



GOVERNMENT OF KERALA

DEPARTMENT OF FACTORIES AND BOILERS

BOILER OPERATION ENGINEER'S EXAMINATION - 2022

The Board of Examiners for the Boiler Operation Engineer's Examination (constituted as per G.O.(P) No. 5/2021/LBR Dated 08.01.2021) met on 28.10.2022 and decided to conduct Boiler Operation Engineer's Examination 2022 as required under Rule 21 of the Boiler Operation Rules, 2021, a Gazette Notification in this regard has to be issued for the information of the public.

NOTIFICATION

DEPARTMENT OF FACTORIES & BOILERS, KERALA

BOILER OPERATION ENGINEER'S EXAMINATION - 2022

T3/8884/2022/F&B

Thiruvananthapuram Dated: 01/12/2022

It is hereby notified as required under Rule 21 of the Boiler Operation Rules, 2021, that Boiler Operation Engineer's written and drawing examination will be held on 11th and 12th March 2023. Oral and practical examinations will be held on 27th, 28th and 29th April 2023. 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. Applicants are requested to fill all mandatory columns one by one and attach soft copies of all relevant documents/testimonials. After finishing the online entries, take a print out of the filled application, sign it in the presence of a Gazetted officer and send to **"The Secretary, Board of Examiners, Office of the Directorate of Factories & Boilers, Suraksha Bhavan, Near A.J. Hall, Kumarapuram, Medical College P.O., Thiruvananthapuram - 695 011, Kerala"**.
2. Examination fee shall be Rs. 2,000/- (Two Thousand Rupees only) through e-payment under the **Head of Accountant "0230-00-800-89"** (Fee for the Boiler Operation Engineer's Examination). Detailed instructions are available along with online application. Fee once remitted will not be refunded under any circumstances;
3. Exact time/place and mode of examination will be notified in the website later.
4. The online application will be available from 01.12.2022 to 31.12.2022 and Hard copies of the submitted online application duly signed and addressed to the Secretary will be received till 5.00 pm on 11.01.2023 in the address mentioned in (Sl No.1) above. Late applications will not be considered under any circumstances.



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

ELIGIBILITY CRITERIA FOR BOILER OPERATION ENGINEER'S EXAMINATION 2022

(As per Boiler Operation Rules, 2021)

- 1. Age:** Applicant should have completed twenty-three years (23) of age as on Date of Notification (01/12/2022)
- 2. Qualifications:** Applicant should possess a degree or diploma in Mechanical or Electrical or Chemical or Power Plant or Production or Instrumentation Engineering from a recognized university or institution;
(Any integration or combination with the above-mentioned branches of Engineering, for example Electrical and Electronics, Electrical and Instrumentation etc. shall also be allowed)
- 3. Experience:** Applicant should have minimum **two*** years experience in the operation 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 meters heating surface in aggregate out of which at least one boiler of not less than five hundred square meters heating surface in case of degree holders
- OR**
- Minimum **five*** years experience in the operation 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 meters heating surface in aggregate out of which at least one boiler of not less than five hundred square meters heating surface in case of diploma holders
- OR**
- Minimum **one*** year experience in the operation 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 meters heating surface in aggregate out of which at least one boiler of not less than five hundred square meters heating surface in case of a degree holder or post graduate diploma holder from National Power Training Institute
- *(Above mentioned experience must have attained on or before the date of notification i.e 01-12-2022. Training period shall not be considered as experience)**
- 4. Conduct:** Applicant should have good conduct for the whole Period of his qualifying service or any unaccounted Break in the period of qualifying service.

