



INLAND WATERWAYS AUTHORITY OF INDIA
(A Statutory Body under Ministry of Shipping, Govt. of India)
Head Office A-13 ,Sector -1, Noida, U.P -201301

Brief Employment Notice no : IWAI/ R&T/ 10/2018

Dated: 15/11/2018

Inland Waterways Authority of India invites applications for filling up of the below mentioned posts, in the level of pay matrix as per 7th CPC mentioned against them, on direct recruitment :

S.N/ Cat. No	Name of post	Pay-scale	No of post (*)
F7	Inland Dredge Master	level 7 in the pay matrix as per 7 th CPC, and pre-revised Pay Band –II of Rs. 9300-34800/- + Grade Pay Rs.4600/-	04 (UR-3, OBC-1)
F8	Licence Engine Driver	level 6 in the pay matrix as per 7 th CPC, and pre-revised Pay Band –II of Rs. 9300-34800/- + Grade Pay Rs.4200/-.	02 (UR-1, OBC-1)
F9	Dredge Control Operator	level 6 in the pay matrix as per 7 th CPC, and pre-revised Pay Band –II of Rs. 9300-34800/- + Grade Pay Rs.4200/-.	07 (UR-5, OBC-1, SC-1)
F10	Master 2 nd class	level 4 in the pay matrix as per 7 th CPC, and pre-revised Pay Band –IV of 5200-20200/- + Grade Pay Rs.2400/-.	10 (UR-7, OBC-2, SC-1)
F11	Driver 1 st class	level 4 in the pay matrix as per 7 th CPC, and pre-revised Pay Band –I of 5200-20200/- + Grade Pay Rs.2400/-.	18 (UR-8, OBC-5, SC-3, ST-2)
F12	Master 3 rd class	level 4 in the pay matrix as per 7 th CPC, and pre-revised Pay Band –IV of 5200-20200/- + Grade Pay Rs.1900/-.	5 (UR-3, OBC-2)

(*) - The vacancy shown against above mentioned posts is tentative and may increase or decrease , depending on the requirement of Authority

Interested candidates possessing requisite qualifications and experience may submit their applications to Assistant Secretary (R&T), IWAI, Noida; so as to reach within 30 days from the date of publication of this advertisement in Employment News, or by 21 /12/2018, whichever is later. Complete details and prescribed format of application may be seen under the head “vacancy” of the website of IWAI www.iwai.nic.in.

**Sd/-
SECRETARY**



INLAND WATERWAYS AUTHORITY OF INDIA
A Statutory Body under Ministry of Shipping
Govt. of India , Head Office A-13 ,Sector -1, Noida, U.P -201301

Employment Notice no : IWAI/ R&T/ 10/2018 Dated: 15/11/2018

IWAI invites application from the Indian nationals for filling up the following posts on direct recruitment basis :

Post Code	Name of Post	Pay-scale	No. of Post (*)
F7	Inland Dredge Master	Level 7 in the pay matrix as per 7 th CPC, and pre-revised Pay Band II of Rs. 9300-34800 + Grade pay of Rs. 4600/-	04 (UR-3, OBC-1)
(*) - The vacancy shown against above mentioned posts is tentative and may increase or decrease ,depending on the requirement of Authority.			

Essential Qualification :

- I) Matriculation Pass Certificate or equivalent from a recognized Board/ University.
II) Having 5 years experience in operation of Dredgers with certificate of competency as Driver 1st Class or as Licence Engine Driver or as Master 1st class; OR
Petty Officer from Technical Branch of Indian Navy or equivalent with 2 years experience in operation & maintenance of the dredgers; OR
SR II certificate holders with a minimum of 3 years experience in operation & maintenance of Dredgers OR
Diploma in Mechanical Engineering with 05 years experience in operation and maintenance of Dredgers.

Age limit : Not exceeding 30 year as on 21/12/2018 i.e closing date of receipt of application (Relaxable for Govt servants/ employees of Autonomous/ Statutory organization/ PSUs upto 5 years in accordance with the instructions/ orders issued by the Central Government).

