

INDIAN MARITIME UNIVERSITY

(A Central University, Government of India)

Entrance Examination for Admission to Ph.D/ MS (By Research)

Subject Name: **MARITIME MANAGEMENT**

Maximum Marks: **120**

Date: **19.01.2019**

Time: **2 Hours**

INSTRUCTIONS

1. Prior to the commencement of the examination, Candidate should check that this question paper does not have any unprinted or torn or missing pages or items, etc. If so, he has to get it replaced with a complete test booklet.
2. This Question Paper contains 120 questions. Each correct answer gets 1 mark. There correct answer gets 1 mark. There are no negative marks for wrong answers.
3. Candidate has to mark answers only in the OMR sheet provided. Follow the instructions given on the OMR sheet.
4. You have to bubble all your answer in Blue or Black Pen on the separate OMR Answer Sheet provided. See directions in the Answer Sheet.
5. More than one bubbled answer per question will make the question invalid for evaluation.
6. Please note that it is the candidate's responsibility to fill in the Roll Number carefully on the OMR sheet.
7. You have to enter your Roll Number in the Question Paper in the Box provided alongside.
8. DO NOT write anything else on the Test Booklet.
9. At the end of the examinations both OMR sheet and the Question booklet have to be handed over to the Invigilator.
10. Sheets for rough work are appended in the Question Paper at the end.
11. Essay Test Question is mentioned at the end of this Question Paper.

Note: Only one out of four answers is correct. Please read all the alternatives before answering.

1. A day is celebrated as the National Maritime Day in our country. This is in remembrance of which significant event?
 - a. Building of the first Indian Ship
 - b. Arrival of the first Indian ship in London
 - c. Establishment of the first Indian shipping company
 - d. Sailing of first Indian ship

2. In the absence of international shipping
 - a. Half the world would freeze
 - b. Half the world would starve
 - c. Nothing will happen
 - d. Half the world would starve and the other would freeze

3. Which is the largest Indian ship owning company?
 - a. Essar Shipping
 - b. Great Eastern Shipping
 - c. Shipping Corporation of India
 - d. Shreyes Shipping

4. Which country supplies maximum seafarers to the global shipping industry?
 - a. India
 - b. Philippines
 - c. China
 - d. Russia

5. Cargoes while loading on ships may be in following condition?
 - a. Packed
 - b. Loose
 - c. Inliquid form
 - d. All of these

6. Which port city is famous for ship scrapping?
 - a. Kolkata
 - b. Bhavnagar
 - c. Vizag
 - d. Mumbai

7. Ships are made of which main material?
 - a. Steel
 - b. Wood
 - c. Alloys
 - d. Composites

8. Which of these is important for the navigation of a ship while near the coast?
 - a. Tide
 - b. Current
 - c. Wind
 - d. All of these

9. Which of these would be in the functions of the Director General of Shipping?
 - a. Registry of ships
 - b. All of these
 - c. Certification of seafarers
 - d. Implementation of MS Act on Indian Ships

10. The Indian legislation for commercial ships is called?
 - a. Marine Insurance Act
 - b. Merchant Shipping Act
 - c. Admiralty Act
 - d. Maritime Shipping Act

11. Territorial waters of India extend to what distance from baseline?
 - a. 10 Nautical miles
 - b. 15 Nautical miles
 - c. 12 Nautical miles
 - d. 20 Nautical miles

12. Port of Kandla is situated in which state?
 - a. Gujarat
 - b. Maharashtra
 - c. Karnatak
 - d. West Bengal

13. If it is 4 p.m. in Chennai, time in London will be
- Less than 4 pm
 - More than 4 pm
 - Noon
 - 4 am
14. Which system is used for navigating modern ships while in deep seas?
- Star
 - Sun
 - Satellite
 - Moon
15. First modern Indian ship was built in s shipyard located in which city?
- Mumbai
 - Visakhapatnam
 - Kochi
 - Chennai
16. Who is the only Indian who has headed the International Maritime Organization in London?
- Sumati Morarjee
 - C.P. Srivastava
 - Ramaswami Mudaliar
 - Ravi Mehrotra
17. In which city does the Indian Maritime University have two campuses?
- Chennai
 - Mumbai
 - Kolkata
 - Kochi
18. Programs at the Indian Maritime University leads to a qualification in which discipline?
- All of these
 - Marine Engineering
 - Nautical Science
 - Naval Architecture