DOCUMENTS/TESTIMONIALS TO BE UPLOADED ALONG WITH ONLINE APPLICATION

1. Scanned copy of original Document/Certificate to prove the age of the applicant in **pdf** format (Document must clearly show the Date, Month and Year of Birth of the Applicant) (size not to exceed **1MB**).
2. Scanned copy of original certificate to prove educational qualification of the applicant in **pdf** format (size not to exceed **1 MB**).
3. Scanned copy of original experience cum conduct certificate in the prescribed format countersigned by the Inspector of Factories & Boilers/ Joint Director of the Kerala State or from Chief Inspector of Boilers/Deputy Chief Inspector of Boilers/Inspector of Boilers for the candidates of other states in **pdf** format (size not to exceed **1MB**).
4. Soft copy of photograph and signature of the applicant in **jpeg** format (Size of the photograph not to exceed **100 KB** and signature not to exceed **50 KB**).
5. Scanned image of left-hand Thumb impression in **jpeg** format (Size of the image not to exceed **50 KB**).

All original testimonials/documents to prove age, qualification, experience and conduct should be produced at the time of oral and practical examination.

TESTIMONIALS

1. Candidates have to produce satisfactory testimonials certifying his or her experience, ability and good conduct for the whole period of the qualifying service or any unaccounted break in the period of qualifying service. Such testimonials shall clearly state the capacity in which candidate was employed viz. as an Apprentice Engineer or Supervisor or Assistant Engineer etc. and the periods of such employment stating the dates between which candidates was so employed.
2. The testimonial shall 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.
Note: Candidates who produce multiple documents to show different periods of work experience shall ensure that each of the experience certificates submitted are countersigned by the same as mentioned above. Experience cum conduct certificate shall be in one page. If it is in more than one page, countersignature is necessary in all the pages.
3. Candidate who has undergone a course of training at a recognized 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.

4. 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.
5. 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 counter-signed by the head of the Department concerned.

Doubtful testimonials

If the Secretary, Committee of Examiners has reason to doubt the truth of any statement made in any application or testimonials, he can make such enquiries as he thinks fit to verify the same.

False testimonials

If on enquiry, the Secretary, Committee of Examiners is satisfied that any testimonial submitted by a candidate is false in any material particulars, he shall submit his findings to the Chairman, Committee of Examiners who may by a written order debar such candidate from being admitted to any examination held under these rules and in case if, on the strength of any such testimonials, a candidate has already been admitted to an examination, he or she shall be deemed to have been failed in such examination and any certificate granted to him or her as a result of his or her having been declared to have passed such examination, shall be forthwith recalled and be cancelled.

SYLLABUS/CURRICULUM FOR THE EXAMINATION

Syllabus for the three written examination papers on which the candidates shall be assessed are as given below:

A candidate in order to be qualified for a certificate of proficiency under these rules, shall, satisfy the examiner that he-

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- a) can calculate loads, areas, volumes, quantities and weights;
- b) can give description of the principal types of steam boilers used on land and to 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 boiler in accordance with the Indian Boiler Regulations;
- c) can 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) understands the working and management of steam boilers, super heaters and economizers;
- e) understands the use and purpose of various valves, cocks, mountings, fitting and other safety devices;
- f) can give a 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) can answer questions on fact relating to combustion, heat and steam and 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 any land boiler and also calculate the overall efficiency of boiler plant;
- h) can explain jet and surface condensation, reheating and the working of steam expansion;

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- i) can explain the general methods employed in laying foundation for boilers and chimneys and the suitable area and height of chimneys to promote efficient combustion;
- j) can explain the 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) understands the need for 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) can detect defects in boilers and state the means and methods of rectifying them.
- m) understands the precautions to be taken for starting a boiler and economizer from cold or from banked fire condition;
- n) understands the procedure to be adopted in putting an economizer out of commission while the boiler is on steam;
- o) can explain the 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; and

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- q) can read and prepare a working sketch and drawing of boilers and boiler mounting or parts thereof.

SCHEME OF EXAMINATION

The examination shall be conducted in the following manner, namely:-

Written Examinations:

Paper-1 (Covering syllabus stipulated under sub-rule (a) to (h) of rule 31 as above)

Paper-2 (Covering syllabus stipulated under sub-rule (i) to (p) of rule 31 as above)

Paper-3 (Drawing examination covering sub-rule (q) of rule 31 as above)

Oral Examination (Viva-voce):

An oral examination to answer questions pertaining to boiler practices and if required by the examiner to demonstrate in the examination room or in a workshop, his ability to carry out the practical aspects of his duties in a Boiler House.