Post Code	Name of Post	Pay-scale	No. of Post (*)
F8	Licence Engine Driver	Level 6 in the pay matrix as per 7 th CPC, and pre-revised Pay Band II of Rs. 9300-34800 + Grade pay of Rs. 4200/-	02 (UR-1, OBC-1)
(*) - The vacancy shown against above mentioned posts is tentative and may increase or decrease ,depending on the requirement of Authority.			

Essential Qualification :

- i) Matriculation Certificate or equivalent from a recognized Board/ University
ii) Certificate of competency as Licence Engine Driver.
iii) Should know Swimming.

Desirable :

Preference will be given to Ex-Serviceman / Coast Guard/ Para-Military forces personnel with the required certificate of service issued by the Competent Authority

Age limit : Not exceeding 30 year as on 20/12/2017 (Relaxable for Govt servants/ employees of Autonomous/ Statutory organization/ PSUs upto 5 years in accordance with the instructions/ orders issued by the Central Government).

Post Code	Name of Post	Pay-scale	No. of Post (*)
F9	Dredge Control Operator	Level 6 in the pay matrix as per 7 th CPC, and pre-revised Pay Band II of Rs. 9300-34800 + Grade pay of Rs. 4200/-	07 (UR-5, OBC-1, SC-1)
(*) - The vacancy shown against above mentioned posts is tentative and may increase or decrease ,depending on the requirement of Authority.			

Essential Qualification :

- i) Matriculation Pass Certificate or equivalent from a recognized Board/ University.
ii) Certificate of competency as Driver 1st Class or as Licence Engine Driver with 10 years experience in the grade. OR
Petty Officer from Technical Branch of Indian Navy having one year experience in the Grade; OR
Diploma In Mechanical /Electrical Engg. with experience of one year in operation of Dredgers AND
iii) Knowledge of Swimming

Desirable : Experience in operation and maintenance of Dredgers. Preference will be given to Ex-Servicemen/ Coast Guard/ Para-Military forces personnel with the required Certificate of Service issued by the Competent Authority .

Age limit : Not exceeding 30 year as on 20/12/2017. (Relaxable for Govt servants/ employees of Autonomous/ Statutory organization/ PSUs upto 5 years in accordance with the instructions/ orders issued by the Central Government).

Post Code	Name of Post	Pay-scale	No. of Post (*)
F10	Master 2 nd Class	Level 4 in the pay matrix as per 7 th CPC, and pre-revised Pay Band I of Rs. 5200-20200 + Grade pay of Rs. 2400/-	10 (UR-7, OBC-2, SC-1)
(*) - The vacancy shown against above mentioned posts is tentative and may increase or decrease , depending on the requirement of Authority.			

Essential Qualification :

- i) Certificate of competency as Master 2nd Class.
ii) Know swimming.

Age limit : Not exceeding 35 year as on 20/12/2017.

Post Code	Name of Post	Pay-scale	No. of Post (*)
F11	Driver 1 st Class	Level 4 in the pay matrix as per 7 th CPC, and pre-revised Pay Band I of Rs. 5200-20200 + Grade pay of Rs. 2400/-	18 (UR-8, OBC-5, SC-3, ST-2)
(*) - The vacancy shown against above mentioned posts is tentative and may increase or decrease ,depending on the requirement of Authority.			

Essential Qualification :

- i) Certificate of competency as Driver 1st Class.
ii) Know swimming.

Age limit : Not exceeding 35 year as on 20/12/2017.

Post Code	Name of Post	Pay-scale	No. of Post (*)
F12	Master 3 rd Class	Level 2 in the pay matrix as per 7 th CPC, and pre-revised Pay Band I of Rs. 5200-20200 + Grade pay of Rs. 1900/-	05 (UR-3, OBC-2)
(*) - The vacancy shown against above mentioned posts is tentative and may increase or decrease ,depending on the requirement of Authority.			

Essential Qualification :

- i) Certificate of competency as Master 3rd Class (Sarang) .
- ii) Know Swimming.

Age limit : Not exceeding 30 year as on the closing date of receipt of application.

