

**Scientist 'F' (Basic Pay: Rs. 1,31,100/- , Level 13A as per 7th CPC) – 02 Vacancies**

Item No.	No. of Vacancies	Subject/ Discipline	Qualifications & Experience	Equivalent acceptable subjects of Essential Qualification
1	01	Naval Architecture / Marine / Civil Engineering *	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering. or Technology in <b>Naval Architecture / Marine / Civil Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 13 years'</b> experience in research or design or development or production of marine structures.</p> <p><b>Desirable:</b></p> <p>(i) PG Diploma in Naval Construction is preferred.</p> <p>(ii) Master's Degree in Engineering or Technology in Ocean Engineering / Naval Architecture / Metallurgy / Material Science / Corrosion Science.</p> <p>(iii) Experience of working in ship lift facility / docking facility.</p> <p>(iv) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology or Management in relevant field.</p> <p>(v) Knowledge of German, French, Russian, Japanese or Chinese.</p> <p>(vi) Four years' experience in Research and Development Management to manage and coordinate science and technology related activities in the area of Project Management or Material Management or Resource Management or Organisational Development.</p>	<ol style="list-style-type: none"> <li>1. Naval Engg</li> <li>2. Naval Architecture &amp; Ocean Engg</li> <li>3. Naval Architecture &amp; Offshore Engg</li> <li>4. Naval Architecture &amp; Marine Engg</li> <li>5. Naval Architecture and Shipbuilding</li> <li>6. Oceanography Engg</li> <li>7. Civil &amp; Structural Engg</li> <li>8. Civil &amp; Environmental Engg</li> <li>9. Civil &amp; Rural Engg</li> <li>10. Civil &amp; Water Management Engg</li> <li>11. Civil &amp; Infrastructure Engg</li> <li>12. Construction Engg &amp; Management</li> <li>13. Any other relevant discipline with qualifying essential degree which mentions 'Naval' or 'Marine' or 'Civil' as the main discipline</li> </ol>
2	01	Computer Science & Engineering *	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Computer Science &amp; Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 13 years'</b> experience in research or design or development or production in one or more of the following relevant fields.</p> <p>(a) Software Design &amp; Development</p> <p>(b) Network &amp; cyber Security Administration</p> <p><b>Desirable:</b></p> <p>(i) Minimum three years of experience in leading a Team for Software Design and Development / Network &amp; Cyber Security Administration / Database Administration.</p> <p>(ii) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology or Management in relevant field.</p> <p>(iii) Knowledge of German, French, Russian, Japanese or Chinese.</p> <p>(iv) Four years' experience in Research and Development Management to manage and coordinate science and technology related activities in the area of Project Management or Material Management or Resource Management or Organisational Development.</p>	<ol style="list-style-type: none"> <li>1. Computer Science/Engg &amp; Information Technology</li> <li>2. Computer Science &amp; System Engg</li> <li>3. Software Engg/ Technology</li> <li>4. Computer Science &amp; Automation Engg/ Tech</li> <li>5. Information Technology</li> <li>6. Computer Science/Technology &amp; Informatics Engg/Tech</li> <li>7. Information Science &amp; Engg/Technology</li> <li>8. Computer &amp; Communication Engg</li> <li>9. Computer Networking</li> <li>10. Any other relevant discipline with qualifying essential degree which mentions 'Computer Science' as the main discipline</li> </ol>

