

KATHMANDU UNIVERSITY
End Semester Examination
March/April, 2025

Marks Scored:

Level : B.E.

Year : II

Exam Roll No. :

Time: 30 mins.

Course : MEEG 217

Semester : I

F. M. : 20

Registration No.:

Date :

08 APR 2025

SECTION "A"

[20Q. × 1 = 20 marks]

Choose the most appropriate answer and **mark [X]**.

- Shrinkage allowance is made by
 Adding to external and internal dimensions.
 Subtracting from external and internal dimensions.
 Subtracting from external dimensions and adding to internal dimension.
 Adding to external dimensions and subtracting from internal dimensions.
- Riddle is
 Round Sieve Long flat metal plate with offset handle.
 Corner repairing wooden tool Scooping tool for sand deep in mould.
- Which of the following materials has more shrinkage allowance
 Cast iron Brass Lead Aluminum alloy
- In drilling softer materials, the cutting speed is ___ as compared to harder materials.
 Same High Low None of these
- When an alloy solidifies over a wide range of temperature, the resulting casting structure is
 Wholly equi-axed
 Wholly columnar
 Partially columnar and partially equi-axed
 Dendritic
- Chills are metal inserts of steel that are placed at appropriate locations in the mould walls to
 Decrease the freezing rate. Increase the freezing rate
 Help directional solidification Prevent directional solidification
- Type of welding defect caused due to poor deposition of weld rod is
 Porosity under fill Undercut Crack
- Hot rolling of mild steel is carried out
 At recrystallization temperature between recrystallization temperature
 Between 100°C to 150°C above recrystallization temperature

9. In Gating system , The ratio 1:2:4 represents
 Sprue base area: in gate area: casting area
 Sprue base area: runner area: in gate area
 Pouring basin area: in gate area: runner area
 Runner area: in gate area: casting area
10. In grinding operation, which one acts as a cutting tool
 HSS Tip Diamond Tip Carbide Tip Abrasive grains.
11. Seam welding is .
 Multi spot welding process Continuous welding process
 Mesh welding process cylindrical object welding process
12. The ductile materials, during machining, produce
 Continuous chips Continuous chips with built up edge
 Serrated chips Built up edge
13. Welding process in which two pieces to be jointed are overlapped and placed between two electrodes is known as
 Projection Seam Spot Percussion
14. Moulding sands can contain following percentage of maximum quantity of moisture
 25% 8% 12% 15%
15. In SMAW the coating of the electrode is called
 Protective layer De-oxidizer Slag Flux
16. The hard grade grinding wheels are denoted by the letters
 A to G P to Z H to O A to M
17. Preheating is essential in welding
 PIG iron HSS Cast Iron Stainless Steel
18. The stroke of a shaping machine is 250 mm. It makes 30 double strokes per minute. The overall average speed of operation is
 3.75 m/min 15 m/min 5 m/min 7.5 m/min
19. In DC arc welding, if leads are arranged in work as Negative pole of the welding arc and electrode as Positive pole of the welding arc, the arrangement is known as
 Fusion Forward welding
 Reverse polarity Direct polarity
20. After cold forming, steel balls are subjected to
 Normalizing Tempering Electroplating Stress relieving