



অতিরিক্ত সংখ্যা  
কর্তৃপক্ষ কর্তৃক প্রকাশিত

বৃহস্পতিবার, জানুয়ারী ২৪, ১৯৯১

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার

সৌ-পরিবহন মন্ত্রণালয়

প্রজ্ঞাপন

ঢাকা, ১৩ই কার্তিক ১৩৯৭/২৯শে অক্টোবর ১৯৯০

নং এস, আর, ও ৩৭৩-অইন/৯০/আইজ-২/বিধি-১/৯০—In exercise of the powers conferred by section 95 of the Bangladesh Merchant Shipping Ordinance, 1983 (XXVI of 1983), the Government is pleased to make the following rules, namely :-

1. **Short title, commencement and application.**

- (1) These rules may be called the Bangladesh Merchant Shipping (Certification of Marine Engineer Officers) Rules, 1990.
- (2) They shall come into force on such date as the Director General, Department of Shipping may, by notification in the official Gazette, appoint.
- (3) (a) These rules shall apply to all Bangladesh sea-going ships engaged in unlimited or limited voyages having registered power of not less than 350 kilowatt and to sail training ships with propulsion engine except fishing vessels and pleasure crafts.  
(b) Notwithstanding the provisions of clause (a), in respect of ships operating between locations in such areas as may be specified, the Director General may, in conformity with the international practices, grant exemptions from all or any of the provisions of these rules (as may be specified in such exemption) to classes of cases or individual cases on such terms and conditions as he may so specify and may, subject to giving reasonable notice, alter or cancel any such exemption.

2. **Definitions** : In these rules, unless there is anything repugnant in the subject or context,-

- (a) "Certificate of Competency" means a Certificate for any grade issued under these rules;
- (b) "Chemical tanker" means a ship constructed and used for the carriage in bulk of any liquid chemical listed in the International Maritime Organisation (IMO) "Code for the Construction and Equipment of ships carrying Dangerous Chemical in bulk";
- (c) "Chief Examiner" means the Chief Engineer & Ship Surveyor, Department of Shipping or any other qualified Person appointed by the Government to act as Chief Examiner of examinations under these rules;

- (d) "Chief Engineer Officer" means the senior engineer officer responsible for the mechanical propulsion of the ship;
- (e) "Convention" means the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978;
- (f) "Department" means Department of Shipping, Government of the People's Republic of Bangladesh;
- (g) "Director-General" means the Director General of the Department of Shipping established under the Bangladesh Merchant Shipping Ordinance, 1983 (XXVI of 1983);
- (h) "Engineer Cadet" means a person undergoing initial training as apprentice for the service of Engineer Officer;
- (i) "Engineer Officer" means a person in the engine department of the ship who has successfully completed the initial training as a marine engineer but possessing or not a Certificate of Competency;
- (j) "Watch Keeping Engineer Officer" means an Engineer Officer certificated as such under these rules;
- (k) "Examination" means written, oral or any other examination or part thereof conducted under the rules;
- (l) "Examiner" means a person appointed by the Government as such and includes Engineer Examiner & Ship Surveyor and any other qualified person whose services may be employed for conducting examination of Engineers under these rules;
- (m) "Fourth Engineer Officer" means the Engineer Officer next in rank to Third Engineer Officer holding a minimum Class 4 Certificate of Competency (Marine Engineer Officer);
- (n) "Limited Voyage" means voyages between ports and places located in the Bay of Bengal between Singapore on the South-east and Colombo on the South-west; and such near coastal voyages anywhere else as may be determined by the Director General for the duration of such engagement;
- (o) "Liquefied gas tanker" means a ship constructed and used for the carriage in bulk of any liquefied gas listed in the International Maritime Organisation (IMO) "Code for the Construction and Equipment of ships carrying Liquefied Gases in bulk";
- (p) "Oil tanker" means a ship constructed and used for the carriage of petroleum and petroleum products in bulk;
- (q) "Qualified Marine Engineer Officer" means an engineer officer certificated as such under these rules;

- (r) "Qualifying sea service" means, except where otherwise stated, sea service under crew agreement on board a sea-going ship as an Engineer Officer on regular watch i.e. on watch for not less than eight out of each 24 hours of service claimed in ships with propelling machinery in full use;
- (s) "Registered power" means, in relation to a ship, the brake or shaft power specified in the ship's certificate of registry;
- (t) "Schedule" means a Schedule to these rules;
- (u) "Sea going ship" means a ship other than those which navigate exclusively in inland waters or waters within or closely adjacent to sheltered waters or areas where port regulations apply;
- (v) "Second Engineer Officer" means the Engineer Officer next in rank to the Chief Engineer Officer and upon whom the responsibility for the mechanical propulsion of the ship will fall in the event of incapacity of the Chief Engineer Officer;
- (w) "Trading Area" means an area a ship is engaged on unlimited or limited voyage exceeding 72 hours;
- (x) "Third Engineer Officer" means the Engineer Officer next in rank to the Second Engineer Officer holding a minimum Class 3 Certificate of Competency (Marine Engineer Officer);
- (y) "Unlimited Voyage" means voyages any of which could be beyond the limits of limited voyage;
- (z) "Watch" means either a group of personnel composing the watch or a period of responsibility for an engineer officer during which his physical presence in the machinery space may or may not be required;
- (zi) "Watch-keeping" means such period of service on a ship during which the engineer officer looks after the operation of machineries in the engine room for not less than eight hours out of each 24 hours of service.

### 3. Classes of Certificates to be Issued, etc.

- (1) Classes of certificate of competency to be issued under these rules, and the functions of an engineer officer of whom the holder of such certificates shall be qualified to perform aboard a ship of 3000 kw registered power or above engaged in unlimited trade are as follows :-

Classes of Certificate of Competency		Qualified to perform functions of
Certificate of Competency (Marine Engineer Officer)	Class 1	Chief Engineer Officer
Certificate of Competency (Marine Engineer Officer)	Class 2	2nd Engineer Officer
Certificate of Competency (Marine Engineer Officer)	Class 3	3rd Engineer Officer

Certificate of Competency  
(Marine Engineer Officer)

Class 4

4th Engineer Officer

- (2) Certificates of Competency, Class 1, Class 2 and Class 4 shall be issued for motor or steam machinery or for combined motor and steam machinery. Certificate of Competency, Class 3 shall be issued for motor machinery only.
- (3) The capacity and functions of a certificated engineer officer may vary depending on the registered power (kilowatt) of the ship and the nature and duration of voyages she is engaged on. A case in which a certificated engineer officer is intended to serve in a capacity higher than what he is qualified for, shall be referred to the Director General for approval and documentation.

**4. Chief Engineer Officers' endorsement**

Certificates of Competency Class 2, Class 3 and Class 4 may carry an endorsement and a person holding a certificate of competency of a class specified in column 1 of the Table below shall be entitled to appear at an examination for an endorsement to qualify to act as Chief Engineer Officer in the description of ships as set out in column 2 thereof.

Table

Column 1 Class of Certificate of Competency	Column 2 Description of ship
Class 2	In ships of 750 KW and or above, but less than 3000 KW registered power going to and from or between any locations. In ships of 3000 KW and or above, but less than 6000 KW registered power going between any locations in the limited trade area.
Class 3	In ships of 350 KW and or above, but less than 750 KW registered power going to and from or between any locations. In ships of 750 KW and or above, but less than 3000 KW registered power going between locations in the limited trade area.
Class 4	In ships of 350 KW and or above, but less than 750 Kw registered power going between locations in the limited trade area. In sail training ships of less than 350 KW registered power going to and from or between any locations .

**5. Certificates of Competency to be issued according to Types of Machinery, etc.**

- (1) Certificate of Competency shall be issued as follows:

- (a) Motor Certificate, qualifying the holder to serve as an engineer officer in the class certified for motor ships propelled by internal combustion reciprocating engines.
  - (b) Steam Certificate, qualifying the holder to serve as an engineer officer in the class certified for steam ships propelled by steam turbines or gas turbines.
  - (c) Combined Certificate, qualifying the holder to serve as an engineer officer in the class certified for both motor ships and steamships and in ships propelled by gas turbines.
- (2) (i) To qualify for the issue of a Class 1, Class 2, Class 3 or Class 4 Certificate of Competency, each candidate shall :
- (a) satisfy the initial training requirements set out in rule 6;
  - (b) Complete the qualifying sea service set out in rule 7;
  - (c) pass the examinations set out in rule 8;

Provided that to be eligible for appearing at a Class 1 certificate of competency examination a candidate must hold a class 2 certificate of competency.

(3) **To qualify for the issue of an Endorsement to a Class 2, Class 3 or Class 4 certificate of competency each candidate must :-**

- (a) be not less than twenty one years of age;
- (b) hold the appropriate class of certificate of competency to be endorsed;
- (c) have completed the qualifying sea service set out in rule 7; and
- (d) pass the examination set out in rule 8.

6. **Initial Training Requirement :**

- (1) Workshop service or other industrial training completed before the age of sixteen years will not be accepted.
- (2) A candidate must have received any one of the following initial trainings :

- (a) Engineering Cadet Training Scheme (ECTS) :  
A candidate shall complete the 4 years' Engine Cadet Training Scheme (ECTS) approved by the Director General, Department of Shipping in Marine Academy, Chittagong as under :-

2- years pre-sea training in Marine Academy (Phase I)

1- year shipboard training	(Phase II)
1- year training in Marine Academy	(Phase III)

The Director general may consider a training carried out in a foreign institution on a case to case basis, which may have the same effect as training in the Marine Academy, Chittagong.

If a candidate fails to complete his training without genuine reasons, no credit shall be given for part of the training and the candidate may be assessed under other approved and appropriate provisions.

- (b) **Engineering Apprentice** : Each such candidate shall hold a Higher Secondary Certificate (Science Group) with at least 50% marks in Physics and Mathematics each and hold 48 months service relevant to marine engineering in a workshop approved by the Director-General in a learning capacity. Description of the training, time period in each shop and form of the testimonials are shown in Schedule 1. 25% of the time in each shop shall be devoted to the theoretical instructions related to work and twelve months as a cadet engineer on board a sea-going ship. Every candidate for apprenticeship training must have prior approval of Director General for such training and be within the upper age limit twenty four years on the date of application for approval.
- (c) **Engineer Graduate** : Every such candidate shall hold a degree in Naval Architecture and Marine Engineering or Mechanical Engineering from a Bangladesh University or equivalent degree from a recognised foreign University. Such candidate shall undergo six months intensive workshop training on the use of machine tools and welding and nine months of sea-service as Engineer Cadet. If the training is carried out during employment, the shipowner shall bear the expenses including the basic Salary of the rank. Pre-sea workshop training shall require prior approval of the Director General and the candidate shall be within the upper age limit of twenty seven years on the date of application for approval.
- (3) Candidates who do not meet any of the requirements of sub-rule (2), but are employed in merchant ships as Engineer Cadets because of national requirements under especial circumstances shall perform sixty months articulated sea-service and six months intensive workshop training during holidays in a recognised training institution or workshop on the use of machine tools and welding and they must have passed Higher Secondary School Certificate examination (Science group) with at least 50% marks in Physics and Mathematics each and have been within upper age limit of twenty years at the time of joining as Engineer Cadet on board a ship.
- (4) Any deficiency from the requirements of sub-rule (2) will be assessed in each case by the Director General and must be made good by further

workshop service of a suitable nature or by compensatory shipboard service as an apprentice engineer or cadet engineer or engineer officer.

**Explanation;** Compensatory shipboard service must be performed in sea-going motor or steam ships of not less than 350 Kilowatt. Such service may be performed on regular watch or on a day work. Time so spent will be accepted as having two thirds the value of a suitable workshop service. Any sea service performed beyond the requirement of compensatory shipboard service, while remaining in the Articles of Agreement of the vessel as engineer will be credited towards qualifying sea service.

- (5) Each candidate shall be required to produce authoritative testimonials covering all of his trainings and post training employments in the engineering industry. These testimonials will state the name of employees concerned, the dates of commencement and termination of employment, the capacities in which the person was employed and give a summary of work undertaken. Testimonials must be signed by the owner or a responsible representative of the owner.
- (6) An engineering cadet or officer prior to joining sea as well as prior to appearing for the various grades or certificate of competency shall be subject to the medical fitness tests, including eyesight, hearing and stammering as may be decided by the Director General.

#### 7. Qualifying Sea Service

- (1) In order to be eligible to appear at the examination for the issue of a Class 4 certificate of competency, a candidate shall, in addition to meeting the initial training requirements set out in rule 6, have completed a period of qualifying sea service in sea going ships of not less than 350 kw registered power as follows:
  - (a) **Motor Certificate.** Six months of which at least four months must have been spent in watchkeeping on the main propelling machinery of motor ships.
  - (b) **Steam Certificate.** Six months of which at least four months must have been spent in watchkeeping on the boilers and main propelling machinery of steam ships.
  - (c) **Combined Certificate.** Nine months of which at least four months must have been spent in watchkeeping on the main propelling machinery of motor ships and at least four months must have been spent in watchkeeping on the boilers and main propelling machinery of steam ships.
  - (d) **Endorsement.** Six months, while in possession of a Class 4 Certificate of Competency. This service shall be performed in

motor ships for an Endorsement to a motor certificate and in steamships for an Endorsement to a steam certificate.

- (2) In order to be eligible to appear at the examination for the issue of a Class 3 Certificate of Competency, a candidate shall, in addition to meeting the initial training requirements set out in rule 6, have completed a period of qualifying sea-service in sea going ships of not less than 350 kw registered power as follows:
- (a) **Class 3 Certificate.** Fifteen months, of which at least nine months must have been spent in watchkeeping on the main propelling machinery of a motor ship. The remaining period may have been spent in watchkeeping on the main propelling or auxiliary machinery of motor or steam ships, or on day work.
  - (b) **Endorsement.** Twelve months, while in possession of a Class 3 Certificate of Competency. This service shall be performed in motor ships.
- (3) In order to be eligible to appear at the examination for the issue of a Class 2 Certificate of Competency, a candidate shall, in addition to meeting the initial training requirements set out in rule 6, have completed a period of qualifying sea service in sea going ships of not less than 750 kw registered power as follows:
- (a) **Motor Certificate.** Twenty one months, of which at least nine months must have been spent in watch-keeping on the main propelling machinery of motor ships. The remaining period may have been spent in watchkeeping on the main propelling or auxiliary machinery of motor or steam ships, or on day work.
  - (b) **Steam Certificate.** Twenty one months, of which at least nine months must have been spent in watchkeeping on the boilers and main propelling machinery of Steamship. The remaining period may have been spent in watchkeeping on the main propelling or auxiliary machinery of motor or steam ships, or on day work.
  - (c) **Combined Certificate.** Twenty one months, of which at least nine months must have been spent in watchkeeping on the main propelling machinery of motorships and at least nine months must have been spent in watchkeeping on the boilers and main propelling machinery of steam ships. The remaining period may have been spent in watchkeeping on the main propelling or auxiliary machinery of motor or steam ships, or on day work.
  - (d) **Endorsement.** Twelve months, while in possession of a class 2 Certificate of Competency, provided that this period together with the period of qualifying sea service actually performed before



obtaining a Class 2 Certificate of Competency, exclusive of remission, amounts to not less than thirty six months. This additional service of not less than twelve months must be performed in motor ships for an endorsement to a motor certificate and in steam ships for an endorsement to a steam certificate.

Where a candidate is in possession of a Class 3 Combined Certificate of Competency, this additional service of not less than twelve months may be performed in either motor ships or steam ships.

- (4) In order to be eligible to appear at the examination for the issue of a Class 1 Certificate of Competency a candidate shall, in addition to meeting the initial training requirements set out in rule 6, have completed a period of qualifying sea-service in sea-going ships of not less than 1500 kw registered power as follows:
- (a) **Motor Certificate.** Twenty one months, of which at least nine months must have been spent in charge of a watch in motor ships of not less than 3000 kw registered power while holding a class 2 certificate of competency, or as chief Engineer Officer in motor ships while holding a class 2 Motor Certificate of Competency with Endorsement. The nine months "Core time" can also be spent in charge of a watch in ships of 1500 kw and above but less than 3000 kw registered power in which case qualifying sea service shall be counted at half the rate.
  - (b) **Steam Certificate.** Twenty one months, of which at least nine months have been spent in charge of a watch in steam ships of not less than 3000 kw registered power while holding a Class 2 certificate of Competency, or as Chief Engineer Officer in steam ships while holding a class 2 Steam Certificate of Competency with Endorsement. The nine months "Core time" can also be spent in charge of a watch in ships of 1500 kilowatt and above but less than 3000 kw registered power in which case qualifying sea service shall be counted at half the rate.
  - (c) **Combined Certificate.** Twenty one months, of which at least nine months must have been spent in accordance with clause (a) of this sub-rule and at least nine months must have been spent in accordance with clause (b) of this sub-rule. Remission may be granted in some instances in accordance with sub-rule (5).
- (5) Remission of qualifying sea service for various examinations shall be granted as follows:

- (a) **Class 4 Certificate of Competency.** Candidates trained under the Engineer Cadet Training Scheme in Marine Academy may be granted remission of qualifying sea service of equal length and description (steam or motor) to that performed during their cadetship if their "History of Employment of sea Service" booklets have been completed to the satisfaction of the Director General and they may take part in the examination on completion of their phase III training, but their Certificates shall not be issued until they accumulate three months of post-examination sea service as assistant to Senior watch-keeper. Such accumulation of time shall not be necessary if they prefer accomplishing three months sea service before examination.
- (b) **Class 4 Endorsement.** A candidate who requires a Class 4 endorsement to a Class 1 Certificate of Competency will be granted full remission.
- (c) **Class 3 Certificate of Competency.** Candidates who have passed the academic subjects of Class 3 examination before starting qualifying sea service may be granted three months remission of qualifying sea service.
- (d) **Class 2 Certificate of Competency.** Candidates who have passed the academic subjects of Class 2 examination before commencement of qualifying sea service may be granted three months remission of qualifying sea service.
- (e) **Class 1 Certificate of Competency.** Candidates who have passed the academic subjects of Class 1 examination before commencement of qualifying sea service may be granted three months remission of qualifying sea service.
- (f) **Class 1 Combined.** A remission of three months from either nine months period specified in clause (c) of sub-rule(4) will be granted to a candidate who has spent at least six months of that period while holding a Class 1 Certificate of Competency.
- (6) **Other sea-service counted towards qualifying sea service :-**
- (a) **Sporadic use of main propelling machinery.** Service performed in ships where for considerable periods the main propelling machinery is not used, is reckoned as one and a half times the number of days actually spent underway, but in no case can it exceed the time served under crew agreement during the period concerned.

- (b) **Unattended machinery spaces.** Service performed in ships where the main propelling machinery operated regularly in the periodically unattended mode will be accepted at full rate.
- (c) **Unusual service.** Service which consists of work of an unusual nature, but which may be considered pertinent to the operational experience of an engineer officer, will be accepted up to a maximum of nine months, either at full rate, or at some proportional rate dependant upon the nature of the work involved. Such service will not be accepted as counting towards the minimum required to be spent in watchkeeping on main propelling machinery.
- (d) **Laidup ships.** Service performed in ships lying idle or Laidup for period exceeding thirty days shall not be counted.
- (e) **Ships under Construction.** Modification, Repair. Service on such ships may be treated as qualifying sea service provided the engineer officer sails on such a ship signing Crew Agreement within a period of forty five days.
- (f) **Auxiliary machinery.** Service in watchkeeping on auxiliary machinery will be accepted at full rate. Such service will not be accepted as counting towards the minimum required to be spent in watchkeeping on main machinery.
- (g) **Day Work.** Engineering work carried out at sea or in port than that performed on regular watch, will be accepted at full rate. Such service will not be accepted as counting towards the minimum required to be spent in watchkeeping on main propelling machinery.
- (7) **Testimonials:** Every candidate must produce sea service testimonials in original to the Chief Examiner. These testimonials, which should state the seniority on watch, the type of main propelling machinery and the nature of duties performed, are to be signed by the Chief Engineer Officer and endorsed by the Engineer Superintendent, or some other responsible representative of the employer. Testimonials covering service as Chief Engineer Officer are to be signed by the Engineer Superintendent or some other responsible representative of the employer. A specimen form of testimonial to cover sea service is shown in schedule II, while a recommended record of duties performed for class 4 examination purposes is shown in Schedule III.
- (8) **Physical or mental disability:** In the case of a candidate who suffers from any physical or mental disability which might interfere with the proper discharge of his duties, the signatories of his testimonials shall state thereon whether such defect did interfere in any way with the proper discharge of his duties.
- (9) **Verification of sea service onboard foreign vessel:**

Bangladesh nationals serving onboard foreign flag vessel, for purpose of assessing their sea service, will have to obtain a Testimonial of sea service in the prescribed form given in the schedul-II, get their Bangladesh 'Continuous Discharge Book' endorsed in the prescribed way and produce photocopy of the foreign article of agreement duly signed and stamped by the Consular Officer or other recognised official of the country of registry of the vessel.

- (10) **Calculation of service :** Sea service as entered in official discharge books and testimonials will be reckoned by the calendar month, that is, the time included between any given day in any month and preceding day of the following month, both inclusive. The number of complete months from the commencement of the period, ascertained in this way, should be computed, after which the number of odd days should be counted, The day on which the crew agreement commences, as well as that on which it terminates, should both be included, all leave of absence excluded and all odd days added together and reckoned at thirty days to a month.
- (11) **Unsatisfactory conduct:** Each candidate who, having signed a crew agreement, has either neglected to join his vessel, or committed misconduct onboard, will be required to produce satisfactory proof of two years' subsequent service with good conduct at sea, unless the Director General, after investigation, should see fit to reduce this period.

#### Examinations etc.

- (1) **Admission to examination:** Details covering the venues, times and manner of admission to the Department's examinations shall be as follows:
- (a) The Department will issue Notice to inform all concerned about the venues and dates on which the various examinations commence.
- (b) **Application for examination.** A candidate seeking admission to an examination for a Certificate of Competency will be required to complete an application form and pay the appropriate fees. The completed form, CDC and supporting documents in accordance with sub-rule (5) of rule 6 and sub-rule (7) of rule 7 together with any certificate of competency held, are to be lodged with the Examiner not less than 21 days before the day the examination commences. Notification of acceptance or rejection will be given as soon as possible after receipt of the application. Notification of acceptance will be accompanied by a copy of the examination rules.
- (2) **Fee :** A candidate will be required to pay the appropriate fee on each occasion of making application for entry to an examination as prescribed by the government by rules.
- (3) **Determination of eligibility :** A candidate enquiring as to his eligibility for admission to an examination will be required to make formal application and pay the appropriate fee before assessment of his application will be made.