**Scientist 'E' (Basic Pay: Rs. 1,23,100/- , Level 13 as per 7<sup>th</sup> CPC) – 14 Vacancies**

Item No.	No. of Vacancies	Subject/ Discipline	Qualifications & Experience	Equivalent acceptable subjects of Essential Qualification
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3	01	Naval Architecture / Marine / Civil Engineering *	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Naval Architecture / Marine / Civil Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 10 years'</b> experience in research or design or development or production of marine structures.</p> <p><b>Desirable:</b></p> <p>(i) PG Diploma in Naval Construction is preferred.</p> <p>(ii) Master's Degree in Engineering or Technology in Ocean Engineering / Naval Architecture / Metallurgy / Material Science / Corrosion Science.</p> <p>(iii) Experience of working in ship lift facility / docking facility.</p> <p>(iv) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology or Management in relevant field.</p> <p>(v) Knowledge of German, French, Russian, Japanese or Chinese.</p> <p>(vi) Three years' experience in Research and Development Management to manage and coordinate science and technology related activities in the area of Project Management or Material Management or Resource Management or Organisational Development.</p>	<ol style="list-style-type: none"> <li>1. Naval Engg</li> <li>2. Naval Architecture &amp; Ocean Engg</li> <li>3. Naval Architecture &amp; Offshore Engg</li> <li>4. Naval Architecture &amp; Marine Engg</li> <li>5. Naval Architecture and Shipbuilding</li> <li>6. Oceanography Engg</li> <li>7. Civil &amp; Structural Engg</li> <li>8. Civil &amp; Environmental Engg</li> <li>9. Civil &amp; Rural Engg</li> <li>10. Civil &amp; Water Management Engg</li> <li>11. Civil &amp; Infrastructure Engg</li> <li>12. Construction Engg &amp; Management</li> <li>13. Any other relevant discipline with qualifying essential degree which mentions 'Naval' or 'Marine' or 'Civil' as the main discipline</li> </ol>
4	01	Electronics & Communication / Electronics & Tele-communication / Electronics & Instrumentation / Instrumentation & Control	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Electronics &amp; Communication / Electronics &amp; Tele-communication / Electronics &amp; Instrumentation / Instrumentation &amp; Control</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 10 years'</b> experience in networking and system integration.</p> <p><b>Desirable:</b></p> <p>(i) Experience of working on sensors.</p> <p>(ii) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology or Management in relevant field.</p> <p>(iii) Knowledge of German, French, Russian, Japanese or Chinese.</p> <p>(iv) Three years' experience in Research and Development Management to manage and coordinate science and technology related activities in the area of Project Management or Material Management or Resource Management or Organisational Development.</p>	<ol style="list-style-type: none"> <li>1. Electronics Engg</li> <li>2. Electronics &amp; Computer Engg</li> <li>3. Electronics &amp; Control Engg.</li> <li>4. Electronics &amp; Communication System Engg</li> <li>5. Electronics &amp; Telematics Engg</li> <li>6. Industrial Electronics Engg</li> <li>7. Tele Communication Engg</li> <li>8. Telecommunication &amp; Information Tech</li> <li>9. Applied Electronics &amp; Instrumentation Engg</li> <li>10. Electronics &amp; Electrical Communication Engg</li> <li>11. Electrical with Communication Engg</li> <li>12. Radio Physics &amp; Electronics</li> <li>13. Electrical Engg</li> <li>14. Electrical &amp; Electronics Engg</li> <li>15. Electronics &amp; Communication Engg (Avionics)</li> <li>16. Any other relevant discipline with qualifying essential degree which mentions 'Electronics' or 'Instrumentation' as the main discipline</li> </ol>
5	01	Mechanical Engineering	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Mechanical Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 10 years'</b> experience in research or design or development or production of boilers.</p> <p><b>Desirable:</b></p> <p>(i) Experience in operation and maintenance of Demineralized (DM) water plants and water chemistry.</p> <p>(ii) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology or Management in relevant field.</p> <p>(iii) Knowledge of German, French, Russian, Japanese or Chinese.</p> <p>(iv) Three years' experience in Research and Development Management to manage and coordinate science and technology related activities in the area of Project Management or Material Management or Resource Management or Organisational Development.</p>	<ol style="list-style-type: none"> <li>1. Mechanical &amp; Automation Engg</li> <li>2. Mechanical &amp; Production Engg</li> <li>3. Any other relevant discipline with qualifying essential degree which mentions 'Mechanical' as the main discipline</li> </ol>