19. Sinking of Titanic led to development of which international convention?
- MARPOL
 - STCW
 - SOLAS
 - LOADLINE
20. Movement of cargo from Chennai to Kochi by ship will be referred as?
- Inland Waterway Shipping
 - Coastal Shipping
 - Deepwater Shipping
 - None of these
21. Breach of cyber security on board ship can affect which activity of the ship
- Navigation
 - Communication
 - Machinery Operation
 - None of these
22. Protection of marine environment covers which of the following areas?
- Discharge of pollutants from ship
 - All of these
 - Type of paint of the hull of the ship
 - Type of exhaust gases from the engine of the ship
23. Current quality management standard for certification is?
- ISO 9001:2008
 - ISO 9001:2008
 - ISO 9001:2015
 - ISO 14001:2015
24. Quality management certification is based on the standards set by which international organization?
- International Organization for Standardization
 - International Standards Organization
 - International Safety Organization
 - International Standards Office

25. Ships travel from one place to another. What is done so that a national identity is provided to a commercial ship?
- Names of the ships are broadcasted
 - Ships are registered in a country
 - Ships of one country travel together
 - National identity is not required as the ships move in open seas
26. Which of these ships provide assistance to the oil fields in the sea?
- Container ships
 - Offshore supply ships
 - Chemical tankers
 - Bulk carriers
27. Cost of transportation per unit is minimum in which mode of transportation?
- Aircraft
 - Train
 - Ship
 - Truck
28. Considering the same size, which type of ship will be most expensive?
- Gas carrier
 - Oil tankers
 - Container Ships
 - Bulk Carriers
29. Motor cars are transported by which type of ships?
- Heavy lift ships
 - Supply ships
 - Ro-ro ships
 - Container ships
30. What does ship owner earn to carry cargo from one place to another?
- Freight
 - Fare
 - Hire
 - Demurrage

31. Which of these ships carry crude oil?
- VLVV
 - ULCC
 - Suexmax
 - All of these
32. Process of refueling the ship is called?
- Bunkering
 - Ballasting
 - Berthing
 - Maneuvering
33. What is the function of propeller on ship
- Cooling the engines
 - Turning the ship
 - Moving the ship
 - Ballasting the ship
34. Which fuel is used on board ships?
- Heavy Oil
 - All of these
 - High Speed Oil
 - Diesel oil
35. A ship without cargo requires ballast. What material is used for this?
- Aluminum ingots
 - Steel Pipes
 - All of these
 - Sea Water
36. Vishwas sold an item for Rs.7,200 and incurred a loss of 20 per cent. At what price should he have sold the item to have gained a profit of 20 per cent.
- Rs.10, 800
 - Rs.8,950
 - Rs.11,200
 - Cannot be determined

37. The average age of 20 students of a section is 12 years. The average age of 25 students of another section is 12 years. What is the average age of both the sections combined together?
- 11.5 years
 - 11 years
 - 11.75 years
 - 12 years
38. A man runs 3 km per hour in still water. If the river is running at 1 km per hour, it takes 45 minutes to row to a place and back. How far is the place?
- 5 kms
 - 4 kms
 - 3 kms
 - None of these
39. A person invested Rs.2 lakhs at 12 percentage per annum interest for one year. If he invests Rs.500 more, he is eligible for 13 percentage per annum interest. How much more interest he would receive if he would have accepted the second option?
- Rs.2065
 - Rs.2165
 - Rs.2155
 - Rs.2045
40. If a car takes 40 minutes to cover a distance of 34 kms, what is its speed per hour?
- 61 kms
 - 51 kms
 - 50 kms
 - 45 kms
41. What should come in place of the question mark (?) in the following number series?
- 2 5 11 23 47 ?
- 95
 - 93
 - 98
 - 94