- (4) **Proof of nationality** : A candidate will be required to produce proof of name, nationality and place and date of birth. The date of birth as recorded in Secondary School Certificate or equivalent Certificate only will be accepted in the case of Bangladeshi nationals.
- (5) **Issue of Certificate.**
- (a) A candidate will receive a Provisional Certificate of Competency when he has successfully completed all parts of the examination and met all other mandatory conditions governing the award. The Provisional Certificate of Competency must be surrendered at time of taking delivery of the definitive Certificate. The Provisional Certificate of Competency shall remain valid for a maximum period of nine months within which it must be exchanged with the definitive Certificate of Competency.
- (b) In order to be eligible to be issued with Class 4 or Class 3 or 2 Engineer Officer Certificate of Competency or Provisional Certificate thereof a candidate shall produce the following course Certificates :
- (i) attend a 5-6 days 'Fire Fighting' course as approved by the Director General, The contents of the course are given in Schedule V;
- (ii) attend a 'First Aid at Sea' course as approved by the Director General. The contents of the course are given in Schedule V;
- (iii) attend Basic Sea Survival/Personal Survival Technique course as approved by the Director General. The contents of the course are given in Schedule V.
- (c) Before issuance of Class 2 Certificate of Competency a candidate shall:
- (i) attend a two weeks Shipping Management Course (SMC) as approved by the Director General. The contents of the course are given in Schedule V;
- (ii) attend a two weeks course on Word Processing and Computer programming (WPCP) as approved by the Director General. The contents of the course are given in Schedule V;
- (iii) attend Proficiency in Survival Craft as approved by the Director General. The contents of the course are given in Schedule V.
- (d) Where the holder of a certificate of a particular class is issued with such certificate of a higher class, he shall surrender the first mentioned certificate to the issuing authority.
- (6) **Candidate with break of sea service** : A candidate who has not been to sea for a period of three years prior to the submission of the application shall not be accepted for the examination unless the Chief Examiner is satisfied on the matter.

- (7) **Exemption** : A candidate who is found eligible under clause (a) and (c) of sub-rule (2) of rule 6 will be given exemption in Applied Mathematics of Class 2 Academic subjects.
- (8) **Examination Subjects:**
- (1) Examinations for Certificate of Competency of class 1,2 and 3 will be split into Academic and Professional Subjects as follows:
- (a) Class 3. Class 3 examination will consist of following subjects:
- (i) **Academic Subjects:**  
General Engineering science I (one paper of 2 hours)  
General Engineering Science II (one paper of 2 hours);
- (ii) **Professional Subjects:**  
Engineering Knowledge I (one paper of 2 hours)  
Engineering knowledge II (one paper of 2 hours);
- (iii) **Oral examination .**
- (b) Class2. Class 2 Examination will consist of the following subjects:
- (i) **Academic Subjects**  
Applied Mechanics (one paper of 3 hours)  
Applied Heat ( one paper of 3 hours)  
Applied Mathematics(one paper of 3 hours)  
Engineering Drawing (one paper of 4 hours)  
Electrotechnology (one paper of 3 hours)  
Naval Architecture ( one paper of 3 hours);
- (ii) **Professional Subjects**  
Engineering Knowledge, General(one paper of 3 hours)  
Engineering knowledge, Motor or steam (one paper of 3 hours);
- (iii) **Oral Examination .**
- (c) Endorsement for chief Engineers' Duty. The examination will be oral and will be based upon the responsibilities and duties of the Chief Engineer Officer at a level appropriate to the endorsed certificate and its range of application.
- (d) Class 1. Class I examination will consist of the following subjects:
- (i) **Academic Subjects**  
Applied Mechanics (one paper of 3 hours)  
Applied Heat (one paper of 3 hours)  
Electrotechnology (one paper of 3 hours)  
Naval Architecture(one paper of 3 hours);
- (ii) **Professional Subjects**  
Engineering Knowledge, General( one paper of 3 hours)  
Engineering knowledge, Motor or steam (one paper of 3 hours);

**(iii) Oral examination.**

- (2) class4 class4 examination will be oral  
 (3) Combined. (a) Class 1 and Class 2 combined examinations will consist of the following Subjects:

**(i) Professional subjects:**

Engineering Knowledge, Motor or Steam ( one paper of 3 hours)

**(ii) Oral examination.**

- (b) Class 4 Combined examination will be oral.

**(9) Endorsement for ensuring the continued proficiency and updating of knowledge for Engineer Officer.**

Every Engineer Officer holding a certificate shall have to get his certificate endorsed at regular intervals not exceeding five years from the date of passing the examination in order to continue to qualify for sea going service in the rank appropriate to his certificate. For the purpose of endorsement of his certificate, he will be required to satisfy the Director General as to:

- (a) Medical fitness, including eye sight and hearing, as approved by the Director-General;

and

- (b) (i) He has served as Watchkeeping Engineer Officer on a sea going ship for at least one year (which need not be continuous) during the preceding five years;

or

- (ii) He has performed functions in shore establishment as marine surveyor(including surveyor and examiner under Department of Shipping) marine engineering superintendent and lecturer in marine engineering college for at least two and a half years during the preceding five years. The duties shall actively involve the candidate in the inspection, operation or survey of sea going ships or other related matters:

or,

- (iii) he has passed an approved test to be conducted by the Chief Examiner;

or,

- (iv) he has successfully completed an approved course or courses;

or,

- (v) he has completed approved sea going service as an engineer officer for a period of not less than three months in a supernumerary capacity or in a lower rank than that for which he holds the certificate, immediately prior to taking up the rank to which he is entitled by virtue of his certificate.

**(10) Examination syllabuses. The syllabuses for the various Certificate of Competency examinations are as given in Schedule IV.****(ii) Permitted attempts.**

- (a) A candidate can take any of the academic subjects of a particular class of examination at any time after he is eligible to appear for the same. He need not accumulate any qualifying sea service for appearing at academic subjects. He can accumulate passes in the academic subjects of that particular class of examination on a subject by subject basis. 'Pass' in any academic subject will be valid for four years from the date of passing the said subject until he passes all the academic subjects.
- (b) To be eligible to sit for the professional subjects of a particular class of examination the candidate shall do the minimum sea service as laid down in rule 7. He will be given a letter of eligibility by the Director General after his sea service and testimonials etc. are checked. The general engineering knowledge paper together with the motor or steam paper must be passed at the same attempt.
- (c) A candidate may take Oral examination independently before or after the written examination on Engineering knowledge papers for a particular class of certificate once his application has been accepted. The oral examination will be considered a separate subject.
- (d) A candidate shall pass the written part of engineering knowledge examination and oral part of the examination for particular class of certificate within a two year period to retain the validity of a pass in either part.
- (e) For a Combined Certificate of Class 1, Class 2 or Class 4, a candidate may present himself for the remaining Engineering Knowledge examination, provided he already holds either a motor or a steam certificate of competency of the same class. A candidate may also present himself for the whole of the Class 4 combined examination.
- (12) Re-examination.**
- (a) A candidate who fails in any subject may present himself for re-examination at any subsequent examination, subject to the provisions of sub-rule (1) and (2).
- (b) Each candidate will receive a record of his examination results which must be produced at all subsequent examinations.
- (13) Repeated failures in Engineering knowledge**
- (a) A candidate who shows ignorance of topics vital to an engineer officer's duties and which, if neglected, could lead to conditions whereby life and/or the ship is endangered, will not be accepted for re-examination until he has performed a further period of sea service not exceeding twelve months.
- (b) A candidate who during three attempts at the Engineering Knowledge examination or Oral examination in any twelve months period, shows no improvement, will not be accepted for re-examination until he has performed a further period of twelve months sea service.
- (14) Pass Marks.** A candidate will be required to obtain minimum fifty percent of total marks to secure pass in individual Academic or Professional subject. A higher standard will be required in the Oral examination.
- 9. Persons serving in the Navy:**
- (1) Bangladesh Navy Personnel who have specialised in Marine Engineering, or any marine engineering artificer and marine engineering mechanic, on



active service or retired, may take examination for the issue of a Certificate of Competency. Naval persons in active service shall produce a "No Objection" certificate from appropriate Naval authority at the time of applying for examination. Application should be made in accordance with clause (b) of sub-rule (1) of rule 8 and the applicants should furnish a statement of service together with testimonials and other documentary evidence in respect of all seagoing appointments and of the last active appointment. Naval certificates should also be furnished wherever necessary. Sea service performed in ships of Bangladesh Navy as mentioned in class (a) to (j) of sub-rule (2) shall be assessed for the purpose of the examination under these rules at the discretion of the chief Examiner depending on the type of ship and the nature of voyage. Candidates for the certificates of competency examinations will be required to pass all the subjects of a particular grade of certificate. No exemptions from any subject will be granted.

- (2) Conditions and requirements in order to be eligible to take examination for the issue of following Certificate of Competency:

(a) **Class 1 Certificate of Competency (Motor)**

An Officer of the Bangladesh Navy will be eligible for this examination with at least thirty six months sea service in motorships as a Commissioned Officer in the engineering branch out of which twenty one months must have been in the rank not below that of a Lieutenant.

(b) **Class 1 Certificate of Competency (Steam)**

An Officer of the Bangladesh Navy will be eligible for this examination with at least thirty six months sea service in steamships as a Commissioned Officer in the engineering branch out of which twenty one months must have been in the rank not below that of a Lieutenant.

(c) **Class 1 Certificate of Competency (Combined)**

An Officer of the Bangladesh Navy will be eligible for this examination with at least forty eight months sea service as a Commissioned Officer in the engineering branch out of which eighteen months must have been spent in motorships in the rank not below that of a Lieutenant and eighteen months must have been spent in steam ships in the rank not below that of a Lieutenant.

(d) **Class 2 Certificate of Competency (Motor)**

An Officer of the Bangladesh Navy will be eligible for this examination with at least twenty one months sea service in the motorships as a Commissioned Officer in the engineering branch.

(e) **Class 2 Certificate of Competency (Steam)**

An Officer of the Bangladesh Navy will be eligible for this examination with at least twenty one months sea service in steamships as a Commissioned Officer in the engineering branch.

(f) **Class 2 Certificate of Competency (Combined)**

An Officer of the Bangladesh Navy will be eligible for this examination with at least thirty months sea service as a Commissioned Officer in the engineering branch out of which at least twelve months must have been spent in motorships and twelve months must have been spent in steamships.

**(g) Class 3 Certificate of Competency (Motor)**

An Officer of the Bangladesh Navy will be eligible for this examination with at least fifteen months sea service in motorships as a Commissioned Officer in the engineering branch.

**(h) Class 4 Certificate of Competency (Motor)**

A person who has served in the Bangladesh Navy for at least seven years in the engineering branch out of which at least fifteen months must have been spent in motorships and attained the rank of Petty Officer will be eligible for this examination.

**(i) Class 4 Certificate of Competency (Steam)**

A person who has served the Bangladesh Navy for at least seven years in the engineering branch out of which at least fifteen months must have been spent in steamships and has attained the rank of Petty Officer will be eligible for this examination.

**(j) Class 4 Certificate of Competency (Combined)**

A person who has served in the Bangladesh Navy for at least seven years in the engineering branch out of which at least twelve months must have been spent in motorships and twelve months must have been spent in steamships and attained the rank of Petty Officer will be eligible for this examination.

(3) In order to be eligible to be issued with Class 4 or Class 3 or Class 2 Engineer Officer Certificate of Competency or Provisional Certificate thereof, each candidate shall:

- (a) attend a 5-6 days 'Fire Fighting course' as approved by the Director General. The contents of the course are given in schedule V;
  - (b) attend a 'First Aid at Sea' course as approved by the Director General. The contents of course are given in Schedule V;
  - (c) attend a 'Personal Survival Technique' course as approved by the Director General. The contents of the course are given in Schedule V;
  - (d) pass medical tests including eye sight, hearing and stammering etc. as approved by the Director General.
- (4) Candidates appearing in Class 1 or Class 2 Engineer Officer examination shall attend all the courses as out-lined in clauses (b) & (c) of sub-rule (5) of rule 8.

**10. Special requirements for Oil Tankers, Chemical Tankers and Liquefied Gas Tankers**

- (1) (a) No engineer shall be employed onboard an oil, chemical and liquefied gas tanker as Chief Engineer, Second Engineer or in any capacity with immediate responsibility for loading, discharging, and

- care in transit or handling of cargo and cargo equipment unless his certificate is duly endorsed for such service.
- (b) For the purpose of endorsement of his certificate, the candidate will be required to satisfy the Chief Examiner that he has completed, in each case within last five years period prior to the date of application, both an approved familiarisation and safety course on the carriage of relevant dangerous cargo and a period of shipboard training or service.
- (2) The contents of the familiarisation and safety course are as given in Schedule V;
- (3) The supervised shipboard training or service may consist of any one of the following arrangements:
- (a) Fourteen days' shipboard training together with three months credited shipboard service.
- (b) Six months credited shipboard service.
- (4) Shipboard training and service shall be carried out in the following manner:
- (a) Shipboard training must be in a supernumerary capacity in tankers for which the endorsement is sought, or on ballast passages between carrying such cargoes; and,
- (b) Credited shipboard service shall be service in ships carrying any of the three type of cargo requiring an endorsement, but if the cargo is not of the type for which the endorsement is sought, such service will be count only at half rate upto to a maximum of half the amount of such service specified in sub-rule (3).
- (5) Engineers holding certificates carrying dangerous cargo endorsements shall be required to revalidate such endorsements at regular intervals not exceeding five years from the date of endorsement. For revalidation of dangerous cargo endorsements the candidate shall, in addition to meeting the basic updating requirements as specified in sub-rule (9) of rule 8, provide evidence of at least three months service (which need not be continuous) in a tanker during the preceding five years. This period of service in the type of tanker will qualify for updating all dangerous cargo endorsements held.
- (6) An engineer who has not served in a tanker during the preceding five years will have his dangerous cargo endorsement or endorsements withdrawn. Before each endorsement is reissued an engineer shall be required either to:
- (a) attend an appropriate approved shore based tanker safety course; or
- (b) undertake fourteen days supervised shipboard training in a supernumerary capacity in the type of tanker in which it is intended to serve.
- (7) Application. Each candidates seeking tanker endorsement is required to complete an application form and pay appropriate fee. An applicant who is suitably qualified need only make one application for more than one

endorsement. Each application must be supported by testimonials covering shipboard training and service together with certificates attesting satisfactory completion of any shore based tanker familiarisation and safety course. A testimonial recommended for shipboard training and service is shown in Schedule VI.

11. **Medical Certificate.** Notwithstanding that an application for a certificate of competency complies with the standards or fulfils the conditions specified by the fore-going provisions of these rules, the Director General shall not issue the certificate applied for unless he is satisfied, having regard to all relevant circumstances, that the applicant is a fit person to be the holder of the certificate and to act competently in the capacity to which it relates. For this purpose, the applicant shall produce a certificate of medical fitness in a prescribed form issued by a Medical Officer acceptable to the Director General. Such certificate of physical fitness shall be required by all engineer officers and apprentices prior to being engaged on a ship.

12. **Qualified Marine Engineer Officer to be carried in ships**

- (1) The minimum number of qualified marine engineer officers to be carried onboard various ships is shown in the table below:

**Table**

Column-1 Trading Area	Column-2 Registered power (kilowatt)	Column-3 Required Class of Certification			
		Chief Engineer Officer	Second Engineer Officer	Engineer Officer Watch-keeping	Engineer Officer Watch-keeping
Unlimited voyage	3,000 and above	1	2	3 or 4	4
	750 and above, but under 3,000	2 (e)	3	4	-
	350 and above, but under 750	3 (e)	4	4	-
Limited voyage	6,000 and above	1	2	3 or 4	-
	3,000 and above but under 6,000	2 (e)	3	4	-
	750 and above, but under 3,000	3 (e)	4	4	-
	350 and above, but under 750	4 (e)	4	4	-

Limited	3,000 and above	2 (e)	4	4	-
voyage not exceeding	750 and above, but under 3,000	3 (e)	4	-	-
72 hours	350 and above, but under 750	4 (e)	4	-	-

**NOTE:** (1) Figures in Column 3 of the Table denotes the class of certification. A three watch system shall be maintained for vessel of 3,000 kw and above. The Chief Engineer officer shall be non-watch keeping officer, where possible.

(2) '(e)' denotes endorsement for Chief Engineers' duty.

(3) In addition to the officers specified in Column 3 of the Table, the ships of 750 kw registered power may be required to carry one 'Electrical Engineer Officer' having a degree or a diploma in the related trade.

(4) Vessels under UMS (Unmanned Machinery Space) operation may be permitted to have a Chief Engineer, 2nd Engineer and one certificated Watchkeeping Engineer. The Chief Engineer and 2nd Engineer will be required to have such certificate as shown in column 3 of the Table appropriate to registered power and trading area.

### 13. Dispensation.

- (1) In circumstances of exceptional necessity, the Director General may relax the requirements, of necessary certificate of competency for a seafarer to serve on a specific ship for a specified period not exceeding six months at a time in a particular capacity.
- (2) A dispensation for a post may be granted only to a person properly certified to fill the post immediately below. Where certification for the post below is not required, a dispensation may be issued to a person whose qualification and experience are, in the opinion of the Director General, of a clear equivalence to the requirements for the post to be filled.
- (3) A candidate desirous of obtaining such dispensation is required to complete an application form and pay appropriate fee. Before applying for dispensation he shall successfully complete Fire Fighting, First Aid at Sea and Basic Sea Survival (FSS)/ Personal Survival Technique (PST) Course in pursuance of clauses (b) and (c) of sub-rule (5) of rule 8, as the case may be.
- (4) Before granting dispensation, a candidate shall be required to pass oral test conducted by an Examiner.
- (5) The Director General may authorise the Principal Officer or Surveyors of the Mercantile Marine Department in Bangladesh to issue dispensation.

**14. Watch-keeping Requirements:**

- (1) No engineer officer shall act in the capacity of Chief Engineer Officer, Second Engineer Officer, Third Engineer Officer or Fourth Engineer Officer unless he holds an appropriate certificate of competency as per the Classes of Certificates under sub-rule (1) of rule 3 or the table of requirements under rule 12 or issued with a dispensation.
- (2) In the event of death or incapacity of the Chief Engineer while the ship is at sea, the Second Engineer may act in the capacity of Chief Engineer until the ship reaches the next intended port. In that case the Master of the ship should notify the matter immediately to the Director General and make an entry of that notification in the ship's official log book.
- (3) Neither the Master, nor the Chief Engineer shall permit any engineer officer to be in charge of an engineering watch in a ship of 750 kilowatt registered power and above to which these rules apply unless he holds a certificate of competency or dispensation of a class required under these rules.
- (4) The owner shall not appoint any engineer officer to act in a capacity for which he is not duly certificated.

**15. Form, revalidation, record, surrender and loss of certificates:**

- (1) Certificate of Competency shall be issued in duplicate, on payment of the appropriate fee, the original to be delivered to the person entitled to the certificate and the duplicate to be retained by the Director General.
- (2) A Certificate of Competency issued under these rules shall become invalid for sea service unless revalidated once every five years from the date of issue. The Chief Examiner may make an endorsement to revalidate a certificate under these rules provided conditions as laid down in sub-rule (9) of rule 8 are fulfilled.
- (3) A record of all certificates of competency issued under these rules and of the suspension, cancellation or alteration of, and any other matters effecting, any such certificate shall be maintained by the Director General.
- (4) **Surrender of the lower grade of Certificate.**  
Where the holder of a certificate of a particular class issued under these rules is issued with such certificate of a higher class, he shall surrender the first mentioned certificate to the issuing authority.
- (5) **Loss of Certificate**  
If a person entitled to a certificate of competency proves to the satisfaction of the Director General that he has, without fault on his part, lost or been deprived of a certificate already issued to him under these rules, the Director General shall, on payment of the prescribed fee, if any, cause a duplicate copy of the Certificate, to which by the record kept in

accordance with these rules he appears, to be entitled, to be issued to him and such duplicate copy shall have all the effect of the original.

**16. Conduct of a candidate.**

A candidate found guilty of any misconduct, including insolence to examiner or staff, or improper or disorderly conduct including adoption of any unfair means, or a breach of any examination rules or instructions to candidates may be liable for punishment in one or more of the ways specified hereunder, namely:-

- (a) Where the examination has not commenced or is not completed the candidate may be debarred from appearing or, as the case may be, to take further part, therein by the Chief examiner;
- (b) Where the result of any examination is declared, the result of the candidate may be varied as deemed appropriate by the Chief Examiner;
- (c) Where the candidate has been declared successful in the examination, but has not been granted the certificate, the same may be withheld for such period as may be decided by the Chief Examiner;
- (d) the candidate may be debarred from appearing at any examination under these rules for such period as may be specified by the Chief Examiner.

**17. Physical and Mental deficiency:**

If a candidate suffers from only such physical or mental deficiency or disability which the examiner thinks may hamper in discharge of duties on a ship, he shall report the same to the Chief Examiner. The Chief Examiner shall decide on the matter of allowing the candidate to take further examination or not.

**18. Basic Principles in Keeping an Engineering Watch**

Candidates will be examined in their knowledge of the basic principles in keeping Engineering Watch as outlined in Schedule VII.

**19. Specimen of Forms and Certificates:**

The specimen of forms and proforma of various applications, certificates, endorsements, examination results etc. shall be as given in Schedule VIII.

20. The Director General may draw the attention by issuing notices to be known as Department of Shipping (DOS) Notices for compliance, by seafarers and agencies or offices concerned, with shipping, maritime training, certification and watchkeeping requirements.

**Schedule 1**  
(see rule 6 (b) )

**WORKSHOP SERVICE TESTIMONIAL**

Name and address of Engineering works \_\_\_\_\_

I certify that the following is a full and true statement of satisfactory workshop service performed by :-

Mr. \_\_\_\_\_ S/o. \_\_\_\_\_

as apprentice Engineer under my supervision at the above works.

NATURE OF DUTIES	PERIOD		TOTAL PERIOD	
	From	to	Month	day
FITTING SHOP : Fitting, erecting and maintenance of machineries on vessels				
MACHINE SHOP : Metal turning, screw thread cutting, planing, slotting, shaping and boring				
DIESEL SHOP : Maintenance, repairs and assembly of Diesel Engines, air compressors and other auxiliary machineries				
STRUCTURAL SHOP : Repairs of ship structures, riveting & caulking, welding, brazing and gas-cutting				
ELECTRIC SHOP : Installation of various types of electric fittings, repairs of A. C/ D.C motors and generators including armature winding				
FOUNDRY & BLACK SMITHSHOP : Forging and casting of simple marine machinery parts				
*DRAWING OFFICE : Drawing of various parts of marine engines				
CARPENTARY SHOP : Making, fitting, erecting repairs of wodden structure etc.				
Total Period				



Report of ability \_\_\_\_\_  
 Report of conduct \_\_\_\_\_  
 REMARKS \_\_\_\_\_

Signature \_\_\_\_\_  
 Designation \_\_\_\_\_

**Note :** The minimum training period in each shop shall be as follows:

Fitting Shop	- 12 months	Electric Shop	- 4 months
Machine Shop	- 8 months	Foundary & Black	- 3 months
Diesel Shop	- 12 months	Smith Shop	- (75 lecture
Structural Shop	- 4 months	Drawing Office	- 3 months hours)
		Carpentary Shop	- 2 months

- In absence of Drawing Office in the Workshop, the apprentice must attend Machine drawing classes in a recognised Institute of Technology, Polytechnic Institute for which a Certificate is to be produced.