6	01	Naval Architecture / Marine / Civil Engineering *	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Naval Architecture/ Marine/ Civil Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 10 years'</b> experience in research or design or development or production activities related to naval platforms.</p> <p><b>Desirable:</b></p> <p>(i) PG Diploma in naval Construction is preferred.</p> <p>(ii) Experience in submarine design and submarine construction activities.</p> <p>(iii) Experience in planning module of ERP.</p> <p>(iv) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology or Management in relevant field.</p> <p>(v) Knowledge of German, French, Russian, Japanese or Chinese.</p> <p>(vi) Three years' experience in Research and Development Management to manage and coordinate science and technology related activities in the area of Project Management or Material Management or Resource Management or Organisational Development.</p>	<ol style="list-style-type: none"> <li>1. Naval Engg</li> <li>2. Naval Architecture &amp; Ocean Engg</li> <li>3. Naval Architecture &amp; Offshore Engg</li> <li>4. Naval Architecture &amp; Marine Engg</li> <li>5. Naval Architecture and Shipbuilding</li> <li>6. Oceanography Engg</li> <li>7. Civil &amp; Structural Engg</li> <li>8. Civil &amp; Environmental Engg</li> <li>9. Civil &amp; Rural Engg</li> <li>10. Civil &amp; Water Management Engg</li> <li>11. Civil &amp; Infrastructure Engg</li> <li>12. Construction Engg &amp; Management</li> <li>13. Any other relevant discipline with qualifying essential degree which mentions 'Naval' or 'Marine' or 'Civil' as the main discipline</li> </ol>
7	01	Mechanical Engineering / Aeronautical	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Mechanical Engineering / Aeronautical</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 10 years'</b> experience in research or design or development or production activities related to naval platforms.</p> <p><b>Desirable:</b></p> <p>(i) PG Diploma in Naval Construction is preferred.</p> <p>(ii) Experience in submarine design and submarine construction activities.</p> <p>(iii) Experience in planning module of ERP.</p> <p>(iv) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology or Management in relevant field.</p> <p>(v) Knowledge of German, French, Russian, Japanese or Chinese.</p> <p>(vi) Three years' experience in Research and Development Management to manage and coordinate science and technology related activities in the area of Project Management or Material Management or Resource Management or Organisational Development.</p>	<ol style="list-style-type: none"> <li>1. Mechanical &amp; Automation Engg</li> <li>2. Mechanical &amp; Production Engg</li> <li>3. Aerospace Engg</li> <li>4. Aerospace Engg (Avionics)</li> <li>5. Any other relevant discipline with qualifying essential degree which mentions 'Mechanical' or 'Aeronautical' or 'Aerospace' as the main discipline</li> </ol>
8	01	Naval Architecture / Marine / Civil Engineering *	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Naval Architecture / Marine / Civil Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 10 years'</b> experience in research or design or development or production in Ship Design / Submarine Design / Refits / Overseeing.</p> <p><b>Desirable:</b></p> <p>(i) PG Diploma in Naval Construction is preferred.</p> <p>(ii) Master's Degree in Engineering or Technology / PhD in Ocean Engineering / Naval Architecture / Corrosion Science / Material Science.</p> <p>(iii) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology or Management in relevant field.</p> <p>(iv) Knowledge of German, French, Russian, Japanese or Chinese.</p> <p>(v) Three years' experience in Research and Development Management to manage and coordinate science and technology related activities in the area of Project Management or Material Management or Resource Management or Organisational Development.</p>	<ol style="list-style-type: none"> <li>1. Naval Engg</li> <li>2. Naval Architecture &amp; Ocean Engg</li> <li>3. Naval Architecture &amp; Offshore Engg</li> <li>4. Naval Architecture &amp; Marine Engg</li> <li>5. Naval Architecture and Shipbuilding</li> <li>6. Oceanography Engg</li> <li>7. Civil &amp; Structural Engg</li> <li>8. Civil &amp; Environmental Engg</li> <li>9. Civil &amp; Rural Engg</li> <li>10. Civil &amp; Water Management Engg</li> <li>11. Civil &amp; Infrastructure Engg</li> <li>12. Construction Engg &amp; Management</li> <li>13. Any other relevant discipline with qualifying essential degree which mentions 'Naval' or 'Marine' or 'Civil' as the main discipline</li> </ol>

