

## **BOILER OPERATION ENGINEER'S EXAMINATION -2018**

### **BOE-2018**

The Board of Examiners for the Boiler Operation Engineer's Examination (constituted as per G.O.(P) No. 86/2016/LBR Dated 09/06/2016) met on 29/06/2018 and decided to conduct Boiler Operation Engineer's Examination-2018 as required under Rule 21 of the Boiler Operation Engineers Rules -2011, a Gazette Notification in this regard has to be issued for the information of the public

### **NOTIFICATION**

It is hereby notified as required under Rule 21 of The Boiler Operation Engineers Rules 2011, that written Examination for Boiler Operation Engineer's will be held on 24<sup>th</sup> & 25<sup>th</sup> November, 2018. and Oral and practical examination will be held on 23<sup>rd</sup>, 24<sup>th</sup> & 25<sup>th</sup> January, 2019. Applications are invited from eligible candidates in the prescribed form.

1. The application form along with the instructions to candidates is available in the official website [www.fabkerala.gov.in](http://www.fabkerala.gov.in). Applicants are requested to fill all mandatory columns one by one and attach soft copies of all relevant testimonials. After finishing the online entries, take a print out of the filled application and sent to **"The Secretary, Board of Examiners, Office of the Director of Factories and Boilers, Suraksha Bhavan, Near A.J.Hall, Kumarapuram, Medical College P.O. Thiruvananthapuram - 695 011, Kerala"**.
2. Examination fee shall be Rs.1,500/-. The remittance of fee shall be done through e-payment (Fee for the Boiler Operation Engineer's Examination). Detailed instructions are made available along with online application. Fee once remitted will not be refunded under any circumstances.
3. Exact time place and mode of examination is available in the website
4. The online application & hardcopies of the application will be received from 03.09.2018 till 5pm of 30-09-2018 and hard copy up to 5pm of 12-10-2018 respectively.

## **BOILER OPERATION ENGINEERS' EXAMINATION- 2018**

The Directorate of Factories and Boilers, Kerala has decided to conduct the Boiler Operation Engineers' Examination during November last and January 2019.

According to the press release today the written examination (viz. Paper I & II) and the drawing examination (Paper III) will be held on 24-11-2018 and 25-11-2018 respectively and Practical Examination will be held on 23<sup>rd</sup> 24<sup>th</sup> and 25<sup>th</sup> January 2019. The last date of receipt of the online application & hardcopy of the application in the office of The Secretary, Board of Examiners, Directorate of Factories and Boilers, "SurakshaBhavan",Kumarapuram, Medical College P.O., Thiruvananthapuram – 695 011, Kerala State will be on or before 30-09-2018 & 12-10-2018 5 PM respectively.

The online application form and instruction to the candidate is available in the official website.

[www.fabkerala.gov.in](http://www.fabkerala.gov.in)

For more details, contact Phone No – 0471- 2441597

**DIRECTOR OF FACTORIES & BOILERS  
AND CHAIRMAN, BOARD OF EXAMINERS**

## **1. Eligibility Criteria**

1. Should not be less than twenty three years of age as on date of notification
2. Should possess a degree or diploma in Mechanical or electrical or Chemical or Power Plant or Production or Instrumentation engineering from a recognized Institution;
3. Should have served for not less than two years in case of Degree holders and for five years in case of Diploma holders in the operation and/or maintenance of a Boiler of not less than one thousand square meters heating surface or a Battery of Boilers of not less than one thousand square meters heating surface in aggregate out of which at least one Boiler of not less than five hundred square meters heating surface. However, for degree holders or post graduate diploma holders from a National Power Training Institute, requirement of minimum working experience shall be one year.

## **2. Testimonials**

- a. Candidates have to produce satisfactory testimonials certifying his experience, ability and good conduct for the whole period of his qualifying service or any unaccounted break: in the period of qualifying service. Such testimonials shall clearly state the capacity in which candidate was employed, whether as an Apprentice Engineer, Supervisor, Assistant Engineer etc. and the periods of such employment stating the dates between which candidates was so employed..
- b. The testimonial is to be signed by a person under whom the candidate was employed and be countersigned by the owner or agent of the mill, factory or workshop and to be certified by the respective Inspector of Boilers/ Deputy Inspector of Boilers/ Chief Inspector of Boilers. Experience certificate (Model attached)
- c. Candidates who have undergone a course of training at a recognised Engineering College or Technical Institution must produce either the degree or diploma of the course or a certificate from the Principal or Superintendent of the Institution giving the period devoted in completing the course.
- d. A testimonial in respect of service in a steamship may be signed by the Chief Engineer and counter signed by the Master of the vessel or may be in the form of a Seaman's Discharge Certificate issued by a shipping Master.
- e. A testimonial of service rendered on railway boilers or boilers belonging to a Government Department or local bodies, shall be signed by a responsible officer under whom the candidate has directly served and countersigned by the Head of the Department concerned.