**Schedule II**  
(see rule 7 (7) )

**SEA SERVICE TESTIMONIAL**

Name & address of  
Shipping Company

I certify that the following is a full and true statement of the sea service performed by \_\_\_\_\_ under my supervision in mv/ss \_\_\_\_\_ O. N. \_\_\_\_\_

Period of service		Rank of officer, seniority on watch	Nature of duties (see list)	Description of i. main machinery ii. auxiliary machinery and power
From	To			

During the whole period stated above this engineer officer,

- (a) was granted no leave of absence  
(b) was granted \_\_\_\_\_ days leave of absence whilst still on article of agreement.

Report as to ability \_\_\_\_\_

Report as to conduct \_\_\_\_\_

Report as to sobriety \_\_\_\_\_

Description of vessel \_\_\_\_\_

Signature of Chief Engineer Officer \_\_\_\_\_

Signagure of \_\_\_\_\_  
Engineer Superintendent or  
other representative of owners \_\_\_\_\_

Description of duties

- I Day work  
II Regular watch\* on auxiliary machinery  
III Regular watch\* on main propulsion machinery :  
(a) in full charge  
(b) in subsidiary capacity  
IV Regular work practices in ships possessing:  
(a) centralised control room  
(b) full or partial automation  
(c) facility to operate machinery in the unattended mode for a significant proportion of each twenty four hour period.

Regular watch means eight hours in every twenty four hours.

This form should be used when the Engineer Officer concerned, or the Chief Engineer Officer, leaves a ship.

**Schedule III**  
(see rule 7(7))

**RECORD OF DUTIES PERFORMED FOR CLASS 4 CERTIFICATE  
OF COMPETENCY (MARINE ENGINEER)**

Name	CDC No.			
Duties performed in manner satisfactory to Chief Engineer.	Ship's Name	Chief Engineer		Date
		Signature	Certificate No.	
Prepare main machinery and auxiliary equipment for sea				
Shut down main machinery plant				
Manoeuvre main machinery				
Prepare, start, couple and change over alternators or generators				
Transfer fuel oil				
Prepare and operate FO/LO purification plants				
Prepare and operate evaporator and /or distillation plant				
Operate oily water separator				
Prepare and operate air compressors				
Prepare and start steering gear and conduct appropriate tests to ensure correct operation				
Test boiler water level gauges under working conditions				
Operate boilers including combustion system				
Transfer ballast and fresh water; Pump bilges				
Compile machinery space log book and understand readings				
Act as assistant watch-keeper at sea				
Other duties relevant to watch-keeping may be listed on the reverse side of this form				

- NOTE:**
- i. This form does not replace testimonials required to substantiate qualifying sea service.
  - ii. Any additional comments by the Chief Engineer as to the candidate's ability can be made on the reverse side of this form.
  - iii. It is not necessary to complete all the duties listed since some may not apply to a particular ship on which candidate has served.

**Schedule IV**  
(see rule 8 (10))

**SYLLABUSES FOR EXAMINATIONS OF CERTIFICATE  
OF COMPETENCY**

**1. CLASS 4 CERTIFICATE OF COMPETENCY**

**(1) Oral examination on engineering knowledge**

- Routine associated with handing over, taking over and accepting a watch.
- Compilation of machinery space log book and understanding significance of a readings taken.
- Routine duties undertaken during a watch.
- Routine associated with handing over to the following watch.
- Safety precautions to be observed during a watch and immediate actions in the event of a fire or accident.
- Preparing main machinery and auxiliary equipment for sea. Testing plant and equipment.
- Routine pumping operations of fuel oil and fresh water.
- Use of oily water separator and precautions to be observed to prevent environmental pollution.
- Operation of auxiliary boiler including combustion system.
- Methods of checking water level in boilers and action necessary if water level is abnormal.
- Preparing, starting, coupling and changing over alternators or generators.
- Immediate action necessary in cases of electric shock.
- Location and rectification of common faults in pumps and pumping systems.
- Location and rectification of common faults in machinery and plant in engine and boiler rooms.

**2. CLASS 3 CERTIFICATE OF COMPETENCY**

**(1) General Engineering Science-1**

- The setting out of calculations, extraction and cancellation of common factor, significant figures, degree of accuracy.
- Averages, percentages, ratio, proportions.
- Use of tables, square roots, reciprocals, use of logarithms or slide rule for multiplication, division, powers and roots.
- Re-arrangement of formulae, use of brackets and factors, simplification of fractions.
- Solution of simple equations by algebraic and graphical methods.

- Theorem of pythagoras. Properties of triangles.
- Mesurement of acute angles in degrees and radians.
- Simple trigonometrical functions.
- Area of triangle, parallelogram, circle. Area and mean height by mid-ordinate rule.
- Ratio of areas for similar figures.
- Surface area and volume of cylinder, sphere, cone, frustum and cube.
- Ratio of masses and volumes of similar solids.
- The vector representation of forces. Triangle of forces. Resultant and equilibrant of a system of consurrent co-planar forces. Couples.
- The principle of moments, application to simply supported beams and cranked levers. Centre of area, centre of gravity. Displacement, time, speed, velocity and acceleration (Linear only) Force, moment of force, torque, work, energy, power.
- Simple machines, velocity ratio, mechanical advantage, efficiency.
- Friction, laws for dry surfaces, coefficient of friction (horizontal plane only).
- Direct stress and strain. Hookes Law, Modulus of Elasticity, elastic limit, UTS, yield stress, limit of proportionality, safety factor, shear stress.
- Relative density, Variation of fluid pressure with depth. Archimedes principles.
- Elementary treatment of transverse stability, centre of buoyancy, centre of gravity and metacentre (box shape only). Transverse movement of masses across deck.

(2) **General Engineering Science II**

- Temperature and its measurement. Temperature scales. Significance of absolute temperature. Heat as energy, conservation of energy applied to heat and work. Fuels, Calorific value.
- Expansion and contraction of solids, liquids and gases. Change of phase. Specific Enthalpy of fusion, evaporation. Properties of working fluids i. e. refrigerants.
- Compression and expansion of gases. Gas Laws. Boyle's Law, Charle's Law. Characteristic gas equation. Gas constant, Specific heat capacity.
- Elementary qualitative treatment of heat transfer by conduction, convection and radiation. Effect of insulation.
- Elementary principles and cycles of operation of IC engines. The indicator diagram, power developed, fuel consumption including understanding of principles of combustion, insufficient, minimum and excess air.

Simple electric circuits, effects of electric current, i. e. chemical magnetic and thermal. Ohm's Law. Series and parallel circuits. Electromotive force, voltage, Units of current, resistance, voltage, energy.

Distribution of current in circuits. Resistance of conductor, variation with dimension, material, temperature. Temperature coefficient of resistance. Insulators.

Secondary cells (acid and alkali). Construction. Capacity-ampere hour.

Instruments, moving coil-moving iron (repulsion type). Magnetic field. Lines of force. Field due to current in a straight conductor. Motor and generator principle. Commutation.

### (3) Engineering knowledge

(1) The engineering knowledge to be shown by candidates is that which is required for the operation and maintenance of the machinery, equipment and ship structure usually in the charge of the engineer officer.

(2) In general the questions in both the written and oral examinations will tend to be based on equipment and operational practices associated with the smaller type of ship.

"W" indicates that this aspect of the syllabus will be covered in the written examination papers.

"O" indicates that this aspect of the syllabus will be covered in the oral examination.

"W & O" indicates that this aspect due to its nature or importance may be in both the written and oral examinations.

The candidate to have knowledge of the following:

Ability to transmit information relating to machinery components by means of simple drawings with supplementary notes, specifications and dimensions.	W
Manufacturing methods for various machinery components and the physical properties of the materials commonly used.	W
Constructional details of auxiliary boilers	W
Care and management of auxiliary boilers	O
Construction and arrangement of steering systems.	W
Care and management of steering systems	O
Working principles and constructional details of pumps.	W

General requirements for pumping systems	W
Care and management of pumping systems	O
Working principles and constructional details of oily water separators.	W
Care and management of oily water separator equipment.	O
Construction, maintenance and operation of fire fighting equipment.	W O
Fire detection and prevention.	W O
Codes of Safe Working Practices in machinery rooms.	O
Dangers of entering enclosed spaces.	O
Routine operational duties and the effects of legislation on engine room operations.	O
Working principles and constructional details of marine diesel engines, gears, clutches and ancillary equipment.	W O
Fuel oil, lubricating oil, and cooling systems of diesel engines together with ancillary systems including filters, pumps, heat exchangers and controls.	W
(a) Methods of manoeuvring, including bridge control systems and variable pitch propellers.	W O
(b) Emergency controls.	W O
Working principles and constructional details of air compressors, air receivers and associated equipment.	W O
Operation, testing and fault rectification of basic automatic control systems and alarm panels.	W O
Assessment of engine power, the running adjustments to maintain performance.	O
Safe and efficient operation and maintenance of marine diesel engines.	O

### 3. CLASS 2 CERTIFICATE OF COMPETENCY

#### (1) Applied Mechanics

Statics. Force as a vector. Triangle and polygon of forces. Resultant and equilibrant of a system of concurrent coplanar forces. Equilibrium of three coplanar forces. Moment of a force. Couples. Moments of areas and volumes. Centroids and centres of gravity (limited to geometrical shapes). Conditions of equilibrium of solids. Necessary force applied parallel to an inclined plane to pull body up or down the plane or to hold it stationary (including effect of friction). Work done at uniform speed up the plane.

Friction. Coefficient of friction angle. Energy and power lost due to friction in simple bearings.

Kinematics. Linear motion. Graphs and equations for displacement, speed, velocity and uniform acceleration. Velocity as a vector. Relative velocities in one plane only. Angular motion. Equations for displacement, velocity and uniform acceleration.

Dynamics. Work and power. Problems with constant force or force with linear variation. Energy. Potential energy of translation. Newton's laws of motion. Conservation of momentum. Centrifugal force and its application to conical pendulum, unloaded governor, curved tracks and machine parts. Stress in thin rim due to centrifugal action.

Machines. Simple lifting machine. Graphs of load-effort and load-efficiency. Linear Law. Velocity ratio, mechanical advantage and efficiency of the following machines: wheel and axle, differential wheel and axle rope pulley blocks, differential pulley blocks, screw jack, Warwick screw, hydraulic jack, wormdriven chain blocks and single and double purchase crab winches. Reduction gearing.

Stress and strain. Direct stress and strain. Modulus of elasticity. shear stress and strain. Modulus of rigidity. Factor of safety. Stress due to restricted expansion or contraction of single members.

Beams. Shearing force and bending moment diagrams for cantilevers and simply supported beams with concentrated or uniformly distributed loads. Stress due to bending.

Torsion. Strength and stiffness of solid or hollow shafts. Stress due to torsion. Power transmitted by shafts and coupling bolts.

Thin shells. Circumferential and longitudinal stress in thin cylindrical shells subject to internal pressure.

Hydrostatics. Equilibrium of floating bodies. Variation of fluid pressure with depth. Total force due to liquid pressure on immersed plane surfaces



horizontal or vertical. Centre of pressure on a rectangular vertical plane surface or triangular plane surface, both with one edge parallel to the surface of the liquid.

Hydraulics. Full bore flow of liquid through pipes under constant head. Flow through orifice. Coefficients of velocity, contraction of area and discharge.

### **Applied Heat**

Heat. Temperature and its measurement. Absolute temperature. Specific heat capacity. Specific enthalpy of evaporation and fusion. Problems involving changes of phase and not more than three substances. Linear, superficial and volumetric expansion due to temperature changes. Coefficients and the relationship between them.

Basic thermodynamic principles. Properties, energy, the First Law of Thermodynamics, flow and non-flow processes.

Heat transfer. Qualitative treatment of heat transfer by conduction, convection and radiation. Laws of conduction and thermal conductance and applications to problems.

Gases. Boyle and Charles' Laws for perfect gases. Characteristic equation. Constant R and its use in simple problems. Isothermal, adiabatic and polytropic process. Relationships between pressure, temperature and volume. Work done. Change in internal energy. Specific heat  $c_p$  and  $c_v$  and the relationship between them.

Ideal Gas cycles. Constant volume cycle. Diesel cycle. Dual cycle. Air standard efficiency.

I.C. Engines. Elementary principles and cycles of operation. Actual indicator diagrams. Mean effective pressure. Work done, power developed, indicated and brake thermal efficiencies, mechanical efficiency, overall efficiency. Fuel consumption. Heat balance.

Air compressors. Elementary principles and cycles of operation. Calculation of work done. Indicator diagrams.

Properties of steam. Saturated steam, dry and wet. Dryness fraction. Superheated steam. Internal energy. Enthalpy. specific volume. Steam tables. Throttling, separating and throttling calorimeters. Steam plant. Advantages of using steam expansively. Thermal, mechanical and overall efficiencies of prime movers. Boiler efficiency, heat balance for engine and boiler trials. Change in dissolved solids in boilers and evaporators due to contaminated feed and effect of blowing down. Elementary principles of steam turbines including simple velocity diagrams for impulse and reaction turbines. Force and work done on blades.

Combustion. Solid and liquid fuels. Calorific value. Chemical equations for complete combustion. Theoretical minimum air required. Excess air.

Refrigeration. Vapour-compression cycle. Refrigerating effect. Cooling load. Use of tables of properties of refrigerants. Coefficient of performance.

### (3) Applied Mathematics

Arithmetic: Ratio and proportion. Percentage. variation, direct and inverse.

Algebra. Indices, including fractional and negative types. Use of common logarithms for multiplication, division, powers and roots. Use of Napierian logarithms. Simplification of algebraic expressions. Addition, Subtraction, multiplication and division of algebraic functions. Rearrangement of formula. Factorisation. Algebraic fractions. Squares and cubes of polynomials such as  $(a \pm b)^2$  and  $(a \pm b)^3$ . Simple equations. Quadratic equations and solution by factorisation, or use of general formula for solution. Simultaneous equations.

Graphical work. The graph  $y=ax+b$  either from calculated values or from experimental results. Calculation of constants from graphs. Graphical solution of simple simultaneous equations involving two unknowns. Graph of  $y=ax^2 + bx+c$  and graphical solution of equation  $ax^2+bx+c=0$ .

Trigonometry. Measurement of angles in degrees and radians. Complementary and supplementary angles. Sine, cosine and tangent of angles up to  $360^\circ$ . Sine and cosine rules and their application to the solution of triangles. Solution of simple trigonometric equations. Expansion of  $\sin(A \pm B)$ . Graphs of  $\sin \theta$ ,  $\cos \theta$  and  $a \sin \theta + b \cos \theta$ .

Geometry. Properties of triangles. Theorem of Pythagoras. Sum of the angles. Relation between exterior and interior angles. Isosceles and equilateral triangles. Similar and congruent triangles.

The circle. Properties of chords and tangents. Angles in the same segment. Angles at centre and circumference.

Mensuration. Area of triangle, polygon, parallelogram trapezium circle, sector and segment of a circle and ellipse. Area and mean height by mid-ordinate rule and by Simpson's rules, Ratio of areas of similar figures. Volumes and surface areas of prisms, pyramids, spheres cylinders, and cones. Ratio of masses, and volumes of similar solids. Solids of revolution.

Calculus. Tangent to a curve; meaning of differential coefficient. Differential coefficient of  $x^n$ ,  $\sin x$ ,  $\tan x$ ,  $e^x$ ,  $\log_e x$ . Simple examples of

the differential coefficient of a product, quotient and function of a function. Application to maximum and minimum values.

Integration as a reverse of differentiation. Integrals of  $x^n$ ,  $\frac{1}{x}$ ,  $e^{ax}$ ,  $\sin ax$ ,  $\cos ax$ ,  $\sin^2 ax$ ,  $\cos^2 ax$ . Definite integral as the limit of a sum. Areas under curves. Volumes of solids of revolution, work done, mean and rms values, centroids and second moment of area.

First and second degree differential equation.

(4) **Engineering Drawing**

The Drawing paper will consist of a test of the ability to apply the principles of projection and candidates will be asked to draw a plan, elevation or section or a combination of these views of a piece of marine machinery from information supplied. All the required information for the completion of the drawing will be given in the question paper.

(5) **Electrotechnology**

The electric circuit. Units-ampere, ohm, volt. Difference between electromotive force and potential difference. Ohm's Law. Kirchoff's Laws. Simple series and parallel circuits involving e.m.f., current and resistances. Non-linear resistors in parallel with constant value resistors. Power and energy. Specific resistance. Temperature coefficient of resistance. Conductor resistance, effect of length, area, material and temperature. d.c. 2-wire distribution system. Types of insulation. Wheatstone network bridge, slide wire bridge; applications to steering gears, resistance pyrometers, strain gauges etc.

Electrolytic action and secondary cells. Theory of electrolytic dissociation applied to common solutions. Uses of electrolysis. Secondary cells (acid or alkaline). Construction and principles. Maintenance, charging. Watt-hour and ampere-hour efficiencies.

Electromagnetism, electromagnetic induction, simple magnetic circuit. Simple magnetic theory. Magnetic field. Lines of force. Field strength. Field intensity. Magnetic fields due to current in straight conductors, loops, coils and solenoids. Relative directions of current and field. Faraday's and Lenz's Laws. Magnitude and direction of induced e.m.f. Force produced on a current carrying conductor. Flux density. Effect of iron. Magneto motive force (m.m.f.) Permeability. Reluctance. Simple magnetic circuit, typical B/H and M/H curves.

Electronics, Qualitative treatment of; Atomic structure and bonding. Semi-conductors. Junction diodes, junction transistors and their operating characteristics. Simple transistor circuits. Conduction in gases, insulators, semi-conductors and conductors. Photo-electric effect.

**Alternating current theory.** Simple continuous periodic waves: frequency, amplitude, instantaneous, maximum, r.m.s and average values, or factor. Phasor representation of a.c. quantities. Phase difference. The inductor. Inductance and its effect on the circuit. Simple series and parallel circuits.

Relationship between resistance, reactance and impedance. Simple treatment of power factor. Power in single phase a. c. circuit.

**Instruments.** Qualitative treatment of the principles and functions of a.c. and d.c. indicating instruments and relays. Uses of shunts and series resistances to increase the range. Rectifiers and transducers.

**Distribution systems.** Systems for a.c. and d.c. shipboard installations. Protective devices such as fuses, circuit breakers, earth lamps. Cable material and installation. Connection of shore supply.

**D.C. machines.** The principles, constructional details and protection of d.c. series, shunt and compound wound motors and generators. Self-excitation, e.m.f. and load voltage equations. Load characteristics. Methods of voltage control. Paralleling procedures and load sharing for generators. Need for and types of starter. speed and torque equations, speed control of d.c. motors.

**A.C. machines.** Simple explanation of the principles, constructional details and protection of alternators, squirrel-cage induction motors and single-phase transformers. parallel running and synchronising theory.

(6) **Naval Architecture**

**General.** Displacement. Wetted surface. Block, mid-section, prismatic and water-plane area coefficient. Tonne per centimetre immersion. Application of Simpson's Rules to area, moment of area, volumes and moment of volume.

Draught and buoyancy. Alteration of mean draught due to change in density of water. Buoyancy and reserve buoyancy. Effect of bilging amidship compartments.

Transverse stability. Centre of gravity. Centre of buoyancy. Metacentre. Shift of centre of gravity due to addition or removal of mass, transverse movement of mass, suspended mass. Stability at small angles of heel (given the second moment of area of the waterplane or formula). The inclining experiment.

Resistance and propulsion. Comparison of skin frictional resistance of hull with model at different speeds.  $R_f = f.S.V.^2$  and residual resistance. Admiralty and fuel coefficients. Relation between speed of vessel and fuel consumption with constant displacement and assuming that resistance varies as (speed)<sup>2</sup>. Elementary treatment of propeller and simple

problems on pitch, pitch ratio, apparent slip, real slip, wake, thrust and power.

Structural strength. Simple problems on strength of structural members to resist liquid pressure. Loading due to head of liquid.

**Ship Construction.** Common terms used in the measurement of steel ships, e.g. length between perpendiculars, breadth overall, moulded depth, draught and freeboard. Definitions of shipbuilding terms in general use. Descriptions and sketches of structural members in ordinary types of steel ships. Watertight doors. Hatches. Rudders. Bow thrusters. Propellers. Watertight bulkheads. Double bottoms. Anchors and cables. Descriptive treatment of the effect of free surface of liquids on stability. Arrangements for the carriage of dangerous goods in bulk.

Ventilation arrangements (natural and mechanical) for pump rooms in tankers and for holds and oil fuel tanks.

Fore and aft peak tanks, double bottom and deep tank filling and pumping arrangements. Compartmental drainage. Levelling arrangements for damaged side compartments.

(7) **Engineering Knowledge**

Candidates for a Steam Certificate will not be examined in items marked with\* and candidates for a Motor Certificate will not be examined in items marked with\*\* (mentioned Later) under this subject.

**Notes:**

- i) The engineering knowledge to be shown by Candidates is that which is required for operation and maintenance of the machinery, equipment and ship structure usually in charge of the engineer officer. A candidate will also be required to understand the legal and management responsibilities of a certificated officer.
- ii) Candidates should be well acquainted with machinery and boiler casualties which may occur at sea and be able to state how these can be prevented or remedied.

"W" indicates that this aspect of the syllabus will be covered in the written examination paper.

"O" indicates that this aspect of the syllabus will be covered in the oral examination.

"W"&"O" indicates that this aspect due to its nature or importance may be in both the written and oral examinations.

The candidate to have knowledge of the following:

Manufacturing methods for various machinery components and the physical properties of the materials commonly used.	W
Working principles and constructional details of: boiler water gauges.	W O
sensing and monitoring devices associated with marine equipment:	W O
Bilge and ballast pumps, pumping and priming systems, including pollution prevention equipment and systems.	W O
propulsion transmission systems, including thrust and shaft bearings stern tubes and propellers.	W O
Hull inspections and drydocking.	W O
Steering and stabilising systems, including bow thrusters.	W O
Refrigeration machinery and air conditioning systems.	W
Fresh water production and conditioning systems.	W
Deck machinery and cargo handling systems.	W
** steam boilers, mountings and feed water systems. Assessment of plant efficiency.	W O
** steam turbines, gearing and lubricating systems, steam distribution systems, and associated equipment.	W O
** Astern running.	O
Auxiliary steam boilers and associated equipment.	O
Boiler water testing and conditioning.	W O
** Control and alarm systems associated with automatic operation of steam plant.	W O
** Safe and efficient operation and maintenance of marine steam plant.	W O
* Marine diesel engines, (Trunk and cross-head types) gearing systems and clutches.	W O
* Starting and reversing systems.	W O

* Cooling and lubricating systems.	WO
* Fuel oil preparation systems.	WO
Air compressors, receivers and associated equipment.	WO
Auxiliary diesel engines and associated equipment.	WO
Control and alarm systems associated with automatic operation of a diesel plant.	WO
* Assessment of engine power, the running adjustments to maintain performance.	WO
Safe and efficient operation and maintenance of marine diesel engines.	WO
Knowledge of Codes of Safe Working Practices as published and amended	O
Knowledge of the types of information issued by the Department of Shipping with regard to Safety at Sea.	O
Knowledge of Codes of Safe Working Practices associated with the carriage of dangerous substances.	WO
Constructional details and maintenance of plant and equipment specially used with dangerous substances.	W
Precaution against fire or explosions, explosive mixtures, sources of ignition.	WO
Principles of fire prevention, detection and extinction in all parts of a ship.	WO
Testing and maintenance of fire detection and extinguishing systems.	WO
Testing of firemen's outfits including BA sets.	WO
Operation, maintenance and testing of fire pumps and associated pumping systems.	WO
Control and organisation of fire and damage control parties.	O
Operation, testing and fault rectification of automatic control systems and alarm panels.	W

Safe and efficient operation in the UMS mode.	O
Procedures to be adopted for operating main machinery under emergency conditions.	O
constructional details of alternators, generators, motors, switch gear and batteries.	W
electrical distribution systems, AC and DC.	W
operational practice and fault finding associated with electrical systems.	O
Constructional details of ships.	W

#### **I. CLASS 1 CERTIFICATE OF COMPETENCY**

##### **(1) Applied Mechanics.**

Statics. Equilibrium of non coplanar forces. Rapson's slide.