9	01	Mechanical Engineering	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Mechanical engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 10 years'</b> experience in research or design or development or production of Mechanical equipments.</p> <p><b>Desirable:</b></p> <p>(i) Experience in working on Steam Propulsion Machinery and operation/ maintenance/ development of Naval/ Marine equipments.</p> <p>(ii) Experience in database management</p> <p>(iii) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology or Management in relevant field.</p> <p>(iv) Knowledge of German, French, Russian, Japanese or Chinese.</p> <p>(v) Three years' experience in Research and Development Management to manage and coordinate science and technology related activities in the area of Project Management or Material Management or Resource Management or Organisational Development.</p>	<ol style="list-style-type: none"> <li>1. Mechanical &amp; Automation Engg</li> <li>2. Mechanical &amp; Production Engg</li> <li>3. Any other relevant discipline with qualifying essential degree which mentions 'Mechanical' as the main discipline</li> </ol>
10	01	Mechanical Engineering	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Mechanical Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 10 years'</b> experience in research or design or development in Reliability Assessment / Quality Engineering of mechanical / marine equipment and system.</p> <p><b>Desirable:</b></p> <p>(i) Master's Degree in Engineering or Technology / PhD in Reliability Engineering / Quality Engineering.</p> <p>(ii) Experience in FMECA / Remaining Life Assessment/ Reliability Allocation and knowledge of various standards/ handbooks on Quality and Reliability.</p> <p>(iii) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology or Management in relevant field.</p> <p>(iv) Knowledge of German, French, Russian, Japanese or Chinese.</p> <p>(v) Three years' experience in Research and Development Management to manage and coordinate science and technology related activities in the area of Project Management or Material Management or Resource Management or Organisational Development.</p>	<ol style="list-style-type: none"> <li>1. Mechanical &amp; Automation Engg</li> <li>2. Mechanical &amp; Production Engg</li> <li>3. Any other relevant discipline with qualifying essential degree which mentions 'Mechanical' as the main discipline</li> </ol>
11	01	Mechanical Engineering	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Mechanical Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 10 years'</b> of experience in research or design or development or production of mechanical/ marine equipment.</p> <p><b>Desirable</b></p> <p>(i) Working Experience in Control Engineering is preferable.</p> <p>(ii) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology or Management in relevant field.</p> <p>(iii) Knowledge of German, French, Russian, Japanese or Chinese.</p> <p>(iv) Three years' experience in Research and Development Management to manage and coordinate science and technology related activities in the area of Project Management or Material Management or Resource Management or Organisational Development.</p>	<ol style="list-style-type: none"> <li>1. Mechanical &amp; Automation Engg</li> <li>2. Mechanical &amp; Production Engg</li> <li>3. Any other relevant discipline with qualifying essential degree which mentions 'Mechanical' as the main discipline</li> </ol>

