting accessories?
5) Write the name of the gauges for Mass Productions?
6) How many types of C N C Machines or using in the modem industry?
7) How many types of knurling tool holder?
8) What is the purpose of the dial test indicator and mention the parts name of the dial gauge?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) How many Types of Safety Precaution and Explain about the personal safety precaution?
2) List out the minimum twenty name of tools, gauges and machinery used in the Workshop?
3) How many types of Drills and draw the need sketch and show the parts of the Drills?
4) Write the method of Grinding by the Grinding Machine? and why the two types of grinding is essential while grinding and also are the cap between the Tool Rest and Grinding While?
5) Explain about use of the following tools: a) Double ended spanner b) Ring spanner c) Adjustable wrench d) Pipe wrench

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ONE YEAR EXAMINATION NOVEMBER-2025

AME023-03 BASIC PRODUCTION & MANUFACTURING

TIME: 3 Hours **Marks: 100**

INSTRUCTIONS

* 43 questions are there in total
* Write answers to each question in proportion to the mark allotted
* During the first 15 minutes read the questions carefully

I. FILL IN THE BLANKS - ANSWER FOR ANY 10 QUESTIONS **1 x 10 = 10**

1) Marking media applied the job for _____

2) The angle of the scriber point is _____

3) The inside caliper is used for to measure the _____

4) The outside caliper is used for to measure the _____

5) In a jenny caliper the bend leg is _____ and another side of the leg pointer is used for _____

6) To take measurement of the centre point of the round rod the _____ is needed.

7) The angle of centre punch is _____

8) In a surface finishing job metal high spots up to 0.12mm can be scraped by the _____

9) To make a hole in a job _____ and _____ is needed.

10) For the riveting purpose the _____ is suitable.

II. DEFINE THE FOLLOWING - ANSWER FOR ANY 10 QUESTIONS **2 x 10 = 20**

1) Hack saw frame
2) Jenny caliper
3) Soft hammer
4) Pitch
5) T.P.I.
6) Web chisel
7) Flute
8) Drill chuck & key
9) Stepped cone pulley
10) Punch
11) Punch

III. WRITE BRIEF ANSWER FOR ANY 5 QUESTIONS **5 x 5 = 25**

1) Which type of modern industries are emphasis the manufacturing process Enhanced by the CNC Machine usage?
2) Write the types of Lathe chuck? and it parts name?
3) What kind of Job Opportunities related to Mechanical Fitter cum CNC Machine Operator course students in the modern industry?
4) State the types of Lathe centre?
5) State the parts name of the Lathe Machine?
6) State type of coolants?
7) Explain function of the bearing and its parts name?
8) How many types of bolts are used in automobile industry?

IV. WRITE LONG ANSWER FOR ANY 3 QUESTIONS **15 x 3 = 45**

1) How many types of controls using in CNC Machine?
2) State name of the manufacturing FANUC Control CNC Machine?
3) How many types of Milling Cutters? and Write any one of them?
4) How many types of Drills and draw the need sketch and show the parts of the Drills?
5) Classified the FANUC Control Programme and explain any of the programme?