Friction. Friction clutches. Friction on inclined plane.

Friction on threads. Work done against friction.

Kinematics. Linear and angular motion with acceleration.

Cams. Velocity-time and acceleration-time graphs.

Dynamics. Acceleration of connected bodies. Effect of simple air resistance on motion under the effect of gravity. The torque equation. Kinetic energy of translation and of rotation. Flywheels. Impulsive forces. Governors including sleeve friction. Simple harmonic motion. Simple pendulum. Simple vibrations. Dynamic balancing of masses rotating in one plane. Basic dynamics of the engine mechanism.

Stress and strain. Stresses on oblique planes. Complementary shear stress. Strength of simple connections such as cottered or screwed joints. Resilience due to direct stress. Suddenly applied loads. Effect of direct loading and of temperature changes on compound members.

Beams. Neutral axis of beams of simple section. Use of deflection formula .

Torsion. Torsion of shaft fitted with liner. Close coiled helical spring.

Struts. Eccentric loading of short columns. Use of strut formulae.

Hydrostatics. Flotation in two liquids of different densities. Total force and centre of pressure on immersed surfaces such as bulkheads.

Hydraulics. Bernoulli's equation and applications. Venturimeter. Force exerted by a jet. Blade angle diagrams for a centrifugal pump.

Control. Simple flow and control problems.



**(2) Applied Heat**

Basic thermodynamic principles. Second Law of Thermodynamics and applications.

Heat transfer. Use of log mean temperature difference. Radiation, Stefan-Boltzmann Law.

Gases. Avagadro's hypothesis. Universal gas constant. Dalton's Law of partial pressures and application to mixtures of gases and vapours such as the effect of air leakage into condensers. Determination of  $n$  from graph connecting  $p$  and  $v$ . Proof of the formula  $c_p - c_v = R$ .

Gas cycles. Use of entropy charts. Open and closed cycles for gas turbines. Carnot and reversed Carnot cycles.

Properties of steam. Use of steam tables to deal with changes of entropy.

Steam plant. Basic Rankine cycle. Isentropic efficiency.

Enthalpy drop in turbines. Flow through nozzles excluding proof of critical pressure ratio. Effect on thermal efficiency of such modifications as superheating, reheating and regenerative feed heating. Use of enthalpy-entropy charts to determine steam condition at various stages. Basic calculations on evaporator and boiler performance.

Combustion. Basic analysis of exhaust gases. Relation between volumetric and mass analysis of a gas mixture. Carbon dioxide content of exhaust gases.

**(3) Electrotechnology**

The electric circuit. The Superposition and Thevenin's Theorems in network problems. Circuits involving non-linear elements.

Electromagnetic induction, magnetic circuit. Mutual inductance. Energy stored in an electric field. Treatment of voltage and current charges in an electric circuit involving inductance and resistance. Time constants,  $B/H$  and  $B/\text{Ampere turns per metre}$  curves and their effect on simple magnetic circuits involving an air gap. Qualitative treatment of hysteresis.

Electrostatics. Types of capacitor. Simple series and parallel circuits involving capacitors. Electric force and electric flux density, relative permittivity, charging and discharging currents of capacitor connected in series with a resistor across a d. c. supply. Energy stored in a capacitor. Generation of static-electricity.

Electronics. The characteristics of junction transistors.

The effect of voltage feedback on amplifier gain, input and output impedances. Equivalent circuits.

Rectification. Simple treatment of thyristors and zener diodes.

Alternating current theory for 3 phase systems. current and voltage relationships. Current, voltage, power and power factor applied to RLC

circuits. The impedance triangle. Power factor improvement. Resonance. Star and delta systems.

D. C. machines. Armature reaction. Speed control. Efficiency. Application to a Ward Leonard system. Suitability of d. c. motors for various types of work. Motor starters; automatic types. Calculations on starters.

A. C. machines. The principles, constructional details and protection of salient pole, cylindrical and brushless alternators. The e.m.f. equation and automatic voltage regulation for an alternator. The production of rotating magnetic fields. Relation between frequency, number of poles and speed of a machine.

The principles, constructional details and protection of induction motors. slip, rotor e.m.f and frequency. Torque-speed curves. Wound, slip ring, cage and double wound types. Starting methods.

The principles and constructional details of single-phase transformers. The e. m. f. equation and efficiency.

Auto-transformers and current transformers.

#### (4) Naval Architecture

General. Wetted surface formula. Simpson's rules applied to second moments of area, volumes, centroids and centres of pressure. Shearing force and bending moment of loaded ship in still water.

Transverse stability. Moment of statical stability. GZ curves. Cross curves of stability. Hydrostatic curves commonly supplied to ship. Effect of free liquid surface and subdivision of tanks. Dangers due to water accumulation during fire-fighting. Practical requirements to ensure stability at sea. Management of water and fuel tanks. Filling and-emptying tanks at sea.

Longitudinal stability. Longitudinal BM and GM and statical stability. Centre of flotation and its calculation. Moment to change trim by one centimetre.

Draught, trim and heel. Changes due to adding or removing fuel, ballast of cargo, changes due to alteration in density of sea water. Changes due to bilging of compartments, using the lost buoyancy and added mass methods. Forces on rudder and stress in rudder stock. Heel when turning, including effect of centrifugal force and of force on rudder.

Resistance and propulsion. Derivation of Admiralty and fuel coefficients. The law of corresponding speeds. Froude's law of comparison. Simple problems on the prediction of full-scale resistance from model experiments.

Problems on propellers involving the use of wake factor,  $ep$ ,  $dp$ ,  $QPC$ , thrust and power. Qualitative treatment of cavitation.

Ship construction. Forces on ship under various conditions, including the effect of panting and pounding, construction of all parts of steel ships. Use

of high tensile steel and aluminium. Structural fire protection arrangements.

Dry docking. Design features of ships for general and specialised trades.

Ship measurement and classification. Meaning of 'classed' and 'unclassed' ships. common terms used in measurement of modern steel ships. common terms used in tonnage measurements, eg gross tonnage, nett tonnage, propelling power allowance.

Load Line. common terms, markings and main criteria used in assignment of freeboards. Maintenance of conditions of assignments.

Life saving equipment. Operation and handling gear for lifeboats and liferafts.

(5) **Engineering knowledge**

Candidates for a steam Certificate will not be examined in items marked with\* and candidates for a Motor Certificate will not be examined in items marked with \*\* (mentioned later) under this subject.

**Notes :**

- (i) The engineering knowledge to be shown by candidates is that which is required for operation and maintenance of the machinery, equipment and ship structure usually in charge of the chief engineer officer.

A candidate will also be required to understand the legal and management responsibilities of that rank.

- (ii) Candidates should be well acquainted with machinery and boiler casualties which may occur at sea and be able to state how these can be prevented or remedied.

- (iii) "W" indicates that this aspect of the syllabus will be covered in the written examination paper.  
 "O" indicates that this aspect of the syllabus will be covered in the oral examination.  
 "W & O" indicates that this aspect due to its nature or importance may be in both the written and oral examination.

- (iv) Naturally there is a similarity between the class 1 and class 2 Engineering knowledge syllabuses, but as a general guide it is expected that the class 1 candidate should be able to show a deeper knowledge of all aspects and a sounder understanding of the principles involved.

The candidate to have knowledge of the following :

Properties and characteristics of metals, materials, liquids, gases and vapours used in marine engineering.	W
Processes to which component parts of machinery and equipment are subjected which are relevant to their manufacture and safe use.	W
Principles and constructional details of sensing, monitoring and measuring devices associated with marine equipment.	WO
Principles involved with the operation, testing and maintenance of propulsion transmission systems, including thrust and shaft bearings, stern tubes and propellers.	WO
Principles involved with the operation, testing and maintenance of bilge and ballast pumps, pumping and priming systems including pollution prevention equipment and systems.	WO
Principles involved with the operation, testing and maintenance of steering and stabilising systems, including bow thrusters.	WO
Principles involved with the operation, testing and maintenance of refrigeration and air conditioning systems.	W
Principles involved with the operation, testing and maintenance of fresh water production and conditioning systems.	W
Principles involved with the operation, testing and maintenance of deck machinery and cargo handling systems.	W
Principles involved with the operation, testing and maintenance of	
** steam boilers, mountings and feed water systems.	WO
** steam turbines, gearing and lubrication systems, steam distribution systems and associated equipment.	WO
auxiliary steam boilers and associated equipment.	WO
control and alarm systems associated with automatic operation of marine steam plant.	WO
Methods of assessment of power, output and efficiency of steam	WO

plant and action to be taken to maintain safe and efficient operation of steam plant.	
Methods of boiler water testing and conditioning and action to be taken to maintain safe conditions.	W O
Principles involved with the operation, testing and maintenance of	
* marine diesel engines (trunk and crosshead types), gearing systems and clutches.	W O
* starting and reversing systems.	W O
* cooling and lubrication systems	W O
* fuel oil perparation systems.	W O
air compressors, receivers and associated equipment.	W O
auxiliary diesel engines and associated equipment.	W O
control and alarm systems associated with automatic operation of a diesel plant.	W O
Methods of assessment of power output and diesel plant efficiency, and action to be taken to maintain safe and efficient operation of plant.	W O
Methods of testing fuel oil, lubricating oil and cooling water and action to be taken to maintain safe conditions.	W O
Codes of Safe Working Practices as published and amended.	O
Types of information issued by the Department of Shipping with respect of Safety at sea.	O
Codes of Safe Working Practices associated with the carriage of dangerous substances.	O
Principles involved with the operation, testing and maintenance of plant and equipment specifically for use with dangerous substances.	W
Legal powers and responsibilities of a Chief Engineer.	O
Precautions against fires or explosions, explosive mixtures and sources of ignition.	W O
Principles and methods of fire prevention, detection and extinction in all areas of a ship.	W O

Principles of the operation, testing and maintenance of fire detection and extinguishing systems.	W O
Principles of the operation, testing and maintenance of fire pumps and associated pumping systems.	W O
Control and organisation of fire and damage control parties.	O
Principles of the operation, testing and maintenance of automatic control systems and alarm panels.	W
Organisation and control procedures necessary for the safe and efficient operation in the UMS mode.	O
Principles of the operation, testing and maintenance of alternators, generators, motors, switch gear and batteries.	W O
AC and DC distribution systems.	W O
Fault finding and rectification of faults in electrical systems.	O
Administration duties of a Chief Engineer associated with organisation and training of staff for normal and emergency duties.	O
organisation of temporary and permanent repairs and surveys.	O
ensuring ship is in seaworthy condition prior to sailing taking into account nature of voyage.	O
Constructional details of ships	W
Dry docking, hull surveys and repairs	W O

#### 5. Service Endorsements

Classes 2, 3 and 4 Engineers seeking endorsement to sail as Chief Engineer Officer in the description of the ship to which the endorsement relates shall appear at oral examination only. The examination will be based on the operation, maintenance and management of marine machinery appropriate to the Class of Certificate, particularly the recognition of irregularity in the performance of that machinery and the analysis and interpretation of information gained from the monitoring equipment.

The candidate will also be required to have the knowledge of the administrative duties of a Chief Engineer Officer i. e. the organisation and training of staff for

both normal and emergency duties including use of safety equipment, and the organisation of repairs and surveys and associated reports.

**NOTE :** The Syllabuses contained in this Schedule are for the guidance of the candidates, but it does not necessarily imply that the question papers are to be restricted within the scope of this Syllabus. Question papers especially of Professional subjects shall be up-graded with the introduction of new technology in shipping industry.

Nevertheless, the Director General may, from time to time, revise the syllabus.

#### Schedule-V

( See rule 8(b) )

1. **Fire Fighting Course (FFC):** A 5-6 days course shall deal with various risks of fire on board ships and good practices by which such fire risk and hazards can be reduced; the equipment and appliances that a ship is supposed to carry, their use and maintenance; the theory of oxygen supply, removal of combustible material, cooling of surrounding; sources of fire-electrical, oil and chemical, gaseous explosions; special care on tanker and gas carriers; typical fire on jute, coal, phosphorus; Fire in engine room; fire in pump room; types of extinguishers-water, foam, dry power, CO<sub>2</sub>-their uses; pump, hoses and hydrants; use of jets and spray specially use of spray wall for approaching seat of fire; emergency fire pump, Isolation valve, International shore connection; use of breathing apparatus; Fixed installation-CO<sub>2</sub>, Halon- their use and precautions, sufficient practical training to withstand heat and develop mental and physical ability to fight fire.
2. **First Aid at Sea (FAAS):** A 2-3 weeks course shall include- basic anatomy of human body, bandages, splints, pressure point, bandage; treatment for heat stroke, electric shock, burn, bleeding, shock, unconsciousness, drowning, fever, colds, loose motion etc., administration of artificial respiration, heart massage, intermuscular injection; general care of a sick person; health and hygiene onboard a ship specially those relating to stores and provision; care and maintenance of a medical chest; ability to consult WHO/IMO medical guide and act accordingly.
3. **Basic Sea Survival (BSS) / Personal Survival Techniques Course (PSTC):** This course shall deal with types of emergencies such as collisions, fire and foundering, types of life saving appliances, need to adhere to the principles of survival, value of training and drills, need to be ready for any emergency and its awareness. The information in the musterlist, in particular, one's specific duties in emergency, survival craft station, the signals calling all crews to their survival craft or fire stations, locations of one's own spare life jackets, fire alarm controls, means of escape, consequences of panic. Actions to be taken when

called to survival craft stations including; putting on suitable clothing, donning a life jacket and collecting additional protection such as blankets. Actions to be taken when required to abandon a ship such as; how to board survival craft from ship and water, how to jump into the sea from a height and reduce the risk of injury when entering the water. Actions to be taken in water, such as; how to survive in oil or fire in the water, cold conditions, shark infested waters and how to right a capsized survival craft. Actions to be taken when aboard a survival craft, such as; getting the survival craft quickly clear of the ship, protection against cold or heat, using a drogue or sea anchor, keeping a look out, recovering and carrying for survivors, facilitating detection by others, checking equipment for use in survival craft and its use remaining, as far as possible in the vicinity. Main dangers to survivors and the general principles of survival such as effects of immersion in water and hypothermia, importance of preserving body fluids, protection against sea sickness, proper use of fresh water, effects of drinking sea water, importance of maintaining morale.

Practical instruction shall be given in wearing a life jacket or immersion suit or both correctly, entering water from a height wearing a life jacket, keeping afloat without a life jacket, boarding life raft from a ship and water while wearing a life jacket, immersion suit, assisting others to board survival craft, operation of survival craft including basic operation of portable radio equipment, streaming a drogue or sea anchor.

4. **Shipping Management Course (SMC) :** The course will deal with-(a) Organisation-International-regional-national-public-private, (b) Information and communication, (c) Personnel Management- human relationship-motivation,(d) Financial Management-Authorised Capital-Reserve capital- shares and equity,(e) Budget-Revenue-Development- Deficit financing -Audit, (f) Balance Sheet - Assets-Liabilities- premium- bonus-Dividend, (g) Balance of trade- surplus-deficit- effects-GNP/GDP, (h) Invisible income-Overseas -investment -banking-insurance- shipping-aviation- personal remittances, (i) Reserve-Gold Reserve-foreign exchange reserve-debt servicing - value of currency, (j) Evaluation-NPV (Net Present Value)-IRR (Internal Rate of Return ) -Voyage analysis-cash flow statement -Statement of Port Account,(k) Shipboard Management- Committee -meetings- Operational efficiency- Social and Recreational activities, (l) Business Management-Letter of intent-invoice-Letter of credit (L/C) -Bill of Lading (B/L)-FOB -CIF etc.

5. **Word processing & Computer Programming (WPCPI):**

Candidates will be required to produce certificate to confirm their ability to type 30 W.P.M. correctly, use P.C. as a word processor, insert, delete or correct as necessary and get a printout; storing information with use of code and retrieving same at a later stage; filing and calling a file and inserting new information; Simple Basic Programming; Use of computer to give survey status of ship etc.



**6. Certificate of Proficiency in Survival Craft (CPSC):**

The course shall deal with Life jacket, Immersion suit/ survival suit, Thermal Protective Aid, Life buoy, Life Raft, Life Boat, helicopter rescue etc and shall comply with the requirements laid out in Reg.VI/I of the International Convention on Standards of Training, Certification and Watch Keeping for Seafarers, 1978.

**7. Tanker safety and Familiarisation Course (TSFC):**

In order to obtain a tanker endorsement it will be necessary to attend Tanker Safety and Familiarisation Course (TSFC) in addition to appropriate period of supervised shipboard service. The duration of TSFC shall be of 2 weeks duration on Tanker Safety and Familiarisation. The course shall take into account relevant Convention regulation and resolutions in this regard. The course in particular shall include general construction features of tankers (crude and product carriers), Knowledge of COW (Crude Oil Washing), IGS (Inert Gas Systems), Pressure Ventilation system, risk of fire and explosions on tankers, gas freeing procedures, entering empty tanks, principle and procedure of fighting fire on tankers; Pumproom operation; loading, discharging including ship to ship operation; ullage of tanks and oil calculations; LOT (Load on top) system, cleaning of tanks, preparing for different grade of oil; characteristics of various types of oil; prevention and control of pollution; good seamanship and safe practices on a tanker. The course shall include one or two visits to tankers.

**Schedul VI**

(see rule 10 (7))

**Testimonial of shipboard service of training  
for dangerous cargo endorsement**

The report of the Chief Engineer Officer should be headed by the full name, certificate number and discharge book number of the subject officer, and should include a statement along the lines of the specimens below, as appropriate. The description of types of cargo carried during the period need not be exhaustive but, must be more than simply "Petroleum", "chemical" or "Liquefied gas" for example- "Crude oil"; "gas oil, motor spirit and other products"; "Benzene"; "Phenol and other chemicals"; "LNG"; "LPG" and "Ammonia" etc.

**Report of service**

Mr. \_\_\_\_\_ has served as \_\_\_\_\_ (rank)  
in MT/ST \_\_\_\_\_ between the following dates  
\_\_\_\_\_ and \_\_\_\_\_

During this time the ship carried the following types of cargo:

I consider Mr. \_\_\_\_\_ to be competent to carry out safely cargo handling duties in a "petroleum tanker/\*Liquefied gas carrier/\*Liquid chemical carrier."

(to be signed by the Chief Engineer Officer and countersigned by the Engineer Superintendent or other representative of the Owners.)

Report of ship-board training as a supernumerary

Mr. \_\_\_\_\_ has served in a supernumerary capacity in MT/ST \_\_\_\_\_ between the following dates \_\_\_\_\_ and \_\_\_\_\_ and during this time has undergone a course of 14 days ship board training in cargo operations. The ship was carrying the following types of cargo, or was on ballast voyages between carrying such cargoes :-

I consider that Mr. \_\_\_\_\_ now has an overall/appreciation of \* petroleum/\*Liquefied gas/\* Liquid chemical cargo operations. (to be signed by the chief Engineer Officer and countersigned by the Engineer Superintendent or other representative of the owners.)

\* Delete as appropriate.

**Schedule VII**

(see rule 18)

**Basic Principles in Keeping an Engineering Watch**

The basic principles, including but not limited to the following, shall be observed in keeping an engineering watch on board a sea going ship:

**1. General**

(1) The chief Engineer Officer of every ship in consultation with the master, ensure that watchkeeping arrangements are adequate to maintain a safe watch, when deciding the composition of the watch, which may include appropriate engine room ratings, the following criteria, interalia, shall be taken into account:

- type of ship;
- type and condition of the machinery;
- special modes of operation dictated by condition such as weather, ice, contaminated water, shallow water, emergency conditions, damage containment or pollution abatement;
- qualifications and experience of the watch keeper;

- observance of international, national and local regulations;
- safety of life, ship, cargo and port, and protection of the environment;
- maintaining the normal operations of the ship.

(2) Under the direction of the Chief Engineer Officer, the Engineer Officer, in charge of the watch shall be responsible for the inspection, operation and testing, as required, of all machinery and equipment under his responsibility. The Engineer Officer in charge of a watch is the Chief Engineer Officer's representative and his primary responsibility, at all times, shall be the safe and efficient, operation and up-keep of machinery effecting the safety of the ship.

(3) The Chief Engineer Officer shall, in consultation with the master, determine in advance the needs of the intended voyage, taking into consideration the requirements for fuel, water, Lubricants, chemicals, expendable and other spare parts, tools, supplies and any other requirements.

## **2. Operations**

(1) The Engineer Officer in charge of the watch shall ensure that the established watchkeeping arrangements are maintained. Under his general direction engine room ratings, if forming part of the watch, shall be required to assist in the safe and efficient operation of the propulsion machinery and the auxiliary equipment.

(2) At the commencement of the engineering watch, the current operational parameters and condition of all machinery shall be verified. Any machinery not functioning properly, expected to malfunction or requiring special service, shall be noted alongwith the action already taken. Plans shall be made for any further action, if required.

(3) The Engineer Officer in charge of the watch, shall ensure that the main propulsion plant and auxiliary systems are kept under constant surveillance, inspections are made of the machinery and steering gear spaces at suitable intervals and appropriate action is taken to remedy any malfunction discovered.

(4) When the machinery spaces are in the manned condition, the Engineer Officer in charge of the watch shall at all times be readily capable of operating the propulsion equipment in response to needs for changes in direction or speed. When the machinery spaces are in the periodic unmanned conditions, the designated duty engineer officer in charge of the watch shall be immediately available and on call to attend the machinery spaces.

(5) All bridge orders shall be promptly executed, Changes in direction or speed of the main propulsion unit shall be recorded, except where an Administration determines that the size or characteristics of a particular ship make such recording impracticable. The engineer officer in charge of the watch shall

ensure that the main propulsion unit controls, when in the manual mode of operation, are continuously attended under standby or manoeuvring conditions.

(6) The engineer officer in charge of the watch shall not be assigned or undertake any duties which would interfere with his supervisory duty in respect of the main propulsion system and its ancillary equipment and he shall ensure that the main propulsion system and auxiliary equipment are kept under constant surveillance until he is properly relieved.

(7) Due attention shall be paid to the maintenance and support of all machinery, including mechanical, electrical, hydraulic and pneumatic systems, their control apparatus and associated safety equipment, all accommodation service systems/equipment and the recording of stores and spare gear usage.