### **3. Syllabus for Examination**

The knowledge of the candidate pertaining to the following shall be assessed

- (a) Calculation of loads, areas, volumes, quantities and weights
- (b) Description of the principal types of steam boilers used on land state the purposes and reasons for which different types of boilers are employed; and from the data and formulae supplied, calculate the safe working pressure for any part of a boilers in accordance with the Indian Boiler Regulation.
- (c) Calculate the direct stress, the torsional stress and the bending stress in round bars and shafts and the bending stress in rectangular bars and levers with given load.
- (d) Working and management of steam boilers, super heaters and economisers
- (e) Use and purpose of various valves, cocks, mountings, fitting and other safety devices.
- (f) Description of and explain the functions of feed pumps, feed injectors, feed regulators, feed water filters and softeners, feed heaters, air heaters, calorifiers steam accumulators, forced draught, induced draught and automatic draught control devices.
- (g) Fact relating to combusting heat and steam and calculate consumption of coal and water and quantity of steam that may be generated from a given heating surface under the various systems of draught, in a land boiler and also calculate the overall efficiency of boiler plant.
- (h) Jet and surface condensation, reheating and the working of steam expansion
- (i) General methods employed in laying foundation for boilers and chimneys and the suitable area and height of chimneys to promote efficient combustion
- (j) Significance of principal appliances in use for the prevention of smoke and the principle on which they work and give description of the principal mechanical stokers, pulverisers, gas, oil and pulverized fuel systems in use
- (k) Periodical cleaning, the methods used for prevention of scale or other deposits on heating surfaces and the necessity for maintaining a certain PH value in feed water
- (l) Detect defects in boilers and state the means and methods of rectifying them
- (m) Precautions to be taken for starting a boiler and economizer from cold or from banked fire condition.
- (n) Procedure to be adopted in putting an economizer out of commission while the boiler is on steam
- (o) Methods adopted for the achievement of fuel economy and the use of various instruments used in a Boiler House

- (p) Materials used in Boiler components and piping  
 (q) Read and prepare a working sketch and drawing of boilers and boiler mounting or parts thereof

## **4.Subjects for examination**

Examination will be conducted in the following manner:-

Paper A- Written examination

1. Paper One- Covering syllabus stipulated under (a) to (h)
2. Paper two- Covering syllabus stipulated under (i) to (p)

Paper B- Drawing examination

One paper covering syllabus under (q)

Paper C- Oral examination

The candidate has to answer question pertaining to Boiler Practices and if required will have to demonstrate in the examination room or in a workshop, ability to carry out the practical aspects of duties in a Boiler house.

### **SCHEDULE OF EXAMINATIONS**

1	Written Examination	24 <sup>th</sup> & 25 <sup>th</sup> November, 2018.
2	Oral and Practical Examination	23 <sup>rd</sup> , 24 <sup>th</sup> & 25 <sup>th</sup> January, 2019

### **How to apply?**

The application form along with the instructions to candidates is available in the official websites [www.fabkerala.gov.in](http://www.fabkerala.gov.in)

The following things must be kept ready for registering online.

Photos should be clear with face in the fore front forwarded with adequate contrast in a light back ground

a) Scanned copy of Photo, Signature in the '**jpeg**' format. Photos should be clear with face in fore front focused, adequate contrast, in a light back ground

b) The size of the above items should not exceed the following **Photograph (138X177) -100KB, Signature-50KB, Thumb Impression- 50KB**

c) All other documents must be in '**pdf**' format and should not exceed **1MBsize**

d) Internet Banking account for remitting fee (Through online) **Rupees. 1500/**

## **5.SUBMISSION OF HARD COPY OF APPLICATION**

The printout of the application signed by the applicant and counter signed by the manager of the firm or a gazetted officer shall be forwarded to the Secretary in the following address.

**The Secretary, Board of Examiners  
SurakshaBhavan  
Directorate of Factories and Boilers  
Kumarapuram  
Thiruvananthapuram- 695011  
Kerala.**

Please note that only print out of the application after affixing signature of the candidate and counter signed by the manager of the firm or a gazetted officer need only be submitted so as to reach on or before 12-10-2018 before 5 pm.

Note : All originals in respect of academic qualifications, experience and such other testimonials uploaded shall be produced at the time of Oral and Practical Examination.

## **6.IMPORTANT DATES**

a) Online submission of application starts from **03.09.2018**

b) Last date for receiving online application: **30-09-2018** before 5 pm

c) Last date for receiving hard copy of application: **12-10-2018** before 5 pm

DIRECTOR OF FACTORIES & BOILERS  
AND CHAIRMAN, BOARD OF EXAMINERS