42. In a class of 60 students, 40 per cent can speak only Hindi, 25 per cent can speak only English and rest of the students can speak both the languages. Total how many students can speak English?
- a. 32
 - b. 28
 - c. 36
 - d. 15
43. Which of the following is not a correct statement about Infrasound?
- a) Infrasound has a frequency lower than 5000 Hertz
 - b) Infrasound is produced/detected by elephants and whales
 - c) Infrasound can travel longer distances than high frequency sound waves
 - d) All the above are correct
44. Germany will partner with India to develop which cities as smart cities?
- a) Jaipur, Ahmedabad and Ludhiana
 - b) Kochi, Bhubaneswar and Coimbatore
 - c) Allahabad, Ajmer and Visakhapatnam
 - d) Kakinada, Sholapur and Udaipur
45. A device for measuring the depth of sea is called
- a) Altimeter
 - b) Fathometer
 - c) Hydrometer
 - d) Manometer
46. A motorboat, whose speed in 15 km/hr in still water goes 30 km downstream and comes back in a total of 4 hours 30 minutes. The speed of the stream (in km/hr) is:
- a) 4
 - b) 5
 - c) 6
 - d) 10

47. One-third of Rahul's savings in National Savings Certificate is equal to one-half of his savings in Public Provident Fund. If he has Rs.1,50,000 as total savings, how much has he saved in Public Provident Fund?
- a) Rs. 30,000
 - b) Rs. 50,000
 - c) Rs. 60,000
 - d) Rs. 90,000
48. In a mixture of 60 litres, the ratio of milk to water is 2:1. If this ratio is to be 1:2, then the quantity of water to be further added to the mixture is:
- a) 20 litres
 - b) 30 litres
 - c) 40 litres
 - d) 60 litres
49. Three times the first of three consecutive odd integers is 3 more than twice the third. The third integer is:
- a) 9
 - b) 11
 - c) 13
 - d) 15
50. The effective annual rate of interest corresponding to a nominal rate of 6% per annum payable half-yearly is:
- a) 6.06%
 - b) 6.09%
 - c) 6.12%
 - d) 6.15%
51. Two ships are sailing in the sea on the two sides of a lighthouse. The angle of elevation of the top of the lighthouse is observed from the ships are 30° and 45° respectively. If the lighthouse is 100 m high, the distance between the two ships is:
- a) 173 m
 - b) 200 m
 - c) 273 m
 - d) 300 m

52. Identify the odd man out of following set of numbers: 396, 462, 572, 427, 671, 264

- a) 396
- b) 427
- c) 671
- d) 264

53. In a lottery, there are 10 prizes and 25 blanks. A lottery is drawn at random. What is the probability of getting a prize?

- a) $\frac{1}{10}$
- b) $\frac{2}{5}$
- c) $\frac{2}{7}$
- d) $\frac{5}{7}$

54. If $\log 2 = 0.3010$ and $\log 3 = 0.4771$, the value of $\log_5 (512)$ is:

- a) 2.870
- b) 2.967
- c) 3.876
- d) 3.912

55. A pump can fill a tank with water in 2 hours. Because of a leak, it took $2\frac{1}{3}$ hours to fill the tank. The leak can drain all the water of the tank in:

- a) $4\frac{1}{3}$ hours
- b) 7 hours
- c) 8 hours
- d) 14 hours

56. After the division of a number successively by 3, 4 and 7 the remainders obtained are 2, 1 and 4 respectively. What is the number?

- a) 80
- b) 76
- c) 41
- d) 53

57. 6 men and 8 women can do as much work in a given time as 3 men and 13 women. The capacities of a man and a woman are in the ratio
- a) 3:8
 - b) 3:5
 - c) 5:3
 - d) 5:8
58. The gross income of a person is Rs.25,000. 20% of his income is exempted from income-tax and the rate of income tax is 5%. His net income in rupees is:
- a) 23,500
 - b) 24,000
 - c) 24,500
 - d) None of these
59. The profit earned after selling an article for Rs.1754/- is the same as loss incurred after selling the article for Rs 1492/-. What is the cost price of the article?
- a. Rs. 1523
 - b. Rs.1623
 - c. Rs.1689
 - d. Rs.3246
60. A tank is connected to pipes. One of those pipes can fill the tank in 15 minutes while the other can empty it in 10 minutes. If the tank is initially $\frac{3}{5}$ full and both pipes are simultaneously opened, how much time it will take to fill or empty the tank?
- a. 12 minutes
 - b. 15 minutes
 - c. 18 minutes
 - d. 10 minutes