12	01	Naval Architecture/ Marine/ Civil Engineering *	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Naval Architecture/ Marine/ Civil Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 10 years'</b> of experience in research or design or development or production in the field of submarine design.</p> <p><b>Desirable:</b></p> <p>(i) PG Diploma in Naval Construction is preferred.</p> <p>(ii) Proficiency in ANSYS, Auto CAD with knowledge/ experience of working in 3D CAD-PLM environment and understanding of structures design codes/ norms, strength calculations, hydrodynamics, hydrostatics and stability calculations is preferable.</p> <p>(iii) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology or Management in relevant field.</p> <p>(iv) Knowledge of German, French, Russian, Japanese or Chinese.</p> <p>(v) Three years' experience in Research and Development Management to manage and coordinate science and technology related activities in the area of Project Management or Material Management or Resource Management or Organisational Development.</p>	<ol style="list-style-type: none"> <li>1. Naval Engg</li> <li>2. Naval Architecture &amp; Ocean Engg</li> <li>3. Naval Architecture &amp; Offshore Engg</li> <li>4. Naval Architecture &amp; Marine Engg</li> <li>5. Naval Architecture and Shipbuilding</li> <li>6. Oceanography Engg</li> <li>7. Civil &amp; Structural Engg</li> <li>8. Civil &amp; Environmental Engg</li> <li>9. Civil &amp; Rural Engg</li> <li>10. Civil &amp; Water Management Engg</li> <li>11. Civil &amp; Infrastructure Engg</li> <li>12. Construction Engg &amp; Management</li> <li>13. Any other relevant discipline with qualifying essential degree which mentions 'Naval' or 'Marine' or 'Civil' as the main discipline</li> </ol>
13	01	Mechanical / Mechanical & Production Engineering	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Mechanical / Mechanical &amp; Production Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 10 years'</b> of experience in research or design or development or production in the field of submarine design.</p> <p><b>Desirable:</b></p> <p>(i) Master's Degree/ PG Diploma in Nuclear Engineering/ Nuclear Technology.</p> <p>(ii) Proficiency in Auto CAD/ 3D CAD-PLM/ Data Analysis/ CAE design tools (Flowmaster or CAE pipe software, flow simulation &amp; analysis tools like Flow Master or Pipe Net or Computational Fluid Dynamics software like FLUENT) is preferable.</p> <p>(iii) Working experience/ Sea service on steam ships/ submarines.</p> <p>(iv) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology or Management in relevant field.</p> <p>(v) Knowledge of German, French, Russian, Japanese or Chinese.</p> <p>(vi) Three years' experience in Research and Development Management to manage and coordinate science and technology related activities in the area of Project Management or Material Management or Resource Management or Organisational Development.</p>	<ol style="list-style-type: none"> <li>1. Mechanical &amp; Automation Engg</li> <li>2. Any other relevant discipline with qualifying essential degree which mentions 'Mechanical' as the main discipline</li> </ol>

14	01	<b>Electrical &amp; Electronics/ Electrical/ Electronics/ Electronics &amp; Communication/ Electronics &amp; Telecommunication/ Instrumentation/ Instrumentation &amp; Control Engineering</b>	<b>Qualification:</b> <b>Essential:</b> (i) At least First class Bachelor's Degree in Engineering or Technology in <b>Electrical &amp; Electronics/ Electrical/ Electronics/ Electronics &amp; Communication/ Electronics &amp; Telecommunication/ Instrumentation/ Instrumentation &amp; Control Engineering</b> from a recognized university or equivalent. (ii) <b>Minimum 10 years'</b> of experience in research or design or development or production in the field of submarine design.  <b>Desirable:</b> (i) Proficiency in Auto CAD/ 3D CAD-PLM/ Data Analysis and Design & development of Control Algorithms on test/ live platforms is preferable. (ii) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology or Management in relevant field. (iii) Knowledge of German, French, Russian, Japanese or Chinese. (iv) Three years' experience in Research and Development Management to manage and coordinate science and technology related activities in the area of Project Management or Material Management or Resource Management or Organisational Development.	1. Electronics & Computer Engg 2. Electronics & Control Engg. 3. Electronics & Communication System Engg 4. Electronics & Telematics Engg 5. Industrial Electronics Engg 6. Tele Communication Engg 7. Telecommunication & Information Tech 8. Applied Electronics & Instrumentation Engg 9. Electronics & Electrical Communication Engg 10. Electrical with Communication Engg 11. Radio Physics & Electronics 12. Electronics & Communication Engg (Avionics) 13. Electrical Power System Engg 14. Electrical & Renewable Energy Engg 15. Power Engg 16. Power Electronics Engg 17. Electronics & Electrical Communications Engg 18. Electronic Instrumentation & Control Engg 19. Electrical & Instrumentation Engg 20. Electrical Instrumentation and control Engg 21. Power Electronics & Instrumentation Engg 22. Electronic Communication & Instrumentation Engg 23. Any other relevant discipline with qualifying degree which mentions 'Electronics' or 'Electrical' or 'Instrumentation' as the main discipline
15	02	<b>Mechanical Engineering</b>	<b>Qualification:</b> <b>Essential:</b> (i) At least First class Bachelor's Degree in Engineering or Technology in <b>Mechanical Engineering</b> from a recognized university or equivalent. (ii) <b>Minimum 10 years'</b> of experience in research or design or development or production of mechanical/ marine equipment.  <b>Desirable</b> (i) Experience of having worked as Submarines/ Dockyard. (ii) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology or Management in relevant field. (iii) Knowledge of German, French, Russian, Japanese or Chinese. (iv) Three years' experience in Research and Development Management to manage and coordinate science and technology related activities in the area of Project Management or Material Management or Resource Management or Organisational Development.	1. Mechanical & Automation Engg 2. Mechanical & Production Engg 3. Any other relevant discipline with qualifying essential degree which mentions 'Mechanical' as the main discipline