(8) The chief engineer officer shall ensure that the engineer officer in charge of the watch is informed of all preventive maintenance, damage control, or repair operations to be performed during the watch. The engineer officer in charge of the watch shall be responsible for the isolation, by-passing and adjustment of all machinery under his responsibility that is to be worked on, and shall record all work carried out.

(9) Before going off duty, the engineer officer in charge of the watch shall ensure that all events related to the main and auxiliary machinery are suitably recorded.

(10) To avoid any danger to the safety of the ship and its crew, the engineer officer in charge of the watch shall notify the bridge immediately in the event of fire, impending actions in machinery spaces that may cause reduction in ship's speed, imminent steering failure, stoppage of the ship's propulsion system or any alteration in the generation of electric power, or similar threat to safety. This notification, where possible, shall be accomplished before changes are made in order to afford the bridge the maximum available time to take whatever actions are possible to avoid a potential marine casualty.

(11) When the engine room is put in a standby condition, the engineer officer in charge of the watch shall ensure that all machinery and equipment which may be used during manoeuvring is in a state of immediate readiness and that an adequate reserve of power is available for steering gear and other requirements.

### **3. Watch requirements**

(1) Every member of the watch shall be familiar with his assigned watchkeeping duties. In addition, every member shall have with respect to that ship:

Knowledge of the use of appropriate internal communication systems;

knowledge of escape routes from machinery spaces;

knowledge of engine room alarm systems and the ability to distinguish between the various alarms with special reference to the CO<sub>2</sub> alarm;

knowledge of the positions and use of the fire fighting equipment in the machinery spaces.

(2) The composition of an underway watch shall, at all time, be adequate to ensure that safe operation of all machinery affecting the operation of the ship, in either automated or manual mode and be appropriate to the prevailing circumstances and conditions. To achieve this, the following, inter alia, shall be taken into account;

adequate supervision, at all times, of auxiliary affecting the safe operation of the ship;

condition and reliability of any remotely operated propulsion and steering equipment and their controls, control location and the procedures involved in placing them in a manual mode of operation in the event of break-down or emergency;

location and operation of fixed fire detection, fire extinction or fire containment device and apparatus;

use and operational condition of auxiliary, standby and emergency equipment affecting the safe navigation, mooring or docking operations of the ship;

steps and procedures necessary to maintain the condition of machinery installations in order to ensure that efficient operation during all modes of ship operation;

any other demands on the watch which may arise as a result of special operating circumstances.

(3) At an unsheltered anchorage the chief engineer officer shall consult with the master whether or not to maintain an underway watch.

**4. Fitness for duty.**

The watch system shall be such that the efficiency of the watch is not impaired by fatigue. Duties shall be so organised by the chief engineer officer that the first watch at the commencement of a voyage and the subsequent relieving watches are sufficiently rested and otherwise fit for duty.

**5. Protection of the marine environment.**

The engineer officers and engine room ratings shall be aware of the serious effects of operational or accidental pollution of the marine environment and shall take all possible precautions to prevent such pollution, particularly within the framework of relevant international and port regulations.

**Schedule VIII**

(see rule 19)

**Specimen of Forms and Certificates**

- EOEC 1 : Application for Certificate of Competency Examination/Endorsement/Eligibility
- EOEC 2 : Notification of Eligibility
- EOEC 3 : Notification of Acceptance for Certificate of Competency Examination.
- EOEC 4 : Results of Examination.
- EOEC 5 : Provisional Certificate of Competency.
- EOEC 6 : Application for Dispensation.
- EOEC 7 : Certificate of Dispensation.
- EOEC 8 : Application for Endorsement for service on tankers.
- EOEC 9 : Endorsement for service on tankers.
- EOEC 10 : Chief Engineer's Endorsement.
- EOEC 11 : Certificate of Competency (Marine Engineer Officer) Class 1 Combined (Motorship & Steamship)
- EOEC 12 : Certificate of Competency (Marine Engineer Officer) Class 1 Motorship.
- EOEC 13 : Certificate of Competency (Marine Engineer Officer) Class 1 Steamship .
- EOEC 14 : Certificate of Competency (Marine Engineer Officer) Class 2 Combined (Motorship & Steamship) .
- EOEC 15 : Certificate of Competency (Marine Engineer Officer) Class 2 Motorship .
- EOEC 16 : Certificate of Competency (Marine Engineer Officer) Class 2 Steamship .
- EOEC 17 : Certificate of Competency (Marine Engineer Officer) Class 3 Motorship .
- EOEC 18 : Certificate of Competency (Marine Engineer Officer) Class 4 Combined (Motorship & Steamship) .
- EOEC 19 : Certificate of Competency (Marine Engineer Officer) Class 4 Motorship .
- EOEC 20 : Certificate of Competency (Marine Engineer Officer) Class 4 Steamship .

(Monogram)

EOEC 1

**Government of the People's Republic of Bangladesh  
Ministry of Shipping  
Department of Shipping**

Application for Certificate of Competency  
examination/endorsement/eligibility \*  
(ENGINEERS)

Completed application form alongwith necessary original documents should be lodged with the Chief Examiner at least 21 days prior to the examination in which the applicant intends to sit. Appropriate fee must be paid at the time of submitting the application form.

Please complete all entries in **block letters**.

(A) Examination for which application is now being made

Name of academic/professional subjects. (Specify Motor, Steam, Combined or Endorsement)	Class	Examination Date	MMO at which Certificate to be issued (For foreign candidate only)

(B) Particulars of applicant

Name	Father's name	Permanent Address

Date & Place of Birth	Height	Identification Mark	Nationality	CDC No. Passport No.

State whether trained under an approved Engineer Cadet Training Scheme-YES/NO \*

(C) Certificate of Competency held (if any)

Steam, Motor, Combined	Class	Number	Examination Centre & Date	Date of Issue	Details of Endorsement

(D) Status of Ancillary Courses

Fire Fighting			First Aid at Sea			Personal Survival Technique		
Centre	Date	Number	Centre	Date	Number	Centre	Date	Number

Shipping Management			Word Processing and Computer Programming			Certificate of Proficiency in Survival Craft		
Centre	Date	Number	Centre	Date	Number	Centre	Date	Number

(E) Date & Place of current medical examination and expiry date of Certificate (enclose certificate)

\* Strike out portion not applicable

\*\* Passport number shall be given in case of foreign candidates.

Particulars of last three attempts in the examination (if none, state "NONE")

Class of Examination	Date	Centre	Academic Subjects								Professional Subjects		
			GES 1	GES 2	App. Mech.	App. Heat	App. Math	Engg. Draw.	Elec. Tech.	Nav. Arch.	Engg. Knowledge Motor/Steam	Oral General	

## (G) Educational qualifications

Name of examinations	Year	Division/Class	Main Subjects	Board/ University

## (H) Statement of initial training

## Workshop training.

Name & Address of employer	Nature of work done by applicant	from	to	month	days

## Engineer Cadet Training Scheme (ECTS)

Name of the Institute	Course	From	to	month	days
	Pre sea (Phase I)				
	Vocational training I				
	Vocational training II				
	Phase III				

Shipboard service for ECTS Phase II or compensatory purposes (taken from testimonials)

Steam or Motor	Name of Ship	Official Number	Registered Power (KW)	From	to	month	days

## (I) To be filled up by Bangladesh Navy Personnel only

Date of joining Navy \_\_\_\_\_ Date of Commissioning \_\_\_\_\_  
 Date of release/retirement and rank held \_\_\_\_\_  
 Present Rank \_\_\_\_\_ P. No. \_\_\_\_\_



Breakdown of service

Rank	From	To

Other qualifications & experience related to marine engineering discipline

(J) Qualifying sea service taken from 'Statement of Service' (for Navy personnel only) or Discharge Book

Name of ship	Steam or Motor	Official Number	Registered Power (KW)	Rank	Type of service*	From	To	Months	Days
* Use the following Codes:						Total			

- |                           |                                |
|---------------------------|--------------------------------|
| 1 - Day Work;             | 2 - Regular watch on auxiliary |
| 3 - Regular watch on main | machinery;                     |
| propelling machinery;     | 4- Regular UMS operation.      |

(K) Declaration by candidate

**Take Notice:** Any person who makes, or procures to be made, or assists in making, any false representation for the purpose of obtaining for himself or any other person a Certificate of competency is guilty of a misdemeanour, and renders himself liable to heavy penalties.

I hereby declare that the particulars contained in this form are correct and true to the best of my knowledge and behalf; and that the substantiating documentation sent with this form are true and genuine documents, given and signed by the persons whose names appear on them.

And I make this declaration conscientiously believing the same to be true.

Signature of applicant \_\_\_\_\_ Date \_\_\_\_\_

Local address \_\_\_\_\_  
 \_\_\_\_\_

**(L) FOR OFFICIAL USE ONLY**

A fee of Tk. \_\_\_\_\_ (In words) \_\_\_\_\_  
 \_\_\_\_\_ has this day been deposited at  
 this office.

Office  
 \_\_\_\_\_  
 (with date)

Name and rank of receiving officer-  
 \_\_\_\_\_

Signature \_\_\_\_\_

(M) Certificate of Examiner	Months	Days
(a) Workshop training deficiency		
(b) Compensatory shipboard service required		
(c) Compensatory shipboard service accumulated as per testimonials		
(d) Sea Service accumulated as per discharge/ Service Book		
(e) Net qualifying sea service		

**Examination results**

Academic			Professional		
GES I		Applied Mechanics	Engineering Knowledge	Motor/ Steam	
GES II		Applied Heat		General	
Applied Mathematics		Electro technology	ORAL		
Engineering Drawing		Naval Architecture			

**Note:** All boxes to be either filled with current results, previous passes, exemptions or cancelled as the case may be.

Class of Certificate to be Issued/endorsed/

Endorsement to be added/

Provisional Certificate of Competency No./  
 & Date of issue

I hereby certify that the particulars in (M) are correct and that the workshop training and sea service have been verified by reference to discharges and testimonials.

Signature of Examiner of Engineers \_\_\_\_\_  
 Signature of Chief Examiner of Engineers \_\_\_\_\_

Office  
 stamp  
 (with  
 date)

(Monogram)

EOEC 2

**Government of the People's Republic of Bangladesh**  
**Ministry of Shipping**  
**Department of Shipping**

**EXAMINATION OF ENGINEERS**

**NOTIFICATION OF ELIGIBILITY**

Date :

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Dear Sir,

This is to inform you that you have been found eligible/not eligible after due assessment of your documents for \_\_\_\_\_ due to reasons as stated below.

Yours faithfully,

(Monogram)

EOEC 3

**Government of the people's Republic of Bangladesh**  
**Ministry of Shipping**  
**Department of Shipping**

**EXAMINATION OF ENGINEERS**

**NOTIFICATION OF ACCEPTANCE**

Date :

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Dear Sir,

Your application for admission to the following academic/professional subjects/Endorsement of the class \_\_\_\_\_ (steam, Motor, combined) Certificate examination has been accepted.

The Examination will commence at \_\_\_\_\_ am/pm on \_\_\_\_\_ You are requested to be punctual.

The rules to be observed during the examination are given overleaf for your attention.

Yours faithfully,

CHIEF EXAMINER OF ENGINEERS

**EXAMINATION RULES.**

1. You must present yourself for examination at the appointed time and are advised to be ten minutes early.
2. You must not have on your desk any books, notice, memoranda or paper other than that provided by the Department. Any such books, notes etc. must be surrendered to the examiner before commencement of the examination.
3. You must only use the mathematical tables and charts provided by the Department.
4. You must bring your own drawing instruments. Drawing boards and tee squares will be provided by the Department.
5. Silence must be strictly observed at all times during the examination.
6. You must not deface or write upon the mathematical tables provided by the Department.
7. All work other than sketching and drawing must be done in ink.
8. You must sign your name at the foot of each page of answer, graph or drawing paper.
9. You may use a slide rule or an electronic calculator (having four basic functions and a single memory) but the full working of each solution must be shown, otherwise no significance will be attached to the answer. Electronic calculators must be noiseless in operation, self contained, needing no external source of power, and non programmable.
10. You must not leave your seat in the examination room without permission.
11. You must not communicate with other candidates during the examination. You must not make notes for conveyance from the examination.
12. If you are found guilty of any breach of these rules involving fraudulent action or improper behaviour you are liable to all the penalties of failure and be excluded from further examination for such period as the Chief Examiner decides.
13. You must complete the examination for which you have been accepted. Failure to do so without a satisfactory explanation will incur loss of fee.
14. You are advised to read the questions carefully and to confine your attention to the problems as presented without dealing with extraneous matter. This advice is applicable to all parts of the examination especially to the Engineering knowledge (General) paper.
15. English comprehension and legible handwriting will be taken into account. Recognition will be given for clear statements and sound reasoning both in calculations and descriptive answers.
16. If a candidate attempts directly or indirectly to influence the decision of examiner governing the award he will be regarded as having committed an act of misconduct. He will be excluded from the examination forthwith and will not be re-examined until a period of 8 months sea-service or more as decided by the Chief Examiner has elapsed.

(Monogram)

EOEC 4

**Government of the People's Republic of Bangladesh**  
**Ministry of Shipping**  
**Department of Shipping**

**EXAMINATION OF ENGINEERS**

**RESULTS OF EXAMINATION**

No. \_\_\_\_\_

Date & Place of birth \_\_\_\_\_

CDC No. \_\_\_\_\_

Name of Candidate \_\_\_\_\_

Date	centre	class	Steam/ Motor/ Combi ned	Qualify- ing sea service at time of exa- mination	Academic subjects					Professional Subjects			Interval to elapse before re exami- nation	Signature of Examiner	
					CES I	CES II	App. Mech anics	App. Heat	App. Math.	Engg. Draw- ing	Elec- tro- tech.	Nav. Arch.			Engi- neering Knowledge

Signature, name and Stamp of  
issuing authority with date \_\_\_\_\_

(Monogram)

EOEC 5

**Government of the People's Republic of Bangladesh**  
**Ministry of Shipping**  
**Department of Shipping**

**EXAMINATION OF ENGINEERS**

**PROVISIONAL CERTIFICATE OF COMPETENCY**

Provisional Certificate No. \_\_\_\_\_

Valid from \_\_\_\_\_ to \_\_\_\_\_

Class of Certificate \_\_\_\_\_

Issued to \_\_\_\_\_ S/o \_\_\_\_\_

Date of birth \_\_\_\_\_ Place of birth \_\_\_\_\_

Identification mark \_\_\_\_\_

Height \_\_\_\_\_ CDC/Passport No. \_\_\_\_\_

Previous Class of Certificate held (if any) \_\_\_\_\_

Certificate No. \_\_\_\_\_

Holders Signature \_\_\_\_\_

The Government of the People's Republic of Bangladesh certified that the holder of this provisional certificate has been found duly qualified in accordance with the provisions of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers 1978 for the capacities shown below within the limitations specified.

Capacity

Limitations

**Endorsement for service on tankers**

The holder of this Certificate has satisfied the conditions specified in Merchant Shipping Certification of Marine Engineer Officer Rules 1990 as to training and service in Ship carrying \_\_\_\_\_

Signature of  
 Chief Examiner \_\_\_\_\_

Office  
 Stamp  
 with date

**Government of the People's Republic of Bangladesh**  
**Ministry of Shipping**  
**Department of Shipping**

**APPLICATION FOR DISPENSATION**

**WARNING :** A false declaration on this form can result in legal proceedings.

**PART I :** To be completed by the Shipowner/Manager/ Agent.

1. Name & address of Owner/ Manager \_\_\_\_\_
2. Name of Ship \_\_\_\_\_ Official No. \_\_\_\_\_  
 Ship type \_\_\_\_\_ GRT \_\_\_\_\_
3. Type of machinery and registered power (Kw) \_\_\_\_\_  
 \_\_\_\_\_  
 vessel to operate on unlimited voyage/ limited voyage/  
 Limited voyage not exceeding 72 hours.
4. Dispensation requested for the rank of \_\_\_\_\_  
 for a period of \_\_\_\_\_
5. Reasons for requesting dispensation \_\_\_\_\_

Signature of Owners/ Agents \_\_\_\_\_

Seal

**FOR OFFICIAL USE**

A fee of Tk. \_\_\_\_\_ (In words) \_\_\_\_\_  
 \_\_\_\_\_ has this day been deposited at this Office.

Name & rank of receiving Officer  
 \_\_\_\_\_  
 \_\_\_\_\_

Signature \_\_\_\_\_

Office Stamp  
 (with date)

**PART 2 :** To be completed by the candidate who must produce the following documents to the Chief Examiner of Engineers/POMMD or Engineer & Ship Surveyor authorised to issue dispensation.



- a) Discharge book
  - b) Testimonials covering last 3 voyages.
  - c) Certificate of Competency, if held.
  - d) Workshop testimonials or any other initial training certificates.
  - e) Certificate of Fire Fighting Course.
  - f) Certificate of First Aid at Sea Course.
  - g) Certificate of Personal Survival Technique/Certificate of Proficiency in Survival Craft Course.
1. Name \_\_\_\_\_ CDC No. \_\_\_\_\_
  2. Date & Place of birth \_\_\_\_\_ Nationality \_\_\_\_\_
  3. Certificate of Competency (Class & No.) \_\_\_\_\_
  4. Endorsement \_\_\_\_\_ YES/ NO\* Endorsement for service on tankers  
\_\_\_\_\_ YES/NO\*.
  5. Fire Fighting Certificate No. \_\_\_\_\_ Centre & Date \_\_\_\_\_
  6. First Aid at sea Certificate No. \_\_\_\_\_ Centre & Date \_\_\_\_\_
  - 7.\* Personal Survival Technique/Certificate of Proficiency in Survival Craft  
Certificate No. \_\_\_\_\_ Centre & Date \_\_\_\_\_
  8. Length of service at sea as an Engineer Officer \_\_\_\_\_ Years \_\_\_\_\_  
months.
  9. If you have been previously considered for a dispensation give  
details of the three most recent occasions -

Name of Ship-

Motor or Steam -

Registered Power- (Kw) -

Rank held -

Place of issue -

Date of issue -

#### **DECLARATION**

I declare that the particulars given by me in this form are true and complete to the best of my knowledge and belief. I also declare that the testimonials and documents submitted are genuine, given and signed by the firms and persons whose names appear upon them.

Signature of candidate \_\_\_\_\_ date \_\_\_\_\_

**FOR OFFICIAL USE**

Certificate of Dispensation Issued- YES/NO\*

Reasons for rejection if certificate of Dispensation not issued:

Chief Examiner of Engineers.  
or POMMD or Engineer & Ship Surveyor \_\_\_\_\_

\* Delete as necessary.

Stamp  
(with date)

(monogram)

EOEC 7

**Government of the People's Republic of Bangladesh  
Ministry of Shipping  
Department of Shipping**

No. \_\_\_\_\_

**CERTIFICATE OF DISPENSATION**

(Issued in accordance with Article VIII of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978)

Name of Ship \_\_\_\_\_ Official No. \_\_\_\_\_  
Port of Registry \_\_\_\_\_  
Type of vessel \_\_\_\_\_ Registered power (Kw) \_\_\_\_\_ GRT \_\_\_\_\_  
Owner \_\_\_\_\_

Name of Engineer \_\_\_\_\_  
CDC No. \_\_\_\_\_ Nationality \_\_\_\_\_  
Class of Certificate of Competency \_\_\_\_\_ No. \_\_\_\_\_

The vessel named above is authorised to operate on unlimited voyage/limited Voyage/limited voyage not exceeding 72 hours with the above named officer serving in the capacity of \_\_\_\_\_ subject to the following special conditions (if none insert "None").

This dispensation is valid until \* \_\_\_\_\_ or for a voyage \_\_\_\_\_ whichever is earlier but it may be withdrawn by the Director General at any time.

\*Period not to exceed six months.

Issued at \_\_\_\_\_ on \_\_\_\_\_

Official Seal  
(with date)

Signed \_\_\_\_\_  
Designation \_\_\_\_\_

**Government of the People's Republic of Bangladesh**  
**Ministry of Shipping**  
**Department of Shipping**

**APPLICATION FOR ENDORSEMENT FOR SERVICE ON TANKERS**

- Name \_\_\_\_\_ Date of birth \_\_\_\_\_
- Father's name \_\_\_\_\_ Nationality \_\_\_\_\_
- Discharge Book No. \_\_\_\_\_ issued by \_\_\_\_\_ on \_\_\_\_\_
- Certificate of Competency (Class & No.) \_\_\_\_\_  
issued by \_\_\_\_\_ on \_\_\_\_\_
- Details of shore based specialised training course  
(attach testimonials)
- Details of shipboard training (attach testimonial)
- Details of credited shipboard service (attach testimonials)

Name of vessel	Type of vessel	Cargo Tonnage	Registered power (kw)	Rank	Period		Total	
					From	To	Month	Date

**DECLARATION:**

I declare that the particulars given by me in this form are true and complete to the best of my knowledge and belief. I also declare that the testimonials and documents submitted are genuine, given and signed by the firms and persons whose names appear upon them.

Date \_\_\_\_\_

Signature of Candidate \_\_\_\_\_

**FOR OFFICIAL USE**

Endorsement issued YES/NO \_\_\_\_\_

Reasons for rejection if Endorsement not issued: \_\_\_\_\_

Stamp with  
date

Chief Examiner of Engineers \_\_\_\_\_

(monogram)

EOEC 9

**Government of the People's Republic of Bangladesh**  
**Ministry of Shipping**  
**Department of Shipping**

No. \_\_\_\_\_

**ENDORSEMENT FOR SERVICE ON TANKERS**

1. Name \_\_\_\_\_ Date of birth \_\_\_\_\_
2. Father's name \_\_\_\_\_ Nationality \_\_\_\_\_
3. Discharge Book No. \_\_\_\_\_ issued by \_\_\_\_\_ on \_\_\_\_\_
4. Certificate of Competency (Class & No.) \_\_\_\_\_  
 issued by \_\_\_\_\_ on \_\_\_\_\_

The above named Engineer Officer, has satisfied the conditions specified in Merchant Shipping (certification of Marine Engineer Officer) Rules, 1990 as to training and service in ships carrying crude liquid Petroleum or Petroleum Products/Liquid Chemical/Liquefied Gas and thereby qualified to serve on the above mentioned type of tanker/tankers.\*

This endorsement is valid until \_\_\_\_\_

Issued at \_\_\_\_\_ on \_\_\_\_\_

\_\_\_\_\_  
 Director General  
 Department of Shipping

Official Seal  
 (with date)

\*Delete as necessary.

N. B. - This endorsement must remain attached with the above mentioned Certificate of Competency of the Engineer Officer.

**Government of the People's Republic of Bangladesh**  
**Ministry of Shipping**  
**Department of Shipping**

No. \_\_\_\_\_

**CHIEF ENGINEER'S ENDORSEMENT**

1. Name \_\_\_\_\_ Date of birth \_\_\_\_\_
2. Father's Name \_\_\_\_\_ Nationality \_\_\_\_\_
3. Discharge Book No. \_\_\_\_\_ issued by \_\_\_\_\_ on \_\_\_\_\_

The above named Engineer Officer has been found duly qualified in accordance with Merchant Shipping (Certification of Marine Engineer Officer) Rules, 1990 to serve as Chief Engineer Officer on a sea going vessel having registered power under \_\_\_\_\_ Kw, operating on unlimited voyage/limited voyage/limited voyage not exceeding 72 hours.

