C–8589	Sub. Code
	82448

B.Voc. DEGREE EXAMINATION, APRIL 2023.

Fourth Semester

Foundary Technology

QUALITY ASSURANCE AND INSPECTION METHODS

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** questions.

1. Define Inspection.

2. What is testing?

3. Define random variables.

4. What is quality audit?

5. List the types of pyrometer

6. What is a thermocouple?

7. Mention some defects in casting.

8. What is casting?

9. What is wedge test?

10. What is fluidity?

Part B $(5 \times 5 = 25)$

Answer **all** questions.

11. (a) What is visual inspection? Brief out.

Or

(b) Write a short note on pressure testing.

12. (a) Write short note on total quality management.

Or

(b) Write a brief note on acceptance sampling.

13. (a) Write a brief note on thermocouple pyrometer and optical pyrometer.

Or

(b) Write short note on tensile test and compression test.

14. (a) Mention the differences between sand control test and moisture content test.

Or

(b) Write a short note on the defects due to faulty heat treatment.

15. (a) Discuss briefly about the casting defects.

Or

(b) Write short note on wedge test and temperature measurement.

Part C (3 × 10 = 30)

Answer **all** questions.

16. (a) Explain in detail about the chemical analysis.

Or

(b) Write a detailed note on the control charts for attributes and variables.

17. (a) Explain in detail about the use of computers in quality assurance.

Or

(b) Write a detailed note on the variables affecting the various types of tests.

18. (a) Discuss in detail about the main types of defects their causes and remedies in casting.

Or

(b) Explain the detailed process of casting modification by different methods.

———————

C–8591	Sub. Code
	82465

B.Voc. DEGREE EXAMINATION, APRIL 2023

Sixth Semester

Foundry Technology

ENERGY CONSERVATION AND POLLUTION CONTROL IN FOUNDRY

(2019 onwards)

Duration : 3 Hours Maximum : 75 Marks

Part A (10 × 2 = 20)

Answer **all** the questions.

1. What is Non-Conventional Energy?

2. How to maintain the water quality?

3. What is Noise pollution?

4. List the sources of Water pollutant.

5. What is Air pollution?

6. What are the causes of Noise pollution?

7. Write the importance of Energy conservation.

8. What the agents which causes pollution in foundry?

9. Write short note on foundry.

10. How to eradicate Water pollution?

Part B (5 × 5 = 25)

Answer **all** the questions

11. (a) Write short note on Conventional Energy.

Or

(b) Write about the management aspect in Refractory unit.

12. (a) Discuss the Control equipment for Particulate contaminant.

Or

(b) Write the importance of Rain water harvesting.

13. (a) Write the safety measures towards pollution.

Or

(b) How will you protect yourself from Air pollution?

14. (a) Briefly discuss the dust problems in foundry.

Or

(b) Write about dust disposal method.

15. (a) State the preventive maintenance in foundries.

Or

(b) State the application of computer in foundry industry.

Part C (3 × 10 = 30)

Answer **all** the questions.

16. (a) Elaborate on the methods of energy conservation.

Or

(b) How to utilize waste heat in foundry, forge and allied industries?

17. (a) Explain in detail about sources and nature of Air pollutants.

Or

(b) Elaborate on Environmental waste management.

18. (a) Explain in detail about Waste water treatment.

Or

(b) Elaborate on the preventive maintenance in foundries.

———————