GENERAL INFORMATION:-

- 1) The Authority is following Central Govt. Rules & Regulations in service matters. Leased accommodation and medical reimbursement are provided as per rules of the Authority.
- 2) The vacancy shown against above mentioned posts is tentative and may increase or decrease depending on the requirement of Authority. **Relaxation in the maximum age limit for OBC, SC, ST and Ex-serviceman is admissible as per Government norms.**
- 3) **The age-limit for the post / Post code F8 to F11 shall be reckoned on 20/12/2017**, as the vacancies for the aforesaid post are the consequential action on the cancellation of selection process, notified in Exam Notification no IWAI/R&T/2.D/2018 dated 12.10.2018, on the same, advertised in the earlier advertisement contained in Emp. Notice no IWAI/SRC/5/2017 dated 16/10/2017 . **However, the closing date of receipt of application for the post / post code of Inland Dredge Master (F7) and Master 3rd Class (F12) shall be reckoned on 21/12/2018.**
- 4) The post has all India transfer liability; candidate selected for the above mentioned may be posted in the Regional offices of Patna / Guwahati / Kolkata / Kochi and other sub-offices of IWAI at Varanasi, Allahabad, Farakka, Sahebganj, Vijayawada, Kollam, Chennai and other regional offices / sub-offices likely to be opened in future.
- 5) **The eligible applicants shall be required to attend the trade test / swimming test, in terms of the eligibility criteria, at Kolkata / Patna, tentatively in the 3rd/ 4th week of January'2019 , for which call letter / admit card shall be sent to all eligible applicants. The syllabus of the trade test shall be of the standard of prescribed eligibility criteria stipulated in the advertisement.**
- 6) **The list of eligible applicants and progress on the selection process shall be updated in the website of IWAI and hence no telephonic inquiry shall be entertained. Candidates are advised to regularly check the website of IWAI viz www.iwai.nic.in for the updated information.**
- 7) Mere possession of essential qualifications will not entitle a candidate to be selected for the post. The decision of the Authority as to the eligibility of a candidate shall be final and no correspondence in this regard will be entertained.
- 8) **The process of interview has been done away and hence category wise merit list shall be prepared only on the basis of performance in the Written Test and Trade test, in accordance with the prescribed eligibility criteria stipulated in the advertisement. However candidates have to qualify in the Swimming Test for all floating posts, in order to be eligible for appearing in Written Test and Job Performance Trade Test, as per detailed selection process mentioned at para-9 . Actual schedule of selection process shall be notified in the website of IWAI, in due course of time and Call letter/ Admit card for attending selection process shall be sent to all eligible candidates by registered / speed post.**

9) Selection process: The Selection process shall involve the following three stages:

I) Swimming Test:	Qualifying & do not carry any marks.
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The 1st stage of selection process shall involve the conduct of Swimming Test of the following component:

- Swimming / any stroke- of 50 meter.
- Floating test – of 10 minutes.
- Jump – 03 meters

The Swimming test shall be qualifying in nature and those candidates who qualify in the Written test shall be allowed in the subsequent selection process viz written test and Job Proficiency trade test.

II) Written Test :	Maximum marks: 60
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In the 2nd stage of selection process, there shall be written tests of one hour duration for ascertaining the suitability of post-wise applicants for the above mentioned posts separately,; written test (Q.P to set up bilingual in English and Hindi) shall carrying maximum of 60 marks and shall consist of 60 objective multiple choice questions of one mark each , having two section viz Section A & Section B; Section ‘A’ shall comprise of 45 question of technical / skill based in nature and some question on experience, covering the topics on the skill based relevant eligibility criteria attached to the post as per prescribed syllabus at para-3 ; And Section “B” of 15 Questions shall be from the General awareness and Arithmetic, of the standard of class-X / High Secondary school examination of CBSE .

The Qualifying marks for Written Test for the Candidates for the above-mentioned posts shall be as under:

- For General candidates – 30 % of total marks i.e 18 marks out 60 marks
- For OBC candidates - 25% of total marks i.e 15 marks out 60 marks
- For SC/ST candidates – 20% of total marks i.e 12 marks out 60 marks

Candidates qualifying in the Written Test shall only be allowed to appear in the 3rd stage of selection process i.e Job Performance Trade Test .

III) <u>Job Proficiency Trade test</u>	Maximum marks: 40
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Those Candidate who are qualified in the Written Test , securing minimum qualifying marks, shall be allowed to appear in the this stage of Selection process. The performance of all candidates on the same shall be assessed by Selection Committee.