This endorsement will remain valid till the validity date of above mentioned Certificate of Competency.

Issued at \_\_\_\_\_ on \_\_\_\_\_.

Signature of holder \_\_\_\_\_.

Chief Examiner of Engineers  
 Department of Shipping

Director General  
 Department of Shipping

Official Seal  
 (with date)

Official Seal  
 (with date)

**N. B. - This endorsement must remain attached with the above mentioned Certificate of competency of the Engineer Officer.**

সৌ-পরিবহন সঞ্চালন  
Ministry of Shipping

সমুদ্র পরিবহন অধিদপ্তর  
Department of Shipping

উপযুক্ততা সার্টিফিকেট (মেরিন ইঞ্জিনিয়ার অফিসার)  
CERTIFICATE OF COMPETENCY (MARINE ENGINEER OFFICER)

এখন শ্রেণী সর্নিলিত  
CLASS - 1 COMBINED

মটর ও স্টীমশিপ  
MOTORSHIP & STEAMSHIP

নং -----  
No -----

বাংলাদেশ মার্চেন্ট শিপিং অধ্যাদেশ, ১৯৮৩ (XXVI of 1983) দ্বারা অর্পিত ক্ষমতাবলে একে বাংলাদেশ মার্চেন্ট শিপিং সার্টিফিকেট  
Empowered by the Bangladesh Merchant Shipping Ordinance, 1983 (XXVI of 1983) and under the provisions  
অনুমোদিত ইঞ্জিনিয়ার অফিসার, বিবিএন, ১৯৯০ এর বিধান অনুযায়ী এই সার্টিফিকেট প্রদান করা  
of Merchant Shipping (Certification of Marine Engineer Officers) Rules, 1990, this certificate is granted

কে যিনি ----- তারিখে উপস্থিত পরীক্ষার ----- তারিখে উপস্থিত পরীক্ষার  
to Mr. ----- who, upon passing an examination on ----- at ----- has been found  
করিয়াছেন, প্রযোজ্যত অনুসারে সমুদ্রপানী যোজ্ঞ ও স্টীম জাহাজে ইঞ্জিনিয়ারের গণে দায়িত্ব পালনের জন্য এই সার্টিফিকেট প্রদান করা  
duly qualified to perform the duties of an Engineer Officer on a Motorship & Steamship in a capacity this  
হইবে। অধিকার ব্যতীত এই গ্রে, টাকের জাহাজে দায়িত্ব পালনের জন্য অথবা সার্টিফিকেটে প্রয়োজনীয় এনডোর্সমেন্ট গ্রহণ করিতে হইবে,  
certificate of Class applies, except that the holder must also obtain an appropriate endorsement for Service  
এক ইন্টারন্যাশনাল স্ট্যান্ডার্ডস অব ট্রেনিং, সার্টিফিকেট প্রদান করা হয় সী-স্টোয়ারার, ১৯৭৮ এর অনুচ্ছেদ- ৬ এবং  
on tanker required in respect of that ship, and with limitation, if any, as stated in the attached endorsement  
বিধান 1/2 অনুসারে এনডোর্সমেন্ট সন্তু এনডোর্সমেন্টে উল্লিখিত সীমাবদ্ধতা, যদি কিছু থাকে, প্রযোজ্য হইবে।

under Article VI & regulation 1/2 of International Convention on Standards of Training, Certification and  
Watchkeeping for Seafarers, 1978.

তারিখ ----- day of -----  
Dated this ----- day of -----  
মহা পরিচালক  
Chief Examiner of Engineers

ডিরেক্টর জেনারেল  
সমুদ্র পরিবহন অধিদপ্তর  
Department of Shipping

সার্টিফিকেটধারীর তথ্যাবলী  
Particulars of holder

অতিরিক্ত যোগ্যতা

Additional Qualification

নাম .....  
 Name .....  
 পিতার নাম .....  
 Father's name .....  
 জন্ম তারিখ ও স্থান .....  
 Date and Place of birth .....  
 সনাক্তকারী চিহ্ন .....  
 Identification marks .....  
 সিদ্ধি, সি. নং ..... প্রদানের স্থান ..... তারিখ .....  
 Discharge Book No ..... Issued at ..... on .....  
 স্বাক্ষর .....  
 Signature of holder .....  
 সার্টিফিকেট প্রদানের স্থান ..... তারিখ .....  
 Certificate delivered at ..... on .....

সীলবন্ধ  
ফটো

Seal & Photograph

সার্টিফিকেট প্রদানকারী অফিসারের স্বাক্ষর  
Signature of Officer Delivering the Certificate

বাংলাদেশ পোস্টে নিম্নলিখিত অধ্যাদেশ, ১৯৮৩ এর প্রতি দৃষ্টি আকর্ষণ পূর্বক সতর্ক করা যাইতেছে যে, এই সার্টিফিকেট কোন প্রত্যক্ষনীয় উদ্দেশ্যে ব্যবহার এবং ইহাকে জাল করা অথবা পরিবর্তন করা আইনভঙ্গ; দণ্ডনীয় অপরাধ।  
 Attention is drawn to the provisions of the Bangladesh Merchant Shipping Ordinance, 1983 whereby the fraudulent use and forgery, or alteration of this document could constitute a criminal offence.

নোট : যারানো অবস্থায় কেই এই ডকুমেন্টেশন পাইকারি থাকিলে তাহা যত্ন-পরিকল্পিত সমুদ্র পরিবহন অধিদপ্তর, ঢাকা এই ডিপার্টমেন্টের ডাক টিকিট বিধীন এনভোলাপে পাঠাইতে অনুমোদিত করা গেল। ডাক মাস্তুল প্রাপ্ত পরিবেশ করিবেন।  
 Note : Any Person finding this document must send it to the Director General, Department of Shipping, Dhaka in an unstamped envelope. Postage will be paid by the addressee.



INTERNATIONAL CONVENTION OF STANDARDS OF TRAINING, CERTIFICATION & WATCH-KEEPING FOR SEAFARERS, 1978.

CONTINUED PROFICIENCY AND UP-DATING OF KNOWLEDGE FOR SEAFARERS, 1978

This Certificate of Competency remains valid for sea-going service for 5 years from the date of its issue. There after, the Certificate will only remain valid for sea-going service in the highest rank appropriate to it for 5 years from the date on which it is confirmed below or over-leaf that the holder has satisfied specified requirements for the continued proficiency and updating of knowledge for certificated engineer officers.  
However, the Certificate always remains valid for sea-going service in ranks below the highest appropriate to it.

CONTINUED PROFICIENCY AND UP-DATING KNOWLEDGE

The holder of this Certificate met the requirements of Regulation III/5 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 on \_\_\_\_\_

ENDORSEMENT OF CERTIFICATE  
Issued under the provisions of the  
INTERNATIONAL CONVENTION ON STANDARDS OF  
TRAINING, CERTIFICATION & WATCHKEEPING  
FOR SEAFARERS, 1978

(Monogram)

Government of the People's  
Republic of Bangladesh

I. the undersigned certify that the present Certificate  
No. \_\_\_\_\_ is issued to \_\_\_\_\_  
who has been found duly qualified in accordance  
with the provisions of Regulations \_\_\_\_\_  
of the above Convention for the capacities shown  
below within the limitations specified.

Capacity

Limitations

CHIEF ENGINEER OFFICER

SECOND ENGINEER OFFICER

WATCHKEEPING ENGINEER  
OFFICER

Date of issue of this Endorsement

Official Seal

Director General  
Department of Shipping

Date of birth of the holder of the Certificate \_\_\_\_\_

Signature of the holder of the Certificate \_\_\_\_\_

উপযুক্ত সার্টিফিকেট (মেরিন ইঞ্জিনিয়ার অফিসার)  
CERTIFICATE OF COMPETENCY (MARINE ENGINEER OFFICER)

প্রথম শ্রেণী  
CLASS - 1  
স্টার জাহাজ  
MOTORSHIP

নং-----  
No -----

বাংলাদেশ মার্চেন্ট শিপিং অধ্যাদেশ, ১৯৮০ (XXXVI of 1983) দ্বারা অর্পিত ক্ষমতাবলে এবং বাংলাদেশ মার্চেন্ট শিপিং সার্টিফিকেট  
Empowered by the Bangladesh Merchant Shipping Ordinance, 1983 (XXXVI of 1983) and under the provisions  
অধিদপ্তর (মেরিন ইঞ্জিনিয়ার অফিসার), বিধিমালা, ১৯৮০ এর বিধান অনুযায়ী এই সার্টিফিকেট জারি করা হবে।  
of Merchant Shipping (Certification of Marine Engineer Officers) Rules, 1990, this certificate is granted

to Mr. ----- who, upon passing an examination on ----- at ----- has been found  
কর্মসম্পাদন, প্রযোজ্যত অনুসারে সমুদ্রগামী মোটর জাহাজে ইঞ্জিনিয়ারের পদে দায়িত্ব পালনের জন্য এই সার্টিফিকেট প্রদান করা  
duly qualified to perform the duties of an Engineer Officer on a Merchant Motorship in a capacity this  
হইবে। অধিকৃত ব্যতিক্রম এই যে, চাকরির জাহাজে দায়িত্ব পালনের জন্য অত্র সার্টিফিকেটে প্রয়োজনীয় এনডোর্সমেন্ট গ্রহণ করিতে হইবে,  
certificate of Class applies, except that the holder must also obtain an appropriate endorsement for Service  
এক ইন্টারন্যাশনাল কনভেনশন অব স্ট্যান্ডার্ডস অব ট্রেনিং, সার্টিফিকেট অব ওয়াচকিপার মর সী-ফারারস, ১৯৭৮ এর অধিক্ষেপ- ৬ এবং  
on tanker required in respect of that ship, and with limitation. If any, as stated in the attached endorsement  
বিধিমালা 1/2 অনুসারে এতদসঙ্গে সমুদ্র এনডোর্সমেন্টে উল্লিখিত সীমাবদ্ধতা, যদি কিছু থাকে, প্রযোজ্য হইবে।  
under Article VI & regulation 1/2 of International Convention on Standards of Training, Certification and  
Watchkeeping for Seafarers, 1978.

তারিখ-----  
Dated this ----- day of -----

মহা পরিচালক  
Director General

সমুদ্র পরিবহন অধিদপ্তর  
Department of Shipping

প্রধান ইঞ্জিনিয়ার পল্লীকর  
Chief Examiner of Engineers

অতিরিক্ত যোগ্যতা  
Additional Qualification

সার্টিফিকেটধারীর উদ্ভাবনী  
Particulars of holder

নাম-----  
Name .....

পিতার নাম-----  
Father's name .....

জন্ম তারিখ ও স্থান-----  
Date and Place of birth .....

সনাক্তকারী চিহ্ন-----  
Identification marks .....

সি.ডি. সি. নং----- প্রদানের স্থান----- তারিখ-----  
Discharge Book No ..... Issued at ..... on .....

স্বাক্ষর-----  
Signature of holder-----

সার্টিফিকেট প্রদানের স্থান----- তারিখ-----  
Certificate delivered at ..... on .....

সীলমোহর  
ফটো  
Seal & Photograph

সার্টিফিকেট প্রদানকারী অফিসারের স্বাক্ষর  
Signature of Officer Delivering the Certificate

বাংলাদেশ মার্চেন্ট শিপিং অধ্যাদেশ, ১৯৮৩ এর প্রতি দৃষ্টি আকর্ষণ পূর্বক সতর্ক করা যাইতেছে যে, এই সার্টিফিকেট কোন প্রত্যাহারের উদ্দেশ্যে ব্যবহার এবং ইহাকে জাল করা অথবা পরিবর্তন করা আইনতঃ দণ্ডনীয় অপরাধ।  
Attention is drawn to the provisions of the Bangladesh Merchant Shipping Ordinance, 1983 whereby the fraudulent use and forgery, or alteration of this document could constitute a criminal offence.

নোট : যারানো অবস্থায় কেহ এই ডকুমেন্টখানা পাইয়া থাকিলে তাহা মহা-পরিচালক সমূহ পরিবহন অধিদপ্তর, ঢাকা এই টিকনায় ডাক টিকিট বিহীন এনভোলাপে পাঠাইতে অনুমোদন করা যেন। ডাক মাতল গ্রাপক পরিদোশ করিলেন।  
Note : Any Person finding this document must send it to the Director General, Department of Shipping, Dhaka in an unstamped envelope. Postage will be paid by the addressee.

INTERNATIONAL CONVENTION OF STANDARDS OF TRAINING, CERTIFICATION & WATCH-KEEPING FOR SEAFARERS, 1978.

CONTINUED PROFICIENCY AND UP-DATING OF KNOWLEDGE FOR SEAFARERS, 1978

This Certificate of Competency remains valid for sea-going service for 5 years from the date of its issue. There after, the Certificate will only remain valid for sea-going service in the highest rank appropriate to it for 5 years from the date on which it is confirmed below or over-leaf that the holder has satisfied specified requirements for the continued proficiency and updating of knowledge for certificated engineer officers.  
However, the Certificate always remains valid for sea-going service in ranks below the highest appropriate to it.

CONTINUED PROFICIENCY AND UP-DATING KNOWLEDGE

The holder of this Certificate met the requirements of Regulation III/5 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 on \_\_\_\_\_

ENDORSEMENT OF CERTIFICATE  
Issued under the provisions of the  
INTERNATIONAL CONVENTION ON STANDARDS OF  
TRAINING, CERTIFICATION & WATCHKEEPING  
FOR SEAFARERS, 1978

(Monogram) Government of the People's  
Republic of Bangladesh

I, the undersigned certify that the present Certificate  
No. .... is issued to .....  
who has been found duly qualified in accordance  
with the provisions of Regulations .....  
of the above Convention for the capacities shown  
below within the limitations specified.

Capacity

CHIEF ENGINEER OFFICER

SECOND ENGINEER OFFICER

WATCHKEEPING ENGINEER  
OFFICER

Date of issue of this Endorsement

Official Seal

Director General  
Department of Shipping

Date of birth of the holder of the Certificate \_\_\_\_\_  
Signature of the holder of the Certificate \_\_\_\_\_

Limitations

ইউসি - ১০  
EOEC - 13

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার  
Government of the People's Republic of Bangladesh

সৌ-পরিবহন মন্ত্রণালয়  
Ministry of Shipping

সমুদ্র পরিবহন অধিদপ্তর  
Department of Shipping

উপযুক্ত সার্টিফিকেট (সেরিন ইঞ্জিনিয়ার অফিসার)  
CERTIFICATE OF COMPETENCY (MARINE ENGINEER OFFICER)

শ্রেণি  
CLASS - 1  
শ্রীম জাহাজ  
STEAMSHIP

নং-----  
No -----

বাংলাদেশ মার্চেন্ট শিপিং অ্যাক্ট, ১৯৮৬ (XXVI of 1983) যারা অধিত ক্ষমতাবলে এক বাংলাদেশ মার্চেন্ট শিপিং সার্টিফিকেট  
Empowered by the Bangladesh Merchant Shipping Ordinance, 1983 (XXVI of 1983) and under the provisions  
অনুযায়ী ইঞ্জিনিয়ার অফিসার, বিধিমালা, ১৯৯০ এর বিধান অনুযায়ী এই সার্টিফিকেট জন্মাব-----  
of Merchant Shipping (Certification of Marine Engineer Officers) Rules, 1990, this certificate is granted  
সে, যিনি----- অনুষ্ঠিত পরীক্ষার----- তারিখে সেরা পূর্বইমারোযোগ্যতাপ্রমাণ

to Mr.----- who, upon passing an examination on----- at----- has been found  
করিয়ানবলে, প্রযোজ্যতা অনুসারে সমুদ্রপারী শ্রীম জাহাজে ইঞ্জিনিয়ারের পদে দায়িত্ব পালনের জন্য এই সার্টিফিকেট প্রদান করা  
duly qualified to perform the duties of an Engineer Officer on a Merchant Steamship in a capacity this  
হইল। শুধুমাত্র যুক্তিযুক্ত এই যে, ট্যাক্সার জাহাজে দায়িত্ব পালনের জন্য এই সার্টিফিকেটে প্রযোজনীয় এনডোর্সমেন্ট গ্রহণ করিতে হইবে,  
এক ইন্টারন্যাশনাল কনভেনশন জন ট্রাডার্স জব ট্রেনিং, সার্টিফিকেট প্রদানের ক্ষেত্রে, সার্টিফিকেট প্রদানের ক্ষেত্রে, ১৯৭৮ এর অনুচ্ছেদ-৬ এবং  
on tanker required in respect of that ship, and with limitation, if any, as stated in the attached endorsement  
under Article VI & regulation 1/2 of International Convention on Standards of Training, Certification and  
Watchkeeping for Seafarers, 1978.

প্রধান ইঞ্জিনিয়ার পরীক্ষক  
Chief Examiner of Engineers

তারিখ-----  
Dated this \_\_\_\_\_ day of \_\_\_\_\_

সমুদ্র পরিবহন অধিদপ্তর  
Director General  
Department of Shipping

অতিরিক্ত যোগ্যতা  
Additional Qualification

সার্টিফিকেটধারীর তথ্যাবলী  
Particulars of holder

নাম-----  
Name.....  
পিতার নাম-----  
Father's name.....  
জন্ম তারিখ ও স্থান-----  
Date and Place of birth.....  
সনাক্তকারী চিহ্ন-----  
Identification marks.....  
শিডি, সি নং-----প্রদানের স্থান-----তারিখ-----  
Discharge Book No..... Issued at..... on.....  
স্বাক্ষর-----  
Signature of holder-----  
সার্টিফিকেট প্রদানের স্থান-----তারিখ-----  
Certificate delivered at..... on.....

সীলমোহর  
কটো  
Seal & Photograph

সার্টিফিকেট প্রদানকারী অফিসারের স্বাক্ষর  
Signature of Officer Delivering the Certificate

বাংলাদেশ মার্চেন্ট শিপিং অধ্যাদেশ, ১৯৮৩ এর শর্তি দ্বারা আকর্ষণ পূর্বক সতর্ক করা যাইতেছে যে, এই সার্টিফিকেট কোন প্রত্যক্ষনীয় উদ্দেশ্যে ব্যবহার এবং ইত্যাকে জাল করা অথবা পরিবর্তন করা আইনতঃ দণ্ডনীয় অপরাধ।  
Attention is drawn to the provisions of the Bangladesh Merchant Shipping Ordinance, 1983 whereby the fraudulent use and forgery, or alteration of this document could constitute a criminal offence.

স্মৃতি : যারালো অবস্থায় কেহ এই ডকুমেন্টখানা পাইয়া থাকিলে তাহা মফা-পরিচালক সমূহ পরিবহন অফিসর, ঢাকা এই  
ঠিকানার ডাক টিকিট বিহীন এনভেলোপে পাঠাইতে অনুপ্রোধ করা গেল। ডাক মাতুল গ্রাপক পরিশোধ করিবেন।  
Note : Any Person finding this document must send it to the Director General,  
Department of Shipping, Dhaka in an unstamped envelope. Postage will  
be paid by the addressee.

INTERNATIONAL CONVENTION OF STANDARDS OF TRAINING, CERTIFICATION & WATCH-KEEPING FOR SEAFARERS, 1978.

CONTINUED PROFICIENCY AND UP-DATING OF KNOWLEDGE FOR SEAFARERS, 1978

This Certificate of Competency remains valid for sea-going service for 5 years from the date of its issue. There after, the Certificate will only remain valid for sea-going service in the highest rank appropriate to it for 5 years from the date on which it is confirmed below or over-leaf that the holder has satisfied specified requirements for the continued proficiency and updating of knowledge for certificated engineer officers. However, the Certificate always remains valid for sea-going service in ranks below the highest appropriate to it.

CONTINUED PROFICIENCY AND UP-DATING KNOWLEDGE

The holder of this Certificate met the requirements of Regulation.III/5 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 on \_\_\_\_\_

ENDORSEMENT OF CERTIFICATE  
Issued under the provisions of the INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION & WATCHKEEPING FOR SEAFARERS, 1978

(Monogram)

Government of the People's Republic of Bangladesh

I, the undersigned certify that the present Certificate No. \_\_\_\_\_ is issued to \_\_\_\_\_ who has been found duly qualified in accordance with the provisions of Regulations \_\_\_\_\_ of the above Convention for the capacities shown below within the limitations specified.

Capacity

Limitations

CHIEF ENGINEER OFFICER

SECOND ENGINEER OFFICER

WATCHKEEPING ENGINEER OFFICER

Date of issue of this Endorsement

Official Seal

Director General  
Department of Shipping.

Date of birth of the holder of the Certificate \_\_\_\_\_  
Signature of the holder of the Certificate \_\_\_\_\_

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার  
Government of the People's Republic of Bangladesh

(মনোগ্রাম)  
(Monogram)

নৌ-পরিবহন মন্ত্রণালয়  
Ministry of Shipping

সমুদ্র পরিবহন অধিদপ্তর  
Department of Shipping

উপমুক্ততা সার্টিফিকেট (সেরিন ইঞ্জিনিয়ার অফিসার)  
CERTIFICATE OF COMPETENCY (MARINE ENGINEER OFFICER)

ক্লাস-২ সম্মিলিত

CLASS - 2 COMBINED

যটন জাহাজ ও ট্রাম জাহাজ

MOTORSHIP & STEAMSHIP

নং-----  
No -----

বাংলাদেশ মার্কেন্ট শিপিং অধ্যাদেশ, ১৯৮০ (XXVI of 1983) দ্বারা অধিত স্বতন্ত্রে এক বাংলাদেশ মার্কেন্ট শিপিং (সার্টিফিকেশন  
Empowered by the Bangladesh Merchant Shipping Ordinance, 1983 (XXVI of 1983) and under the provisions  
অবধারিত ইঞ্জিনিয়ার অফিসার), বিধিমালা, ১৯৯০ এর বিধান অনুযায়ী এই সার্টিফিকেট প্রদান  
of Merchant Shipping (Certification of Marine Engineer Officers) Rules, 1990, this certificate is granted  
কে, যিনি----- জরুরি পরীক্ষার-----

to Mr. .... who, upon passing an examination on ..... at ..... has been found  
করিতেছেন, প্রযোজ্য অনুসারে সূত্রগামী যেহেতু জাহাজ ও ট্রাম জাহাজে ইঞ্জিনিয়ারের পদে দায়িত্ব পালনের জন্য এই সার্টিফিকেট প্রদান করা  
duly qualified to perform the duties of an Engineer Officer on a Merchant Motorship & Steamship in a capacity this  
হইল। অতীত ব্যতিক্রম এই যে, ঢাকার জাহাজে দায়িত্ব পালনের জন্য অত্র সার্টিফিকেটে প্রযোজ্য অন্তর্ভুক্ত প্রমাণপত্র হইবে,  
Certificate of Class applies, except that the holder must also obtain an appropriate endorsement for Service  
এক ইন্টারমিডিয়েট সার্টিফিকেশন অন ইন্টারন্যাশনাল স্ট্যান্ডার্ডস অব ট্রেনিং, সার্টিফিকেশন এন্ড সার্ভিসিং ফর শী-ফেয়ারারস, ১৯৭৮-এর অনুচ্ছেদ- ৬ এবং  
on tanker required in respect of that ship, and with limitation, if any, as stated in the attached endorsement  
বিধান 1/2 অনুসারে এতদনুসারে সর্বত্র এনডোর্সমেন্টে উল্লিখিত সীমাবদ্ধতা, যদি কিছু থাকে, প্রযোজ্য হইবে।  
under Article VI & regulation 1/2 of International Convention on Standards of Training, Certification and  
Watchkeeping for Seafarers, 1978.