61. The five elements in the management process are:
- plan, direct, update, lead, and supervise,
 - organize, plan, control, staff, and manage
 - organize, plan, control, staff, and manage
 - plan, organize, staff, lead, and control
62. Managers at first level in the organizational hierarchy require various sets of skills. Which one is most required skill?
- Technical skills
 - Human skills
 - Conceptual skills
 - Design skills
63. Which of the following involves a graphic representation of alternative courses of action and the possible outcomes and risks associated with each action?
- Decision tree
 - Risk analysis
 - Utility theory
 - Incremental analysis
64. Katrina Kaif has started a small beverages company. She plans to diversify into fast foods and confectionaries. Her company required a formal structure to coordinate its activities. Hence, Katrina adopted the functional structure. Which of the following is a feature of the functional structure?
- Positions are grouped according to similarity of products
 - A horizontal set of divisional reporting relationships are superimposed onto a hierarchial tasks based structure
 - Activities are grouped on the basis of process or equipment
 - Positions are combined into units on the basis of similarities of expertise, skill and work activities
65. The Strategic Business Unit (SBU) is a major recent form of organization structure adopted by several companies. Which of the following is not true with respect to SBUs?
- It is a distinct business entity
 - It can be managed independently
 - Its mission is same as that of a parent company
 - It has well defined competitor group
66. If planning focuses on deciding what to do, organizing focuses on how to do it. Organizing as a management function includes all the following except
- Creating the right condition for utilization of organizational resources
 - Specifying subordinates authority and responsibility
 - Evaluation of the subordinates performance at set intervals
 - Setting verifiable objectives and clear picture of the major duties to be performed

67. When managers delegate authority, they must allocate commensurate
- Responsibility
 - Power
 - Money
 - Influence
68. In SWOT analysis, which of the following are external environment characteristics of an organization?
- Strengths and weaknesses
 - Opportunities and threat
 - Strengths and opportunities
 - Weaknesses and threats
69. Which of the following is the most common feature in a highly centralized organization?
- Decisions are made very quickly
 - The organization is multinational
 - Decision-making authority is retained by top management
 - Delegation is a common practice within the organization
70. According to Kurt Lewin, in which of the following stages, the new behaviour pattern is locked in by means of supporting or reinforcing mechanism, so that it becomes the new norm?
- Benchmarking
 - Refreezing
 - Moving
 - Unfreezing
71. According to Henry Mintzberg's classification of managerial roles, a manager designing and initiating change within the organization is said to be playing which of the following roles?
- Figurehead
 - Leader
 - Disseminator
 - Entrepreneur
72. The aim of managers is to improve productivity, efficiency and effectiveness. Which of the following is/are way(s) to improve productivity?
- By producing more output with same inputs.
 - By reducing inputs, but maintaining the same level of outputs.
 - By increasing outputs and reducing inputs.
 - By reducing both inputs and outputs.
- Only (I) above
 - Both (I) and (II) above
 - Both (II) and (III) above
 - (I), (II) and (III) above

73. There can be different sources of resistance to change. For analytical purposes, they can be categorized as individual and organizational sources. Which of the following is an organizational source of resistance to change?
- Habit
 - Structural inertia
 - Security
 - Fear of the unknown
74. Employees' involvement and commitment towards accomplishment of the Organisation's Goal / Objective is achieved through -----
- Encouragement
 - Punishment
 - Empowerment
 - Employment
75. Observing Truth, Justice and Fairness in business dealings is called as -----
- Purpose of existence
 - Business Ethics
 - Business Mission
 - Business Strategy
76. To analyse the current business and foresee expected future situation, determine the Direction of Business and develop means to achieve the Mission of the Organisation requires -----
- Strategic Planning
 - Skill Development of Employees
 - Decision Making
 - Top Management involvement
77. An ability of a person to influence belief, thinking or Actions of others is known as -----
- Authority
 - Power
 - Capability
 - Popularity
78. A set of general statements or guidelines provided to help the concerned Manager to channelize the thinking towards 'decision making' is -----
- Procedure
 - Policy
 - Systems
 - Guidelines