Combined performance of candidate in the written test and Trade test shall be ascertained by Selection Committee and based upon the same, post-wise merit list shall be prepared and recommended by the Committee for appointment to various floating posts (F7 to F13).

10) SYLLABUS OF WRITTEN EXAMINATION :

The post-wise syllabus of Written exam for selection to various floating posts are as detailed below :

POST NAME / POST CODE	LICENCE ENGINE DRIVER / F8
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ELEMENTARY MATHEMATICS:

Addition, Subtraction, Multiplication, Division, Decimals and Vulgar Fraction.

- (a) Power and roots of numbers, Ratio and proportion, Percentages, Direct and Inverse Variation, Averages.
- (b) Areas and perimeters of a rectangle, triangle and circle, Volumes and Surface areas of box shaped bodies, cylinders pyramids, cones and spheres, Simpson's first and second rules, practical applications involving use of the above. To find out the area of water planes and displacement of boats at different draughts in sea water and fresh water by Simpson's rules as well as by using area co-efficient and prismatic coefficient.
Solutions of simple equation, involving use of given formulae, rearrangement of given formulae.
- (c) To calculate the T.P.I. in sea water and fresh water.
- (d) Difference of draughts when boat moves from sea water to fresh water or vice-versa. (g) To find out the carrying capacity of the boat.

ENGINEERING KNOWLEDGE:

SECTION-A (GENERAL)

(i) Fundamental Units, (ii) Density and specific density, (iii) Parallelogram of forces, (iv) The Triangle of Forces, (v) Momentas and levers, (vi) Parallel forces, (vii) Centre of gravity, (viii) Stress and strain, (ix) Friction, (x) Work, (xi) Temperature scales, (xii) Quantity of heat and specific heats (xiii) Quantity of Electricity and Farad's Laws of Electrolysis, (xiv) Resistivity, (xv) a. Ohm's Law,

b. The measurement of resistance by the Ammeter/Voltmeter Method.

SECTION-B: MARINE ENGINEERING:

- (i) Principal of working construction operation and maintenance of two stroke and four stroke internal combustion engines (Supercharged and naturally aspirated) used on board ship, with particular reference to starting and reversing arrangements and safety devices.
- (ii) General used and application of various materials used in machinery on board of Inland Vessels.
- (iii) The construction, use and principles involved in the action of pressure gauge, thermometer, pyrometer and other measuring instruments commonly used on boards ships.
- (iv) Construction, operation and maintenance of centrifugal bucket and gear type pumps.
- (v) Lay-out and creation of bilge, ballast and fuel systems.
- (vi) Construction, operation and maintenance of steering gears.
- (vii) Lay out and working of electric light and electric power installation with particular reference to safety devices.
- (viii) Construction and care of staring air vessels including mountings.
- (ix) Construction and operation of refrigerating plant.
- (x) Estimation and fuel, lubricating oil and water consumption for given voyage.
- (xi) Work related to dry docking, including propeller, tail, shaft, rudder, sea connections, stern tube, shaft bracket.
- (xii) Elements of boat construction.

- (xiii) Precautions against fire and explosions due to oil vapour or gas, flash point.
The danger of oil leakage precautions while bunkering.
- (xiv) Explosion in crank cases and starting air systems.
- (xv) Construction, operation and maintenance of fire fighting appliances.
- (xvi) Knowledge of statutory requirements concerning safety.
- (xvii) Candidates will be expected to draw free hand sketches of machine and engine parts.
- (xviii) Preparation of defect list and procedure of maintaining engine log book.
- (xix) Use and maintenance of life saving appliances.

ENGINEERING DRAWING :

Use of drawing instruments, reading of blue prints, production of working drawing of machine and engine parts.