REQUIREMENTS FOR PASSING THE EXAMINATION

- a) A candidate shall secure at least forty-five per-cent (45%) of the marks in each written paper as well as in the oral and drawing examinations; but the aggregate should not be less than fifty per-cent (50%) of the total marks in order to qualify for award of certificate of proficiency.
- (b) A candidate securing less than forty- five per-cent (45%) of the marks in any written paper shall not be called for the oral examination.

SCHEDULE OF EXAMINATION

DATE	PAPER
11/03/2023	Paper-1(Written) & Paper -2 (Written)
12/03/2023	Paper-3 (Drawing)
27/04/2023, 28/04/2023 & 29/04/2023	Oral and Practical

ONLINE APPLICATION

Applicants shall visit the website www.fabkerala.gov.in to fill the online application form. The link for applying online will be available from 1st December 2022 to 31st December 2022.

REQUIREMENTS OF PHOTOGRAPH AND SIGNATURE TO BE UPLOADED ALONG WITH THE APPLICATION

PHOTOGRAPH:

1. Please upload only good quality (not blurred) photograph.
2. A passport size (3.5 cm width and 4.5 cm height) photograph of the face of the candidate is required for the application form.
3. The photograph must be recent, in COLOUR with WHITE background. Photographs taken using a mobile phone and other self-composed portraits may result in rejection of the application.
4. Face in the photo MUST NOT be covered with any foreign objects (except spectacles with power). Sunglasses, caps, Hats, Coloured glasses, Mask etc. are NOT allowed.
5. Upload image of your photo in jpeg format of the size not exceed 100 KB.
6. Background of the photograph MUST be WHITE colour.
7. The photograph MUST have full-face view looking into the camera directly.

SIGNATURE:

1. Upload image of your clear signature in jpeg format of size not be exceed 50 KB.
2. Sign with Black or Blue color ink only.

INSTRUCTIONS TO FILL THE EXPERIENCE CUM CONDUCT CERTIFICATE:

1. The Applicant must produce the duly filled experience certificate in the prescribed format given along with the notification (Experience Certificate Format is also available in the Official website of the Department of Factories and Boilers, Government of Kerala, www.fabkerala.gov.in).
2. The Applicant shall upload the scanned copy of Original Experience certificate duly signed by the Signatories of the Factory and Countersigned by the Inspector of Factories & Boilers/ Joint Director of the Kerala State or from Chief Inspector of Boilers/Deputy Chief Inspector of Boilers/Inspector of Boilers for the candidates of other states in **pdf** format. (Size not to exceed **1 MB**)
3. All Fields in the Experience Certificate must be completely filled. Incomplete Experience certificate will not be considered.
4. The Experience Certificate shall clearly state that it has been issued for the purpose of appearing for the Boiler Operation Engineer's Examination 2022 conducted by Department of Factories and Boilers, Government of Kerala.
5. Experience cum conduct certificate shall be in one page. If it is in more than one page, countersignature is necessary in all the pages.

EXAMINATION FEE

Rs. 2,000/- (Rupees Two thousand only) for all candidates. The fee shall be paid through online mode while filling the application form. **Fee once paid is not refundable or adjustable under any circumstances in future.**

DOCUMENTS TO BE SUBMITTED IN HARD COPY AFTER SUBMISSION OF THE ONLINE APPLICATION

1. Print out of the Form-A application with Original of the part IV signed by the applicant in presence of any Gazetted officer with his signature, Name and Designation seal. The Photocopy of Part IV of the application will not be considered under any circumstances.
2. Self-attested Copy of degree/diploma certificate to prove educational qualification of the applicant.
3. Self-attested Copy of the experience-cum-conduct certificate in the prescribed format counter signed by the Inspector of Factories & Boilers/Joint Director of the Kerala State or from Chief Inspector of Boilers/Deputy Chief Inspector of Boilers/Inspector of Boilers for the candidates of other states.
4. Self-attested Copy of original Document/Certificate to prove the age of the applicant.