প্রধান ইঞ্জিনিয়ার পরীক্ষক

Chief Examiner of Engineers

তারিখ-----  
Dated this \_\_\_\_\_ day of \_\_\_\_\_

মহা পরিচালক

Director General

সমুদ্র পরিবহন অধিদপ্তর

Department of Shipping



সার্টিফিকেটকারীর তথ্যাবলী  
Particulars of holder

অতিরিক্ত যোগ্যতা

Additional Qualification

নাম-----  
 Name .....  
 পিতার নাম-----  
 Father's name .....  
 জন্ম তারিখ ও স্থান-----  
 Date and Place of birth .....  
 সনাক্তকারী চিহ্ন-----  
 Identification marks .....  
 সিডি, সি নং----- প্রদানের স্থান----- তারিখ-----  
 Discharge Book No ..... Issued at ..... on .....  
 স্বাক্ষর .....  
 Signature of holder-----  
 সার্টিফিকেট প্রদানের স্থান----- তারিখ-----  
 Certificate delivered at ..... on .....

সীল মোহর  
ফটো

Seal & Photograph

সার্টিফিকেট প্রদানকারী অফিসারের স্বাক্ষর  
Signature of Officer Delivering the Certificate

বাংলাদেশ মার্চেন্ট শিপিং অধ্যাদেশ, ১৯৮৩ এর প্রতি দৃষ্টি আকর্ষণ পূর্বক সতর্ক করা যাইতেছে যে, এই সার্টিফিকেট কোন প্রত্যয়নার উদ্দেশ্যে ব্যবহার এবং ইহাকে ছাপা করা অথবা পরিবর্তন করা আইনতঃ দণ্ডনীয় অপরাধ।  
 Attention is drawn to the provisions of the Bangladesh Merchant Shipping Ordinance, 1983 whereby the fraudulent use and forgery, or alteration of this document could constitute a criminal offence.

নোট : যারনামে অবস্থান কেই এই ডকুমেন্টখানা পাইয়া থাকিলে তাহা মহা-পরিচালক সন্মুখ পরিবেশন অধিদপ্তর, ঢাকা এই ঠিকানায় ডাক চিকিট বিহীন এনভেলোপে পাঠাইতে অনুরোধ করা গেল। ডাক মাতল প্রাপক পরিবেশন করিবেন।  
 Note : Any Person finding this document must send it to the Director General, Department of Shipping, Dhaka in an unstamped envelope. Postage will be paid by the addressee.

INTERNATIONAL CONVENTION OF STANDARDS OF TRAINING, CERTIFICATION & WATCH-KEEPING FOR SEAFARERS, 1978.

CONTINUED PROFICIENCY AND UP-DATING OF KNOWLEDGE FOR SEAFARERS, 1978

This Certificate of Competency remains valid for sea-going service for 5 years from the date of its issue. There after, the Certificate will only remain valid for sea-going service in the highest rank appropriate to it for 5 years from the date on which it is confirmed below or over-leaf that the holder has satisfied specified requirements for the continued proficiency and updating of knowledge for certificated engineer officers.  
However, the Certificate always remains valid for sea-going service in ranks below the highest appropriate to it.

CONTINUED PROFICIENCY AND UP-DATING KNOWLEDGE

The holder of this Certificate met the requirements of Regulation III/5 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 on \_\_\_\_\_

ENDORSEMENT OF CERTIFICATE Issued under the provisions of the INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION & WATCHKEEPING FOR SEAFARERS, 1978

(Monogram)

Government of the People's Republic of Bangladesh

I, the undersigned certify that the present Certificate No. \_\_\_\_\_ is issued to \_\_\_\_\_ who has been found duly qualified in accordance with the provisions of Regulations \_\_\_\_\_ of the above Convention for the capacities shown below within the limitations specified.

Capacity

Limitations

CHIEF ENGINEER OFFICER

SECOND ENGINEER OFFICER

WATCHKEEPING ENGINEER OFFICER

Date of issue of this Endorsement

Official Seal

Director General  
Department of Shipping.

Date of birth of the holder of the Certificate \_\_\_\_\_  
Signature of the holder of the Certificate \_\_\_\_\_

(মনোগ্রাম)  
(Monogram)

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার  
Government of the People's Republic of Bangladesh

নৌ-পরিবহন মন্ত্রণালয়  
Ministry of Shipping

সমুদ্র পরিবহন অধিদপ্তর  
Department of Shipping

উপযুক্ততার সার্টিফিকেট (মেরিন ইঞ্জিনিয়ার অফিসার)  
CERTIFICATE OF COMPETENCY (MARINE ENGINEER OFFICER)

২য় শ্রেণী

CLASS -2

মটর জাহাজ

MOTORSHIP

নং-----  
No -----

বাংলাদেশ মার্চেন্ট শিপিং অধ্যাদেশ, ১৯৮৩ (XXXVI of 1983) দ্বারা অর্জিত ক্ষমতাবলে এবং বাংলাদেশ মার্চেন্ট শিপিং (সার্টিফিকেশন  
Empowered by the Bangladesh Merchant Shipping Ordinance, 1983 (XXXVI of 1983) and under the provisions  
অবশ্যে মেরিন ইঞ্জিনিয়ার অফিসার), বিধিমালা, ১৯৯০ এর বিধান অনুযায়ী এই সার্টিফিকেট জ্ঞানব-----  
of Merchant Shipping (Certification of Marine Engineer Officers) Rules, 1990, this certificate is granted  
কে, যিনি----- অনুষ্ঠিত পরীক্ষায়-----

to Mr. .... who, upon passing an examination on ----- at ----- has been found  
করিয়াছেন, প্রযোজ্য অনুসারে সমুদ্রগামী মোটর জাহাজে ইঞ্জিনিয়ারের পদে দায়িত্ব পালনের জন্য এই সার্টিফিকেট প্রদান করা  
duly qualified to perform the duties of an Engineer Officer on a Merchant Motorship in a capacity this  
হইল। শুধুমাত্র ব্যতিক্রম এই যে, ট্যাকোর ছাহাজে দায়িত্ব পালনের জন্য অত্র সার্টিফিকেটে প্রয়োজনীয় এনডোর্সমেন্টে গ্রহণ করিতে হইবে,  
certificate of Class applies, except that the holder must also obtain an appropriate endorsement for Service  
এবং ইন্টারন্যাশনাল কনভেনশন অন ট্যাংকার অফ ট্রেডিং, সার্টিফিকেশন এন্ড ওয়ার্কিং ফর শী-সেমারারস, ১৯৭৮ এর অনুচ্ছেদ-৬ এবং  
on tanker required in respect of that ship, and with limitation, if any, as stated in the attached endorsement  
প্রবিধান 1/2 অনুসারে এডমসনে সফ্টওয়্যার এনডোর্সমেন্টে উল্লিখিত সীমাবদ্ধতা, যদি কিছু থাকে, প্রযোজ্য হইবে।

under Article VI & regulation 1/2 of International Convention on Standards of Training, Certification and  
Watchkeeping for Seafarers, 1978.

তারিখ-----

Dated this \_\_\_\_\_ day of \_\_\_\_\_

সহ পরিচালক

Director General

সমুদ্র পরিবহন অধিদপ্তর

Department of Shipping

প্রধান ইঞ্জিনিয়ার পরীক্ষক  
Chief Examiner of Engineers

সার্টিফিকেটধারীর তথ্যাবলী  
Particulars of holder

অতিরিক্ত যোগ্যতা

Additional Qualification

নাম-----  
Name .....  
পিতার নাম-----  
Father's name .....  
জন্ম তারিখ ও স্থান-----  
Date and Place of birth .....  
সনাক্তকারী চিহ্ন-----  
Identification marks .....  
সিডি, সি নং----- প্রদানের স্থান----- তারিখ-----  
Discharge Book No ..... Issued at ..... on .....  
স্বাক্ষর-----  
Signature of holder-----  
সার্টিফিকেট প্রদানের স্থান----- তারিখ-----  
Certificate delivered at ..... on .....

সীল মোহর  
ফটো

Seal & Photograph

সার্টিফিকেট প্রদানকারী অফিসারের স্বাক্ষর  
Signature of Officer Delivering the Certificate

বাংলাদেশ মার্চেন্ট শিপিং অধ্যাদেশ, ১৯৮৩ এর প্রতি দৃষ্টি আকর্ষণ পূর্বক সতর্ক করা যাইতেছে যে, এই সার্টিফিকেট কোন প্রতারনার উদ্দেশ্যে ব্যবহার এবং ইহাকে ছাল করা অথবা পরিবর্তন করা আইনতঃ দণ্ডনীয় অপরাধ।  
Attention is drawn to the provisions of the Bangladesh Merchant Shipping Ordinance, 1983 whereby the fraudulent use and forgery, or alteration of this document could constitute a criminal offence.

নোট : হারানো অবস্থায় কেবল এই ডকুমেন্টখানা পাইয়া থাকিলে তাহা মহা-পরিচালক সমুদ্র পরিবহন অধিদপ্তর, ঢাকা এই ঠিকানায় ডাক টিকিট বিহীন এনভেলোপে পাঠাইতে অনুমোদিত করা যেন। ডাক মাতল প্রাপক পরিদোষ করিবেন।  
Note : Any Person finding this document must send it to the Director General, Department of Shipping, Dhaka in an unstamped envelope. Postage will be paid by the addressee.

INTERNATIONAL CONVENTION OF STANDARDS OF TRAINING, CERTIFICATION & WATCH-KEEPING FOR SEAFARERS, 1978.

CONTINUED PROFICIENCY AND UP-DATING OF KNOWLEDGE FOR SEAFARERS, 1978

This Certificate of Competency remains valid for sea-going service for 5 years from the date of its issue. There after, the Certificate will only remain valid for sea-going service in the highest rank appropriate to it for 5 years from the date on which it is confirmed below or over-leaf that the holder has satisfied specified requirements for the continued proficiency and updating of knowledge for certificated engineer officers.  
However, the Certificate always remains valid for sea-going service in ranks below the highest appropriate to it.

CONTINUED PROFICIENCY AND UP-DATING KNOWLEDGE

The holder of this Certificate met the requirements of Regulation III/5 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 on \_\_\_\_\_

ENDORSEMENT OF CERTIFICATE  
Issued under the provisions of the INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION & WATCHKEEPING FOR SEAFARERS, 1978

(Monogram)

Government of the People's Republic of Bangladesh

I, the undersigned certify that the present Certificate No. \_\_\_\_\_ is issued to \_\_\_\_\_ who has been found duly qualified in accordance with the provisions of Regulations \_\_\_\_\_ of the above Convention for the capacities shown below within the limitations specified.

Capacity

Limitations

CHIEF ENGINEER OFFICER

SECOND ENGINEER OFFICER

WATCHKEEPING ENGINEER OFFICER

Date of issue of this Endorsement

Official Seal

Director General  
Department of Shipping.

Date of birth of the holder of the Certificate \_\_\_\_\_

Signature of the holder of the Certificate \_\_\_\_\_

(মনোগ্রাম)  
(Monogram)

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার  
Government of the People's Republic of Bangladesh

নৌ-পরিবহন মন্ত্রণালয়  
Ministry of Shipping

সমুদ্র পরিবহন অধিদপ্তর  
Department of Shipping

উপযুক্ততা সার্টিফিকেট (মেরিন ইঞ্জিনিয়ার অফিসার)  
CERTIFICATE OF COMPETENCY (MARINE ENGINEER OFFICER)

২য় শ্রেণী  
CLASS - 2  
ষ্টীম জাহাজ  
STEAMSHIP

নং-----  
No -----

বাংলাদেশ মার্চেন্ট শিপিং অধ্যাদেশ, ১৯৮০ (XXVI of 1983) দ্বারা জারিত করা হইতেছে এবং বাংলাদেশ মার্চেন্ট শিপিং সার্টিফিকেশন  
Empowered by the Bangladesh Merchant Shipping Ordinance, 1983 (XXVI of 1983) and under the provisions  
অনুমোদিত ইঞ্জিনিয়ার অফিসার), বিধিমালা, ১৯৮০ এর বিধান অনুযায়ী এই সার্টিফিকেট জ্ঞানাব-  
of Merchant Shipping (Certification of Marine Engineer Officers) Rules, 1990, this certificate is granted  
কে, যিনি-----

to Mr. .... who, upon passing an examination on ----- at ----- has been found  
করিয়াছেন, যথেষ্টভা অঙ্গুরে সন্তোষানী ষ্টীম জাহাজে ইঞ্জিনিয়ারের পদে দায়িত্ব পালনের জন্য এই সার্টিফিকেট প্রদান করা  
duly qualified to perform the duties of an Engineer Officer on a Merchant Steamship in a capacity this  
হইল। অধুনা যান্ত্রিক্য এই যে, জাহাজের জাহাজে দায়িত্ব পালনের জন্য অন্য সার্টিফিকেটে যথেষ্টভা অঙ্গুরে প্রদান করা হইবে,  
certificate of Class applies, except that the holder must also obtain an appropriate endorsement for Service  
এক ইন্টারমিডিয়েট সনাক্তকরণ অন ট্যাভেল অব ট্রেনিং, সার্টিফিকেশন এন্ড রেজিস্ট্রেশন ফর স্টী-ফেমারারস, ১৯৭৮ এর অনুচ্ছেদ- ৬ এবং  
on tanker required in respect of that ship, and with limitation, if any, as stated in the attached endorsement  
প্রবিধান 1/২ অনুসারে এতদপক্ষে সন্তুষ্ক এনডোর্সমেন্টে উল্লিখিত সীমাবদ্ধতা, যদি কিছু থাকে, প্রযোজ্য হইবে।  
under Article VI & regulation 1/2 of International Convention on Standards of Training, Certification and  
Watchkeeping for Seafarers, 1978.

তারিখ-----

Dated this \_\_\_\_\_ day of \_\_\_\_\_

মহা পরিচালক  
Director General  
সমুদ্র পরিবহন অধিদপ্তর  
Department of Shipping

প্রধান ইঞ্জিনিয়ার পরীক্ষক  
Chief Examiner of Engineers

অতিরিক্ত কোণ্ডা

Additional Qualification

সার্টিফিকেটধারীর তথ্যাবলী  
Particulars of holder

নাম-----  
 Name-----  
 পিতার নাম-----  
 Father's name-----  
 জন্ম তারিখ ও স্থান-----  
 Date and Place of birth-----  
 সনাক্তকারী চিহ্ন-----  
 Identification marks-----  
 সিডি, সি নং----- প্রদানের স্থান----- তারিখ-----  
 Discharge Book No.----- Issued at----- on-----  
 স্বাক্ষর-----  
 Signature of holder-----  
 সার্টিফিকেট প্রদানের স্থান----- তারিখ-----  
 Certificate delivered at----- on-----

সীল মোহর  
মুদ্রা

Seal &amp; Photograph

সার্টিফিকেট প্রদানকারী অফিসারের স্বাক্ষর  
Signature of Officer Delivering the Certificate

বাংলাদেশ মার্চেন্ট শিপিং অধ্যাদেশ, ১৯৮৩ এর প্রতি দৃষ্টি আকর্ষণ পূর্বক সতর্ক করা যাইতেছে যে, এই সার্টিফিকেট কোন প্রভাৱনার উদ্দেশ্যে ব্যবহার এবং ইহাকে জাল করা অথবা পরিবর্তন করা আইনভাৱে দণ্ডনীয় অপরাধ।  
 Attention is drawn to the provisions of the Bangladesh Merchant Shipping Ordinance, 1983 whereby the fraudulent use and forgery, or alteration of this document could constitute a criminal offence.

**নোট :** যারানো অবস্থার ক্ষেত্রে এই ডকুমেন্টখানা পাইয়া থাকিলে তাল্য মহা-পরিচালক সমুদ্র পরিবহন অধিদপ্তর, ঢাকা এই ডিপার্টমেন্টের ডাক চিকিৎসা বিভাগে পঠাইতে অনুপ্রোধ করা গেল। ডাক মাতল প্রাপ্ত পরিপোষ করিবেন।  
**Note :** Any Person finding this document must send it to the Director General, Department of Shipping, Dhaka in an unstamped envelope. Postage will be paid by the addressee.

INTERNATIONAL CONVENTION OF STANDARDS OF TRAINING, CERTIFICATION & WATCH-KEEPING FOR SEAFARERS, 1978

CONTINUED PROFICIENCY AND UP-DATING OF KNOWLEDGE FOR SEAFARERS, 1978

This Certificate of Competency remains valid for sea-going service for 5 years from the date of its issue. There after, the Certificate will only remain valid for sea-going service in the highest rank appropriate to it for 5 years from the date on which it is confirmed below or over-leaf that the holder has satisfied specified requirements for the continued proficiency and updating of knowledge for certificated engineer officers. However, the Certificate always remains valid for sea-going service in ranks below the highest appropriate to it.

CONTINUED PROFICIENCY AND UP-DATING KNOWLEDGE

The holder of this Certificate met the requirements of Regulation III/5 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 on \_\_\_\_\_

ENDORSEMENT OF CERTIFICATE  
Issued under the provisions of the  
INTERNATIONAL CONVENTION ON STANDARDS OF  
TRAINING, CERTIFICATION & WATCHKEEPING  
FOR SEAFARERS, 1978

(Monogram) Government of the People's  
Republic of Bangladesh

I, the undersigned certify that the present Certificate  
No. \_\_\_\_\_ is issued to \_\_\_\_\_  
who has been found duly qualified in accordance  
with the provisions of Regulations \_\_\_\_\_  
of the above Convention for the capacities shown  
below within the limitations specified.

Capacity Limitations

CHIEF ENGINEER OFFICER

SECOND ENGINEER OFFICER

WATCHKEEPING ENGINEER  
OFFICER

Date of issue of this Endorsement

Official Seal Director General  
Department of Shipping.

Date of birth of the holder of the Certificate \_\_\_\_\_  
Signature of the holder of the Certificate \_\_\_\_\_



(মনোগ্রাম)  
(Monogram)

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার  
Government of the People's Republic of Bangladesh

ইওইসি-১৭  
EOEC - 17

নৌ-পরিবহন মন্ত্রণালয়  
Ministry of Shipping  
সমুদ্র পরিবহন অধিদপ্তর  
Department of Shipping

উপযুক্ত সার্টিফিকেট (সেরিন ইঞ্জিনিয়ার অফিসার)  
CERTIFICATE OF COMPETENCY (MARINE ENGINEER OFFICER)

তৃতীয় শ্রেণী  
CLASS -3  
যটন জাহাজ  
MOTORSHIP

নং-----  
No -----

বাংলাদেশ মার্চেন্ট শিপিং অধ্যাদেশ, ১৯৮৩ (XXVI of 1983) দ্বারা অধিকৃত ক্ষমতাবলে এবং বাংলাদেশ মার্চেন্ট শিপিং (সার্টিফিকেশন  
Empowered by the Bangladesh Merchant Shipping Ordinance, 1983 (XXVI of 1983) and under the provisions  
অবধিগত ইঞ্জিনিয়ার অফিসার), বিধিমালা, ১৯৯০-এর বিধান অনুযায়ী এই সার্টিফিকেট জ্ঞানাব-  
of Merchant Shipping (Certification of Marine Engineer Officers) Rules, 1990, this certificate is granted  
তে, যিনি----- অনুষ্ঠিত পরীক্ষায়----- তারিখে তৃতীয় শ্রেণী ইয়ায়োগ্যতাপ্রাপ্ত  
to Mr. ----- who, upon passing an examination on ----- at ----- has been found  
করিয়াকেন, প্রযোজ্যত অনুসারে সমুদ্রগামী মোটর জাহাজে ইঞ্জিনিয়ারের পদে দায়িত্ব পালনের জন্য এই সার্টিফিকেট প্রদান করা  
duly qualified to perform the duties of an Engineer Officer on a Merchant Motorship in a capacity this  
হইল। শুধুমাত্র ব্যতিক্রম এই যে, টাকোর জাহাজে দায়িত্ব পালনের জন্য অত্র সার্টিফিকেটে প্রয়োজনীয় এনডোর্সমেন্ট গ্রহণ করিতে হইবে,  
certificate of Class applies, except that the holder must also obtain an appropriate endorsement for Service  
এবং ইচ্ছারূপে পালন কনভেনশন অন ইন্টারন্যাশনাল অফ স্ট্যান্ডার্ডস অব ট্রেনিং, সার্টিফিকেশন এন্ড ওয়াচকীপিং ফর সী-ফেয়ারার্স, ১৯৭৮-এর অনুচ্ছেদ-৬ এবং  
on tanker required in respect of that ship, and with limitation, if any, as stated in the attached endorsement  
প্রবিধান I/২ অনুসারে এতদনুসারে সংযুক্ত এনডোর্সমেন্টে উল্লিখিত সীমাবদ্ধতা, যদি কিছু থাকে, প্রযোজ্য হইবে।  
under Article VI & regulation I/2 of International Convention on Standards of Training, Certification and  
Watchkeeping for Seafarers, 1978.

তারিখ-----

Dated this \_\_\_\_\_ day of \_\_\_\_\_

সহ পরিচালক

Director General

সমুদ্র পরিবহন অধিদপ্তর

Department of Shipping

প্রধান ইঞ্জিনিয়ার পরীক্ষক

Chief Examiner of Engineers

নাম.....  
 Name.....  
 পিতার নাম.....  
 Father's name.....  
 জন্ম তারিখ ও স্থান.....  
 Date and Place of birth.....  
 সনাক্তকারী চিহ্ন.....  
 Identification marks.....  
 সিডি, সি নং..... প্রদানের স্থান..... তারিখ.....  
 Issued at..... on.....  
 বাক্স.....  
 Signature of holder.....  
 সার্টিফিকেট প্রদানের স্থান..... তারিখ.....  
 Certificate delivered at..... on.....

সীল মোহর  
 Seal & Photograph

সার্টিফিকেট প্রদানকারী অফিসারের স্বাক্ষর  
 Signature of Officer Delivering the Certificate

বাংলাদেশ মার্চেন্ট শিপিং অধ্যাদেশ, ১৯৮৩ এর প্রতি দৃষ্টি আকর্ষণ পূর্বক সতর্ক করা যাইতেছে যে, এই সার্টিফিকেট কোন প্রত্যক্ষনর উদ্দেশ্যে ব্যবহার এবং ইয়াকে জাল করা অথবা পরিবর্তন করা আইনতঃ দণ্ডনীয় অপরাধ।  
 Attention is drawn to the provisions of the Bangladesh Merchant Shipping Ordinance, 1983 whereby the fraudulent use and forgery, or alteration of this document could constitute a criminal offence.