79. The bargaining power of buyers, as described by Porter, is high when
- There are only a few players in the industry
 - Their purchases form a large chunk of the sellers' total sales
 - There are no substitutes for products being purchased
 - Products or services are critical to the buyer's business
80. When Jack Welch said, "change or be ready to die", he was basically referring to the importance of change in modern business environment and therefore management must take into account the impending changes in every aspect of business and act accordingly. Which of the following management functions plays a very important role in dealing with environmental change?
- Organizing
 - Controlling
 - Planning
 - Staffing
81. Which of the following methods help managers find out the minimum time and cost required to complete a project?
- Program evaluation and review technique (PERT)
 - Critical path method (CPM)
 - Just in time (JIT)
 - Computer aided design (CAD)
82. ----- is the processes that account for an individual's intensity, direction and persistence of effort towards attaining a goal
- Perception
 - Cooperation
 - Motivation
 - Affect
83. What is the objective of planned change?
- Training and Development
 - To keep the organisation current and viable
 - All of the above
 - None of the above
84. Which of these are tactics for dealing with Resistance to change?
- Facilitation and support
 - Manipulation and co-optation
 - Education and Communication
 - Coercion
- Both I & IV
 - Both II & III
 - Both I & II
 - I, II, III and IV

85. Which of these is a source of organisational conflict?

- a. Differences in evaluation criteria and reward systems
- b. Dependence on common scarce resources
- c. High horizontal differentiation
- d. All of the above

86. _____ refers to the information, equipment, techniques and processes required to transform inputs into outputs in the organisation.

- a. Size
- b. Technology
- c. Power - control
- d. Environment

87. Which of these is a characteristic of organic structure?

- a. Formalization
- b. Complex
- c. Flexible
- d. All of the above

88. Which of these is a characteristic of bureaucracy?

- a. Impersonal nature
- b. Career tracks for employees
- c. Division of labour
- d. All of the above

89. _____ is a structural design that assigns specialists from specific functional departments to work on one or more interdisciplinary teams which are led by project leader.

- a. Committee form
- b. Matrix
- c. Network structure
- d. None of the above

90. Advantage of delegation of authority results in prompt _____.

- a. Understanding
- b. Decision making
- c. Both (A) and (B)
- d. None of the above

91. Positive motivation makes people willing to do their work in the best way they can and improve their _____.

- a. Skills
- b. Performance
- c. Both (A) and (B)
- d. None of the above

92. The non-financial type of motivators would be

- a. Encouragement
- b. Freedom
- c. Recognition
- d. All of the above

93. Learning organizations are adaptive to their _____ environment.

- a. Internal
- b. External
- c. Work
- d. None of the above

94. What does a mission statement specify that the organization will achieve?

- a. Goals
- b. Profit
- c. Both (A) and (B)
- d. None of the above

95. Which approach to the study of organisational behaviour emphasises the formal structure, hierarchy of management, the technical requirements and the assumption of rational behaviour?

- a. The human relations approach
- b. The Systems approach
- c. The contingency theory
- d. The classical approach

96. As a manager, Abhinav Pal has a good grasp of the “big picture”, visualizing the relationship of his business to the industry and to the larger community. He is also able to see how the various parts of his organization depend upon one another. In this way, Abhinav is demonstrating excellent _____ skill.

- a. Diagnostic
- b. Technical
- c. Conceptual
- d. Human

97. Six sigma quality indicates:

- a. 2.4 defects per thousand
- b. 2.7 defects per thousand
- c. 3.4 defects per thousand
- d. None of these

98. Which of the following forms of decision-making involves seeking expert opinion iteratively through anonymous participation?

- a. Brainstorming
- b. Nominal group
- c. Delphi group
- d. Interactive group

99. Response rate refers to

- a. How confident you want to be about your results
- b. The proportions of people who take part in a study
- c. How big a population is
- d. How variable participants' responses are

100. Which of the following chart types will be used for monitoring the diameter of forged steel rods within a production lot?

- a. X- chart
- b. R – chart
- c. P- chart
- d. C – chart

101. When a pharmaceutical research company assigns research specialist to report jointly to the head of marketing and also to the head of research, it is an example of

- a.. Functional departmentation
- b. Matrix structure
- c. Geographical departmentation
- d. Centralized structure.