5. Two copies of recent passport size photographs one of which shall bear the signature of the applicant on the back.
6. All original testimonials/documents to prove age, qualification, experience and conduct should be produced at the time of examination/interview.
7. Hard Copy of the Application along with the Self Attested Copies of Documents/Certificates mentioned above along with Two copies of recent passport size photographs shall be forwarded to **The Secretary, Board of Examiners, Suraksha Bhavan, Office of the Director of Factories and Boilers Near A.J. Hall, Kumarapuram, Medical College P.O. Thiruvananthapuram – 695 011, Kerala** on or before **11-01-2023, 5 pm. Late Applications will not be considered under any circumstances.**
- 8) Hardcopy of the Application submitted without the online submission of the Application will not be considered and **will be summarily rejected.**

IMPORTANT DATES TO REMEMBER

1	ONLINE SUBMISSION OF APPLICATION BEGINS	*01/12/2022
2	LAST DATE OF SUBMISSION OF ONLINE APPLICATION	*31/12/2022
3	LAST DATE OF RECEIPT OF HARD COPIES OF ONLINE APPLICATION	*11/01/2023 till 5 pm
4	DATE OF WRITTEN & DRAWING EXAMINATION	*11th & 12th March 2023
5	DATE OF ORAL & PRACTICAL EXAMINATION	*27th, 28th & 29th April 2023
6	DATE OF PUBLICATION OF RESULT	29th April 2023

*Above dates are tentative and are liable to change.

POINTS TO REMEMBER

1. Submission of the online application along with scanned copies of original testimonials/documents and hard copy of the original application along with self-attested copies of testimonials/documents are mandatory; otherwise the applications will be summarily rejected without any prior notice.
2. Applications without signature of applicant and signature and Name & Designation seal of any Gazetted officer in Part IV will be summarily rejected without any prior notice. The Original of the duly signed Part IV has to be submitted along with the hardcopy of application.
3. Experience cum conduct certificates must be countersigned by the Inspector of Factories & Boilers/Joint Director of Factories & Boilers of the Kerala State of Kerala for applicants from Kerala or from Chief Inspector of Boilers/Deputy Chief Inspector of Boilers/Inspector of Boilers for the applicants of other States, otherwise the applications will be summarily rejected without any prior notice. Experience cum conduct certificate shall be in one page. If it is in more than one page, countersignature is necessary in all the pages.
4. Online submission of application without the payment of fees will not be considered.
5. Applicants, whose applications are rejected, will not be intimated separately.

EXPERIENCE-CUM-CONDUCT CERTIFICATE FORMAT

ABILITY, CONDUCT AND EXPERIENCE CERTIFICATE

Name of Employee :
Staff No. :
Designation :
Date of Birth (DD/MM/YY) :
Educational Qualification :
Name and Address of the firm :
Date of Joining in the firm :
Date of issue of certificate :

Details of Experience in Boiler

This is to certify that Sri./Smt..... is/was working in this organization in the capacity as (designation) from to He/She is/was attending the Boiler/Boilers of this organization and has acquired necessary skill and responsibility in Operating and Maintaining the Boiler/Boilers, particulars of which are given below.

Details of Boilers

Name of Organization	Registration No./Nos. of Boilers	Make	Rating (Heating Surface, m ²)	Working Pressure (kg/cm ²)	Capacity (TPH)	Type	Fuel used

Sri/Smt..... (Occupier's Name) has no objection to the above employee appearing for the Boiler Operation Engineer's Examination 2022 conducted by Department of Factories and Boilers, Government of Kerala.

Certified that the best of our knowledge and belief, Sri./Smt..... bears good character and conduct.

Signature of the owner or agent of the Mill, Factory or Workshop

Signature and name of the person under whom the candidate was employed

Counter signed by Deputy Chief Inspector of Boilers/Joint Director of Factories and Boilers/Inspector of Boilers/Inspector of Factories and Boilers (.....State)