POST NAME / POST CODE	DREDGE CONTROL OPERATOR / F7 & INLAND DREDGE MASTER / F9
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Topics for Basic Dredging	
1	Dredge types, Techniques and Constraints
2	Layout of different dredger and their Equipment
3	Introduction to Pumps
4	Introduction to hydraulics
5	Dredging and different types of dredgers
6	Dredger types, techniques and constraints
7	Layout of different dredger and their Equipment
8	Pumps Performance
9	Introduction of hydraulics
10	TSHD introduction & work method
11	Backhoe introduction & work Method
12	CSD introduction & Work Method
13	Transfer / Transportation f Dredge Material
14	Calculation of Output and Dredger Safety
15	Grab Dredge introduction & work method
16	Types of Soil and Dredger Types

CHAPTER 01**LEGISLATION**

- The Inland Vessel Act 1917 as amended in 2007
Prevention and Control of Pollution and
Protection of Inland Waters
- Investigation into Causalities
- Suspension and Cancellation of Certification
granted under the Act

CHAPTER 02**THE INLAND WATERWAYS AUTHORITY OF
INDIA (IWAI)**

- IWAI – Responsibility And Functions
- National Waterways Act 1985

CHAPTER 03**COMPASS WORK****CHAPTER 04****STEERING INLAND VESSEL****CHAPTER 05****NAVIGATION**

- National Waterways Safety of Navigation &
Shipping Regulation 2002
- Marking the Waterways
- Specification of Life Saving Appliances
- Stowage and Handling of Life Saving
Appliances

CHAPTER 06**STORM SIGNALS TIDAL SEMAPHORE**

- Storm Signal
International code of Signals
(Intereo)
- Flag Signaling
- Morse Signaling
 - Single Letter Signals

CHAPTER 07**RIVER KNOWLEDGE****CHAPTER 08****TIDES****CHAPTER 09****LIGHTS, SOUND SIGNALS AND PREVENTION
OF COLLISION STEERING AND SAILING****CHAPTER 10****PROTECTION OF AND CARRAGE OF
PASSENGER INLAND VESSEL**

<u>CHAPTER 11</u>	<u>LIFE SAVING APPLIANCES TO BE CARRIED</u>	<u>ON BOARD</u>
	<u>INLAND VESSELS</u>	
<u>CHAPTER 12</u>	<u>INLAND VESSELS AND FIREFIGHTING</u>	<u>EQUIPMENTS</u>
<u>CHAPTER 13</u>	<u>PASSENGER ACCOMODATION</u>	
<u>CHAPTER 14</u>	<u>STABILITY</u>	
<u>CHAPTER 15</u>	<u>LEADLINE</u>	
<u>CHAPTER 16</u>	<u>CARGO WORK</u>	
	<ul style="list-style-type: none"> • Loading of Iron Ore • Loading of Coal • Loading of Fly Ash • Loading of Cement • Loading Over Dimension Cargo • Loading of Petroleum Products • Loading of Container 	
<u>CHAPTER 17</u>	<u>EMERGENCY PROCEDURES ON GROUNDING</u>	
<u>CHAPTER 18</u>	<u>BRIDGE EQUIPMENTS</u>	
	<ul style="list-style-type: none"> • Echosounder • Auto Pilot • Log 	
	<u>RADAR & ARPA</u>	
	<ul style="list-style-type: none"> • GPS & DGPS • VHF • Anemometer 	

POST NAME / POST CODE	ENGINE DRIVER 1st CLASS / F11
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1. ELEMENTARY MATHEMATICS:

- a) Addition, Subtraction, Multiplication, Division, Decimals and Vulgar Fraction.
- b) Power and roots of numbers, Ratio and proportion, Percentages, Direct and Inverse Variation, Averages.
- c) Areas and Perimeters of a rectangle, triangle and circle, Volumes and Surface areas of box shaped bodies, cylinders pyramids, cones and spheres, Simpson's first and second rules, to find out the area of water planes and displacement of boats and different draughts in sea/river/canal water by Simpson's rules as well as by using area co-efficient and prismatic co-efficient.
- d) Solution of simple equation, involving use of given formulae, rearrangement of given formulae.
- e) To calculate the T.P.I (Total Pressure Index) in sea water and fresh water.
- f) To find out the carrying capacity of the boat.

2. ENGINEERING KNOWLEDGE:

- (I) Fundamental Units. (II) Density and Specific Density. (III) Parallelogram of forces.

