***Department of Naval Architecture & Offshore Engineering***

**Course**: BE (NA & OE) **Semester**: VII

**Subject**: Quality Health safety & Environmental Management (**NAOE 409**)

**Part A (2marks)**

**Unit-1**

1. Define Quality
2. Define Quality assurance
3. Define Quality control
4. What is Quality management?
5. The term Continues improvement refers to what in TQM?
6. Write a note on History of TQM.
7. Define Appraisal cost
8. Define External cost failure
9. Define Internal cost failure
10. Define prevention cost
11. What are major Internal cost
12. What are major External cost

**UNIT-2**

1. What is the abbreviation for QMS, TQM?
2. What is the abbreviation for ISO, ISM
3. What is the abbreviation for BIS,BSI
4. Define the term Non-conformity
5. Define Customer
6. What is the need of Skilled/Trained Labor in industry?
7. What is the abbreviation for WPS,PQR
8. What is the abbreviation for LSA,FSA
9. Write a note on Documentation Requirements/Control of documents
10. What are the three kinds of Inspection?
11. Write any 4 Nationalized Quality Standards.
12. Abbreviate API,ASME

**UNIT-3**

1. In QC of shipbuilding what is to be verified in purchased product?
2. What is the difference in doing dry survey for a small and bigger ship?
3. Abbreviate NDT and DT
4. List out all type of NDT used in ship building
5. What is ISO?
6. Define Quality Audit
7. What is the purpose of Audit?
8. What are the four phases of Audit
9. What is Internal Audit
10. What is External Audit
11. What is the difference between BSI(ISI) and ISO?
12. What are the three stages of quality movement prior to ISO9000 QMS?

**UNIT-4**

1. Why ISO needed for a organization?
2. List in 3steps how ISO carried out?
3. How Total quality management helps an organization?
4. What are the five major area focused for improvement in TQM?
5. What is resource management in ISO 9000 QMS
6. Explain the purpose of OHSAS in detail.
7. What are the Elements of OHSAS?
8. What are the four ways of dealing with Non-Conformity in an organization
9. Define Environment
10. Define Environmental Aspect
11. Define Environmental Impact
12. List out the standards included in ISO 14000.

**UNIT-5**

1. Who is a Auditor?
2. Who is a Auditee
3. What are the Four Phases of Quality Audit
4. What is PDCA cycle?
5. What are Management responsibilities in QMS?
6. List out the Various ISO standards that you know.
7. What are the two method of analyzing Quality cost
8. List out the Four level of Documentation
9. What is Controlled document
10. Define SMS
11. Define DOC
12. Define SMC

**PART-B (4 Mark)**

**UNIT-1**

1. Write a note on Quality Management
2. Write a short note on TQM
3. What are the principles of TQM
4. Define Vision and Mission. Give an example.
5. What is Quality policy, Quality objectives & Targets?
6. What are the pillars of TQM?
7. What are the five elements of ISO 9000 QMS
8. What are the Various types of Quality Cost
9. What are the Bases of Quality cost and Explain the methods used for Analysis of Quality cost
10. What are the Elements of Quality cost and list out the Application of Quality cost

**UNIT-2**

1. Write short note on Quality Planning
2. Write a note on Identification of customer Requirement
3. What is design Verification and Design Validation
4. Write a short note on Basic design
5. Write a short note on Detailed design
6. List out the data to be entered in WPS and PQR document
7. Give a short note on quality of a purchased product.
8. What is Block assembly?
9. Write a note on Pre-Erection and Erection.
10. Give a short note on Operation control in shipbuilding
11. What is the need of NDT in shipbuilding industry? Explain Dye penetrating test
12. Explain why Ultra sonic is better than X-Ray testing in NDT

**UNIT-3**

1. What are welding specifications?
2. Write a short note on pre heating
3. What is draft mark survey
4. What are the Seven tools of Quality control
5. What is Risk Assessment?
6. What are Tangible and Intangible Benefits of ISO 9000
7. What ISO implementation do for your organization
8. Define Verification and Validation with examples.
9. List out the seven tools for Quality control
10. With a time chart explain the Evolution of QMS Standards
11. Write a short note on six essential documented procedures for ISO9000?
12. What is the current ISO 9000 family of standards?

**UNIT-4**

1. What is quality policy
2. Give a short note on Quality procedure.
3. Write a short note on work instruction
4. What is Quality manual?
5. What is OHSAS 18000? Why it is needed in Industry
6. Explain the Elements of OHSAS
7. Write a short note on Environmental Objective and Environmental Target
8. Write about the Global and Organizational benefits of EMS.

**UNIT-5**

1. Write a note on Compliance and Process Audit?
2. Give some Examples of Quality document and Quality record
3. Explain the first party audit, second party audit and third party audit.
4. What are the Classifications of Audit Findings
5. What is the difference between Procedure and process in QMS?
6. Who is MR? What are his responsibilities?
7. Brief about the objectives of ISM
8. Explain Hard Identification and Risk assessment
9. What are the types of DOC’s give a short note.
10. What are the types of SMC’s give a short note.
11. Write a short note only on Validity of SMC and DOC documents

**PART-C(14 marks)**

**Unit-1**

1. Write a detailed note on dimensions of quality for a Manufacturing and service product with example.
2. Give a detailed note on Quality cost.
3. Give a brief note on Quality Awards.
4. Explain Quality document and Quality record with example

**Unit-2**

1. What are the various design and development stages in shipbuilding
2. Describe through a flowchart, the sequential steps involved from first stage of identifying customer requirement till the ship is tested
3. Write a detailed note on application of QC & QA in shipbuilding industry.
4. Write a note on NDT and Explain various types of NDT used in shipbuilding Industry.
5. With a neat sketch/Table explain WPS and PQR.

**UNIT-3**

1. What is Documentation? Explain four Level /stages in detail
2. Define Quality Audit. Explain the process of audit before achieving ISO certificate.
3. What is Audit Methodology? Explain the qualities of Auditor.
4. Explain Hazard identification and Risk Assessment.

**UNIT-4**

1. Write a detailed note on Pre and post outfitting.
2. Write a detailed note on Dry Survey.
3. Explain about Dock Trail.
4. What is the purpose of sea trial & explain the various types of sea trial
5. Explain about OHSAS, Why it is followed in Industries.
6. Explain concept of EMS in detail, its purpose and explain its requirement

**UNIT-5**

1. With a neat flowchart explain the procedure to achieve ISO Certification
2. What is ISO 9000? Explain its various elements in detail.
3. Write a Detailed note on ISO also explaining how it is carried out? And explain the benefits of getting ISO certificate for your organization
4. Define ISM. Explain DOC, SMC and Interim certificate