নোট : যারানো অবস্থায় কেহ এই ডকুমেন্টখানা পাইয়া থাকিলে তাহা যথা-পত্রিালক সমুদ্র পরিবহন অধিদপ্তর, ঢাকা এই প্রকায় ডাক চিকিৎসা বিভাগে এনকোপে পাঠাইতে অনুপ্রোধ করা গেল। ডাক মাস্তুল প্রাপক পরিপোধ করিবেন।  
 Note : Any Person finding this document must send it to the Director General, Department of Shipping, Dhaka in an unstamped envelope. Postage will be paid by the addressee.

INTERNATIONAL CONVENTION OF STANDARDS OF TRAINING, CERTIFICATION & WATCH-KEEPING FOR SEAFARERS, 1978.

CONTINUED PROFICIENCY AND UP-DATING OF KNOWLEDGE FOR SEAFARERS, 1978

This Certificate of Competency remains valid for sea-going service for 5 years from the date of its issue. There after, the Certificate will only remain valid for sea-going service in the highest rank appropriate to it for 5 years from the date on which it is confirmed below or over-leaf that the holder has satisfied specified requirements for the continued proficiency and updating of knowledge for certificated engineer officers. However, the Certificate always remains valid for sea-going service in ranks below the highest appropriate to it.

CONTINUED PROFICIENCY AND UP-DATING KNOWLEDGE

The holder of this Certificate met the requirements of Regulation III/5 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 on \_\_\_\_\_.

ENDORSEMENT OF CERTIFICATE  
Issued under the provisions of the INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION & WATCHKEEPING FOR SEAFARERS, 1978

(Monogram)

Government of the People's Republic of Bangladesh

I, the undersigned certify that the present Certificate No. \_\_\_\_\_ is issued to \_\_\_\_\_ who has been found duly qualified in accordance with the provisions of Regulations \_\_\_\_\_ of the above Convention for the capacities shown below within the limitations specified.

Capacity

Limitations

CHIEF ENGINEER OFFICER

SECOND ENGINEER OFFICER

WATCHKEEPING ENGINEER OFFICER

Date of issue of this Endorsement

Official Seal

Director General  
Department of Shipping.

Date of birth of the holder of the Certificate \_\_\_\_\_

Signature of the holder of the Certificate \_\_\_\_\_

সৌ-পরিবহন মন্ত্রণালয়  
Ministry of Shipping

সমুদ্র পরিবহন অধিদপ্তর  
Department of Shipping

উপযুক্ততা সার্টিফিকেট (সেভিন ইঞ্জিনিয়ার অফিসার)  
CERTIFICATE OF COMPETENCY (MARINE ENGINEER OFFICER)

চতুর্থ শ্রেণী সমন্বিত  
CLASS -4 COMBINED  
মটর ও স্টীম জাহাজ  
MOTORSHIP & STEAMSHIP

নং-----  
No -----

বাংলাদেশ মার্টিন সার্টিফিকেট, ১৯৮০ (XXVI of 1983) দ্বারা অধিত ক্ষমতাবলে এবং বাংলাদেশ মার্টিন সার্টিফিকেট  
Empowered by the Bangladesh Merchant Shipping Ordinance, 1983 (XXVI of 1983) and under the provisions  
অনুযায়ী (ইঞ্জিনিয়ার অফিসার), বিধিমালা, ১৯৯০ এর বিধান অনুযায়ী এই সার্টিফিকেট জারি করা হবে।  
of Merchant Shipping (Certification of Marine Engineer Officers) Rules, 1990, this certificate is granted  
কে, যিনি-----

to Mr. ----- who, upon passing an examination on ----- at ----- has been found  
করিয়েছেন, প্রযোজ্য অনুসারে সমুদ্রগামী মোটর ও স্টীম জাহাজে ইঞ্জিনিয়ারের পদে দায়িত্ব পালনের জন্য এই সার্টিফিকেট প্রদান করা  
duly qualified to perform the duties of an Engineer Officer on a Merchant Motorship & Steamship in a capacity this  
হইল। তদুপরে যত্নক্রমে এই যে, টাকের জাহাজে দায়িত্ব পালনের জন্য অর্থ সার্টিফিকেটে প্রযোজ্য এনডোর্সমেন্ট প্রদান করা হইবে,  
certificate of Class applies, except that the holder must also obtain an appropriate endorsement for Service  
এবং ইন্টারন্যাশনাল স্কাফোল্ডার্স অ্যান্ড স্ট্যান্ডার্ডস অফ ট্রেনিং, সার্টিফিকেট প্রদান এবং স্কাফোল্ডার্স, ১৯৭৮ এর অনুচ্ছেদ- ৬ এবং  
on tanker required in respect of that ship, and with limitation, if any, as stated in the attached endorsement.  
প্রতিমাণ 1/2 অনুসারে এনডোর্সমেন্ট সনাক্ত এনডোর্সমেন্টে উল্লিখিত সীমাবদ্ধতা, যদি কিছু থাকে, প্রযোজ্য হইবে।  
under Article VI & regulation 1/2 of International Convention on Standards of Training, Certification and  
Watchkeeping for Seafarers, 1978.

তারিখ-----  
Dated this \_\_\_\_\_ day of \_\_\_\_\_  
মহা পরিচালক  
Director General  
সমুদ্র পরিবহন অধিদপ্তর  
Department of Shipping  
প্রধান ইঞ্জিনিয়ার পর্দীক্ষক  
Chief Examiner of Engineers

অতিরিক্ত যোগ্যতা

Additional Qualification

সার্টিফিকেটধারীর তথ্যাবলী

Particulars of holder

নাম-----  
 Name.....  
 পিতার নাম-----  
 Father's name.....  
 জন্ম তারিখ ও স্থান-----  
 Date and Place of birth.....  
 সনাক্তকারী চিহ্ন-----  
 Identification marks.....  
 সিডি, সি নং----- প্রদানের স্থান----- তারিখ-----  
 Discharge Book No..... Issued at..... on.....  
 সাক্ষর-----  
 Signature of holder-----  
 সার্টিফিকেট প্রদানের স্থান----- তারিখ-----  
 Certificate delivered at..... on.....

সীলমোহর  
ফটো

Seal &amp; Photograph

সার্টিফিকেট প্রদানকারী অফিসারের স্বাক্ষর  
Signature of Officer Delivering the Certificate

বাংলাদেশ মাঠে সিপিং অধ্যাদেশ, ১৯৩৩ এর প্রতি দৃষ্টি আকর্ষণ পূর্বক নতর করা যাইতেছে যে, এই সার্টিফিকেট কোন প্রভারনার উদ্দেশ্যে ব্যবহার এক ইহাকে জাল করা অথবা পরিবর্তন করা আইনতঃ দণ্ডনীয় অপরাধ।  
 Attention is drawn to the provisions of the Bangladesh Merchant Shipping Ordinance, 1983 whereby the fraudulent use and forgery, or alteration of this document could constitute a criminal offence.

**নোট :** যারানো অবস্থায় কেহ এই ডকুমেন্টখানা পাইয়া থাকিলে তাহা মহা-পরিচালক সমুদ্র পরিবহন অধিদপ্তর, ঢাকা এই ঠিকানায় ডাক টিকিট বিহীন এনভোপে গাঠাইতে অনুমোদন করা যেন। ডাক মাস্তুল গ্রাপক পরিদেপাধ করিবেন।  
**Note :** Any Person finding this document must send it to the Director General, Department of Shipping, Dhaka in an unstamped envelope. Postage will be paid by the addressee.

INTERNATIONAL CONVENTION OF STANDARDS OF TRAINING, CERTIFICATION & WATCH-KEEPING FOR SEAFARERS, 1978.

CONTINUED PROFICIENCY AND UP-DATING OF KNOWLEDGE FOR SEAFARERS, 1978

This Certificate of Competency remains valid for sea-going service for 5 years from the date of its issue. There after, the Certificate will only remain valid for sea-going service in the highest rank appropriate to it for 5 years from the date on which it is confirmed below or over-leaf that the holder has satisfied specified requirements for the continued proficiency and updating of knowledge for certificated engineer officers. However, the Certificate always remains valid for sea-going service in ranks below the highest appropriate to it.

CONTINUED PROFICIENCY AND UP-DATING KNOWLEDGE

The holder of this Certificate met the requirements of Regulation III/5 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 on \_\_\_\_\_

ENDORSEMENT OF CERTIFICATE Issued under the provisions of the INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION & WATCHKEEPING FOR SEAFARERS, 1978

(Monogram)

Government of the People's Republic of Bangladesh

I, the undersigned certify that the present Certificate No. \_\_\_\_\_ is issued to \_\_\_\_\_ who has been found duly qualified in accordance with the provisions of Regulations \_\_\_\_\_ of the above Convention for the capacities shown below within the limitations specified.

Capacity

CHIEF ENGINEER OFFICER

SECOND ENGINEER OFFICER

WATCHKEEPING ENGINEER OFFICER

Limitations

Date of issue of this Endorsement

Official Seal

Director General  
Department of Shipping.

Date of birth of the holder of the Certificate \_\_\_\_\_  
Signature of the holder of the Certificate \_\_\_\_\_

(মনোগ্রাম)  
Government of the People's Republic of Bangladesh

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার  
Government of the People's Republic of Bangladesh

ইইসি-১৯  
EOEC - 19

নৌ-পরিবহন মন্ত্রণালয়  
Ministry of Shipping

সমুদ্র পরিবহন অধিদপ্তর  
Department of Shipping

উপযুক্ততা সার্টিফিকেট (মেরিন ইঞ্জিনিয়ার অফিসার)  
CERTIFICATE OF COMPETENCY (MARINE ENGINEER OFFICER)

চতুর্থ শ্রেণী  
CLASS -4  
মটর জাহাজ  
MOTORSHIP

নং-----  
No -----

বাংলাদেশ মার্চেন্ট শিপিং অধ্যাদেশ, ১৯৮৩ (XXXVI of 1983) দ্বারা অধিত কৃতভাবে এক বাংলাদেশ মার্চেন্ট শিপিং সার্টিফিকেশন Empowered by the Bangladesh Merchant Shipping Ordinance, 1983 (XXXVI of 1983) and under the provisions অব মেরিন ইঞ্জিনিয়ার অফিসার, বিধিমালা, ১৯৯০ এর বিধান অনুযায়ী এই সার্টিফিকেট জারি করা হবে।  
Certification of Marine Engineer Officers) Rules, 1990, this certificate is granted কে, যিনি ----- জারি কৃত পরীক্ষার ----- has been found to Mr. ----- who, upon passing an examination on ----- at ----- করিয়াছেন, প্রযোজ্য অনুসারে সমুদ্রশ্রমী মোটর জাহাজে ইঞ্জিনিয়ারের পদে দায়িত্ব পালনের জন্য এই সার্টিফিকেট প্রদান করা করিয়াছেন, প্রযোজ্য অনুসারে সমুদ্রশ্রমী মোটর জাহাজে ইঞ্জিনিয়ারের পদে দায়িত্ব পালনের জন্য এই সার্টিফিকেট প্রদান করা duty qualified to perform the duties of an Engineer Officer on a Merchant Motorship in a capacity this হয়। সমুদ্র পরিবহন আইন, ১৯৮৩ এবং মেরিন ইঞ্জিনিয়ার অফিসারের বিধিমালা, ১৯৯০ এর বিধান অনুসারে প্রযোজ্য সার্টিফিকেট প্রদান করা হয়েছে।  
The holder must also obtain an appropriate endorsement for Service certificate of Class applies, except that the holder must also obtain an appropriate endorsement for Service এক ইন্টারন্যাশনাল কনভেনশন অর্থাৎ সার্টিফিকেশন এন্ড রেগুলেশন, ১৯৭৮ এর অনুচ্ছেদ- ৬ এবং on tanker required in respect of that ship, and with limitation, if any, as stated in the attached endorsement প্রতিধান 1/2 অনুসারে এতদসঙ্গে সংযুক্ত কনভেনশনে উল্লিখিত সীমাবদ্ধতা, যদি কিছু থাকে, প্রযোজ্য হবে।  
under Article VI & regulation 1/2 of International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978.

তারিখ-----  
Dated this ----- day of -----  
মহা পরিচালক  
Director General  
সমুদ্র পরিবহন অধিদপ্তর  
Department of Shipping

প্রধান ইঞ্জিনিয়ার পরিচালক  
Chief Examiner of Engineers

সার্টিফিকেট-ধারীর তথ্যাবলী  
Particulars of holder

অতিরিক্ত যোগ্যতা  
Additional Qualification

নাম-----  
Name .....

পিতার নাম-----  
Father's name .....

জন্ম তারিখ ও স্থান-----  
Date and Place of birth .....

সনাক্তকারী চিহ্ন-----  
Identification marks .....

সিহ্ন, সি নং-----  
Discharge Book No. .... Issued at ..... on .....

স্বাক্ষর-----  
Signature of holder-----

সার্টিফিকেট প্রদানের স্থান-----  
Certificate delivered at ..... on .....

তারিখ-----  
Date .....

সীলমোহর  
মুদ্রা  
Seal & Photograph

সার্টিফিকেট প্রদানকারী অফিসারের স্বাক্ষর  
Signature of Officer Delivering the Certificate

বাংলাদেশ মার্চেন্ট শিপিং অধ্যাদেশ, ১৯৮৩ এর প্রতি দৃষ্টি আকর্ষণ পূর্বক সতর্ক করা যাইতেছে যে, এই সার্টিফিকেট কোন প্রতারনার উদ্দেশ্যে ব্যবহার একে ইহাকে ছাল করা অথবা পরিবর্তন করা আইনতঃ সতর্কীয় অপরাধ।  
Attention is drawn to the provisions of the Bangladesh Merchant Shipping Ordinance, 1983 whereby the fraudulent use and forgery, or alteration of this document could constitute a criminal offence.

নোট : যারানো অবস্থায় কেহ এই ডকুমেন্টের পাইন থাকিলে তহা মহা-পরিচালক সমূহ পরিবহন অফিসের, তাকা এই ডিক্রানার তাক ডিক্রিট বিহীন এনভেলোপে পাঠাইতে অনুপ্রোধ করা পেল। তাক মাতল প্রাপক পরিপোধ করিবে।  
Note : Any Person finding this document must send it to the Director General, Department of Shipping, Dhaka in an unstamped envelope. Postage will be paid by the addressee.



INTERNATIONAL CONVENTION OF STANDARDS OF TRAINING, CERTIFICATION & WATCH-KEEPING FOR SEAFARERS, 1978.

CONTINUED PROFICIENCY AND UP-DATING OF KNOWLEDGE FOR SEAFARERS, 1978

This Certificate of Competency remains valid for sea-going service for 5 years from the date of its issue. Thereafter, the Certificate will only remain valid for sea-going service in the highest rank appropriate to it for 5 years from the date on which it is confirmed below or over-leaf that the holder has satisfied specified requirements for the continued proficiency and updating of knowledge for certificated engineer officers. However, the Certificate always remains valid for sea-going service in ranks below the highest appropriate to it.

CONTINUED PROFICIENCY AND UP-DATING KNOWLEDGE

The holder of this Certificate met the requirements of Regulation III/5 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 on \_\_\_\_\_

ENDORSEMENT OF CERTIFICATE

Issued under the provisions of the INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION & WATCHKEEPING FOR SEAFARERS, 1978

(Monogram)

Government of the People's Republic of Bangladesh

I, the undersigned certify that the present Certificate No. \_\_\_\_\_ is issued to \_\_\_\_\_ who has been found duly qualified in accordance with the provisions of Regulations \_\_\_\_\_ of the above Convention for the capacities shown below within the limitations specified.

Capacity

Limitations

CHIEF ENGINEER OFFICER

SECOND ENGINEER OFFICER

WATCHKEEPING ENGINEER OFFICER

Date of issue of this Endorsement

Official Seal

Director General  
Department of Shipping.

Date of birth of the holder of the Certificate \_\_\_\_\_  
Signature of the holder of the Certificate \_\_\_\_\_

লৌ-পরিবহন মন্ত্রণালয়  
Ministry of Shipping  
সমুদ্র পরিবহন অধিদপ্তর  
Department of Shipping

উপস্থিত সার্টিফিকেট (সেবিন ইঞ্জিনিয়ার অফিসার)  
CERTIFICATE OF COMPETENCY (MARINE ENGINEER OFFICER)

চতুর্থ শ্রেণী  
CLASS - 4  
ষ্টীম জাহাজ  
STEAMSHIP

নং-----  
No -----

বাংলাদেশ মার্চেন্ট শিপিং অধ্যাদেশ, ১৯৮০ (XXVI of 1983) দ্বারা অধিষ্ঠিত ক্ষমতাবলে এবং বাংলাদেশ মার্চেন্ট শিপিং সার্টিফিকেটন  
Empowered by the Bangladesh Merchant Shipping Ordinance, 1983 (XXVI of 1983) and under the provisions  
অনুমোদিত ইঞ্জিনিয়ারঅফিসার), বিকিমাণ, ১৯৯০ এর বিধান অনুযায়ী এই সার্টিফিকেট প্রদান করা  
of Merchant Shipping (Certification of Marine Engineer Officers) Rules, 1990, this certificate is granted  
কে, যিনি-----অনুষ্ঠিত পরীক্ষার-----তারিখে উত্তীর্ণ হয়েছিলেন।

to Mr. .... who, upon passing an examination on ..... at :..... has been found  
করিয়াছেন, যাকে জাহাজে সূত্রপাতী ষ্টীম জাহাজে ইঞ্জিনিয়ারের পদে দায়িত্ব পালনের জন্য এই সার্টিফিকেট প্রদান করা  
duly qualified to perform the duties of an Engineer Officer on a Merchant Steamship in a capacity this  
হইবে। অধিকার ব্যতীত এই যে, টাকার ক্ষমতায় সার্টিফিকেট পালনের জন্য অর্থ সার্টিফিকেটে প্রয়োজনীয় এনডোর্সমেন্ট প্রদান করা হইবে।  
certificate of Class applies, except that the holder must also obtain an appropriate endorsement for Service  
এক ইন্টারন্যাশনাল কনভেনশন অফ স্ট্যান্ডার্ডস অফ ট্রেনিং, সার্টিফিকেটন এন্ড ওয়াচকেপিং, ১৯৭৮ এর অনুচ্ছেদ- ৬ এবং  
on tanker required in respect of that ship, and with limitation, if any, as stated in the attached endorsement  
বিধান 1/2 অনুসারে এনডোর্সমেন্ট সঞ্চারিত সীমাবদ্ধতা, যদি কিছু থাকে, প্রযোজ্য হইবে।  
under Article VI & regulation 1/2 of International Convention on Standards of Training, Certification and  
Watchkeeping for Seafarers, 1978.

তারিখ-----  
প্রধান ইঞ্জিনিয়ার পরীক্ষক  
Chief Examiner of Engineers

Dated this \_\_\_\_\_ day of \_\_\_\_\_

সমুদ্র পরিবহন  
Director General  
সমুদ্র পরিবহন অধিদপ্তর  
Department of Shipping

অতিরিক্ত পেশতা

Additional Qualification

সার্টিফিকেট-ধারীর তথ্যাবলী  
Particulars of holder

নাম.....  
 Name.....  
 পিতার নাম.....  
 Father's name.....  
 জন্ম তারিখ ও স্থান.....  
 Date and Place of birth.....  
 সনাক্তকারী চিহ্ন.....  
 Identification marks.....  
 পিভি, সি নং..... প্রদানের স্থান..... তারিখ.....  
 Discharge Book No..... Issued at..... on.....  
 সাক্ষর.....  
 Signature of holder.....  
 সার্টিফিকেট প্রদানের স্থান..... তারিখ.....  
 Certificate delivered at..... on.....

সীল মোহর  
 স্বাক্ষর  
 Seal & Photograph

সার্টিফিকেট প্রদানকারী অফিসারের স্বাক্ষর  
 Signature of Officer Delivering the Certificate

বাংলাদেশ মার্টেট লিনিং অধ্যাদেশ, ১৯৮৩ এর প্রতি দৃষ্টি আকর্ষণ পূর্বক নতর করা যাইতেছে যে, এই সার্টিফিকেট কোন প্রত্যাহার উদ্দেশ্যে ব্যবহার এবং ইত্যাকে জাল করা অথবা পরিবর্তন করা আইনতঃ সতর্কিত অপরাধ।  
 Attention is drawn to the provisions of the Bangladesh Merchant Shipping Ordinance, 1983 whereby the fraudulent use and forgery, or alteration of this document could constitute a criminal offence.

নোট : যারাবো ব্যবহার কেহ এই ডকুমেন্টখানা পাইয়া থাকিলে তাহা অস্বা-পরিচালক সফর পরিবহন অধিদপ্তর, ঢাকা এই  
 ডিক্রিনার ডাক টিকিট বিহীন এনকোপেশ পাঠাইতে অনুমোদন করা নহে। ডাক মাতল গ্রহণক পরিচালনা করিবেন।  
 Note : Any Person finding this document must send it to the Director General,  
 Department of Shipping, Dhaka in an unstamped envelope. Postage will  
 be paid by the addressee.

INTERNATIONAL CONVENTION OF STANDARDS OF TRAINING, CERTIFICATION & WATCH-KEEPING FOR SEAFARERS, 1978.

CONTINUED PROFICIENCY AND UP-DATING OF KNOWLEDGE FOR SEAFARERS, 1978

This Certificate of Competency remains valid for sea-going service for 5 years from the date of its issue. There after, the Certificate will only remain valid for sea-going service in the highest rank appropriate to it for 5 years from the date on which it is confirmed below or over-leaf that the holder has satisfied specified requirements for the continued proficiency and updating of knowledge for certificated engineer officers.  
However, the Certificate always remains valid for sea-going service in ranks below the highest appropriate to it.

CONTINUED PROFICIENCY AND UP-DATING KNOWLEDGE

The holder of this Certificate met the requirements of Regulation III/5 of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 on \_\_\_\_\_

ENDORSEMENT OF CERTIFICATE issued under the provisions of the INTERNATIONAL CONVENTION ON STANDARDS OF TRAINING, CERTIFICATION & WATCHKEEPING FOR SEAFARERS, 1978

(Monogram) Government of the People's Republic of Bangladesh

I, the undersigned certify that the present Certificate No. \_\_\_\_\_ is issued to \_\_\_\_\_ who has been found duly qualified in accordance with the provisions of Regulations \_\_\_\_\_ of the above Convention for the capacities shown below within the limitations specified.

Capacity Limitations

CHIEF ENGINEER OFFICER

SECOND ENGINEER OFFICER

WATCHKEEPING ENGINEER OFFICER

Date of issue of this Endorsement \_\_\_\_\_

Official Seal Director General Department of Shipping.

Date of birth of the holder of the Certificate \_\_\_\_\_  
Signature of the holder of the Certificate \_\_\_\_\_

রাষ্ট্রপতির আদেশক্রমে  
প্রশ্ন ক্যাডেন্স (ডেকান) সৈয়দ আব্দুল  
সাব্বি

যে: প্রিন্টের প্রধান, ডেপুটি সেক্রেটারি, বাংলাদেশ সরকারি মুদ্রাগার, ঢাকা স্বাক্ষর করিলেন।  
সেপেকের সাহায্যে প্রিন্ট, ডেপুটি সেক্রেটারি, বাংলাদেশ সরকার ও প্রকাশনী অফিস, ঢাকায়, ঢাকা স্বাক্ষর করিলেন।