(IV) The Triangle of Forces. (V) Moments and Levers. (VI) Parallel Forces. (VII) Centre of Gravity. (VIII) Stress and Strain .(IX) Friction. (X) Work. (XI) Temperature Scale (XII) Quantity of Heat and Specific Heat. (XIII) Quantity of Electricity and Farada's Laws of Electrolysis. (XIV) Resistivity.(XV) Ohm's Law. (XVI) The Measurement of Resistance by the Ammeter Voltmeter Method.

SECTION B: MARINE ENGINEERING:

- (a) Working principle of Marine Engine.
- (b) Difference in between Internal Combustion Engine and External Combustion Engine.
- (c) Name of Principal part of Machinery's.
- (d) Knowledge of what attention id required by the various part of the machinery, use and maintenance of valves, cocks pipes and connections, and familiar with the various methods of supplying air and fuel to the cylinders.
- (e) Cause of defects and their rectification.
- (f) Complete overhauling of the Marine Engines.
- (g) Nature of the properties of the various fuel used in internal combustion engines.
- (h) Precautions against fire and explosions due to oil vapour or gas, flash point. The danger of oil leakage, precautions while bunkering.
- (i) Construction, operation and maintenance of fire fighting appliances.
- (j) Lay out and working of electric light installation and battery installations.
- (k) Dry docking including repairs to the propeller, tail shaft rudder and sea connections, stern tubes, shaft brackets.
- (l) Alignment of Shaft.
- (m) Calculations pertaining to speed, consumption of fuel and fresh water for a given voyage. Arrangements for pumping out oil gas.
- (n) Preparation of defect list.
- (o) Utilization and maintenance of life saving appliances.
- (p) Able to draw free hand sketches or machine and engine parts.
- (q) Maintaining procedure or engine log book.

ENGINEERING DRAWING:

Use of drawing instruments, reading of blue prints and able to draw the sketches or various parts of the engine.

11) Outstation candidates, if called for the interview shall be paid 2nd class / Sleeper class rail fare for to and fro journey by the shortest route, provided that candidate need to travel mote than 250 km distance and subject to the production of proof of journey. Candidates claiming T.A may also be required to produce a certificate of unemployment from an M.P or MLA or Gazetted officer of the place where the candidate normally reside.

12) Canvassing in any form shall be a ground for disqualification.

13) The interested candidates may send their application, within a period of 30 days (**closing/ last date of submission / receipt of application: 21/12/2018**) , from the date of publication of this advertisement in Employment News, in a closed envelope superscribing "**Application for the post of on direct recruitment against Employment Notice No. IWAI/R&T/10/2018 dated 15/11/2018**" to the Assistant Secretary (R&T), Inland Waterways Authority of India, A-13, Sector-1, Noida-201 301 (U.P.) along with self-attested copies of certificates, testimonials in support of the eligibility criteria of the post applied, as stipulated in the advertisement.

**Sd/-
Secretary**



INLAND WATERWAYS AUTHORITY OF INDIA
(A Statutory Body under Ministry of Shipping, Govt. of India)
Head Office A-13 ,Sector -1, Noida, U.P -201301

Emp. Notice No : IWAI/SRC/ 10/2018 dated 15/11/2018

PROFORMA
APPLICATION FOR THE POST OF
Post Code : _____

1. Name in full (in Block Letters) :
2. Father's/Husband's Name :
3. Address for communication :
(with Pin Code , Telephone number & Email ID)
4. Permanent Address :
5. (a) Date of Birth (in Christian era) :
(b) Age as on closing date of application :
6. Nationality :
7. Whether belongs to SC/ST/OBC/Ex-Serviceman/PH :
9. Whether working in any Central/State/UT/Autonomous body/PSU/Port Organization/Semi-Govt. :
10. Educational/Professional Qualifications (kindly indicate and enclose copy
11. Experience : (including present employment)

Paste Passport
size photo duly
attested

S. No	Name of Employer	Designation of The post held & nature of appointment	Pay scale/ Salary(CDA/ IDA)	Date of Joining	Date of Leaving and Reasons for leaving	Nature of Duties performed

12. Languages known :
13. Any other information such as experience, training, publication etc. in support of suitability for the post :

UNDERTAKING

14. I hereby solemnly declare that the information given above is true and correct to the best of my knowledge and belief.

Place:

Date :

SIGNATURE OF THE APPLICANT