102. Goal setting theory suggests all of the following except

- a. Specific goals lead to higher performance
- b. Difficult goals Increase performance
- c. Feedback leads to higher performance

- d. Ambiguous goals increase performance
103. An organization that groups activities according to footwear, apparel, accessories, and leggings would use
- a. Functional departmentation
 - b. Process departmentation
 - c. Product departmentation.
 - d. Geographic departmentation
104. We use control charts to monitor
- a. Random variables
 - b. Assignable variables
 - c. Natural variation
 - d. All of the above
105. Which of the following tests measure an individual's ability to learn a given job, when adequate training is given and do not test the knowledge or proficiency possessed by the individual?
- a. Interest tests
 - b. Achievement tests
 - c. Situational tests
 - d. Aptitude tests
106. How much interest is earned in the third year on a Rs. 1,000 deposit that earns 7% interest compounded annually?
- a. Rs. 70
 - b. Rs. 80
 - c. Rs. 106
 - d. Rs. 140
107. Who among the following are **not** stakeholders of an organization?
- a. Shareholders
 - b. Competitors
 - c. Customers
 - d. Employees

108. The role of a 'disseminator' is amongst the various roles that Mr. Sumit fulfills as a manager of the company he works for. Which of the following describe(s) Mr. Sumit's role as a disseminator?

- I. Performing ceremonial and social duties as the organization's representative.
- II. Forwarding information to other organization members and subordinates through sending memos and reports.
- III. Taking corrective action during disputes.

- a. Both (II) and (III) above.
- b. Only (II) above
- c. Only (III) above
- d. Both (I) and (II) above

109. Management by Objectives (MBO) is a widely used term and organizations use it for various purposes. Nevertheless, MBO **cannot** be used as a/an

- a. Appraisal tool
- b. Motivational technique
- c. Recruitment tool
- d. Planning device

110. David C. McClelland has contributed to the theories of motivation by highlighting the importance of various basic needs to understand motivation. According to McClelland, an employee having which of the following needs can be motivated by setting challenging, but reachable goals and providing immediate feedback about his/her performance?

- a. Achievement
- b. Affiliation
- c. Power
- d. Existence

111. Abraham Maslow's hierarchy of human needs theory is classified into various groups. An organization satisfies which of the following needs of its employees by providing a well-furnished office, a car, a personal assistant and other benefits such as stock options, club memberships, etc?

- a. Self-actualization
- b. Safety and security
- c. Social
- d. Esteem

112. Performance appraisals are important in an organization because they

- I. Provide systematic judgments to support promotions.
- II. Provide a basis for coaching.
- III. Provide a basis for counseling
- IV. Let subordinates know where they stand with the boss.

- a. Only (I) and (II) above
- b. All (I), (II), (III) and (IV) above.
- c. Both (I) and (IV) above
- d. (I), (III) and (IV) above

113. When a subordinate or a lower level manager passes information or offers suggestions to the higher level management, they are using which level of communication?

- a. Upward communication
- b. Downward communication
- c. Lateral communication
- d. Diagonal communication.

114. Devbrata must constantly report to the departmental head as well as his immediate supervisor. Which of the following is being violated?

- a. Work specialization
- b. Unity of command
- c. Span of control
- d. Departmentalization

115. Budget refers to

- a. Planned target of performance
- b. Steps of handling future activities
- c. Systematic action and allocation of resources
- d. Statement of expected results expressed in numerical terms

116. Which of the following is the reason for resistance to change?

- a. Obsolescence of skills
- b. Fear of economic loss
- c. Fear of unknown
- d. All of the above.

117. As a manager moves to higher positions in an organisation the ability to make _____ becomes _____ important.

- a. Programmed; less
- b. Non-programmed; more
- c. Non-programmed; less
- d. Programmed; much more

118. As the business environment is subject to change, a planner has to make assumptions about the environment in which the plan is going to be carried out. The planners are required to lay down the boundaries or limitations within which plans are to be implemented. These assumptions about the environment are called

- a. Probabilities
- b. Planning premises
- c. Organizational objectives
- d. Tactics

119. The difference between the mean of a researcher's sample and the mean of the population of the sample is known as the

- a. Confidence level
- b. Sampling error
- c. Significance level
- d. Standard deviation

120. Usually confidence intervals are set at what figure?

- a. 95%
- b. 100%
- c. 5%
- d. 55%

ESSAY TEST

(One Hour)

Write an essay on the topic of your proposed research covering the following components in not less than 400 words:

- Objective
- Brief background
- Data requirement
- Methodology proposed