Scientist 'D' (Basic Pay: Rs. 78,800/- , Level 12 as per 7<sup>th</sup> CPC) – 08 Vacancies

Item No.	No. Of Vacancies	Subject/ Discipline	Qualifications & Experience	Equivalent acceptable subjects of Essential Qualification
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16	01	Physics / Radiation Physics *	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class M.Sc. in <b>Physics / Radiation Physics</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 07 years'</b> of experience in research or design or development in the field of:-</p> <p>(a) Installation/ commissioning of radiation monitoring systems in power generation plant/ platforms.</p> <p>(b) Radiation safety with experience of working on radiation safety related sensors/ equipment.</p> <p><b>Desirable:</b></p> <p>(i) Certification course on radiological calibration laboratories/ in possession of Radiation Safety Officer (RSO) license for at least one year.</p> <p>(ii) Master's degree in Engineering or Technology in Radiation Safety Engineering</p> <p>(iii) Working experience in Power Generation Plants/ Shipyards or associated facilities/ Projects in areas of Waste management facility/ Handling of sources/ Management of refuelling facilities/ Handling of radiation monitoring equipment.</p> <p>(iv) Post Doctoral / Doctorate Degree in Science in the subject concerned.</p> <p>(v) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Physics (Electronics)</li> <li>2. Applied Physics</li> <li>3. Solid State Physics</li> <li>4. Computational Physics</li> <li>5. Engineering Physics</li> <li>6. Physics &amp; Electronics</li> <li>7. Any other relevant discipline with qualifying essential degree which mentions 'Physics' or 'Radiation' as the main discipline</li> </ol>
17	02	Mechanical Engineering	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Mechanical Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 07 years'</b> of experience in research or design or development in design analysis of equipment using Finite Element (FE) Method/ Design Standards/ FE modelling/ meshing and analysis using Hyper mesh/ Ansys APDL and Ansys Workbench.</p> <p><b>Desirable:</b></p> <p>(i) Experience in design analysis of Naval equipment/ structural analysis/ thermal analysis/ hydraulic analysis/ Modal analysis/ Shock analysis/ Fatigue Analysis/ Explicit analysis/ Material non-linear analysis/ Non-linear analysis using Abaqus software.</p> <p>(ii) Experience in design/ analysis of mitigating strategies for Noise, Vibration and Shock/ Base-excitation analysis/ reliability analysis/ coupled thermo-structural analysis etc.</p> <p>(iii) Experience in life estimation of polymer products.</p> <p>(iv) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(v) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Mechanical &amp; Automation Engg</li> <li>2. Mechanical &amp; Production Engg</li> <li>3. Any other relevant discipline with qualifying essential degree which mentions 'Mechanical' as the main discipline</li> </ol>
18	01	Mechanical Engineering	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Mechanical Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 07 years'</b> of experience in research or design or development or production of mechanical/ marine equipment.</p> <p><b>Desirable:</b></p> <p>(i) Practical experience in operation/ maintenance/ design &amp; development/ manufacturing of mechanical/ marine equipment is preferable.</p> <p>(vi) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(ii) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Mechanical &amp; Automation Engg</li> <li>2. Mechanical &amp; Production Engg</li> <li>3. Any other relevant discipline with qualifying essential degree which mentions 'Mechanical' as the main discipline</li> </ol>

19	01	<b>Electrical/ Electronics &amp; Communication Engineering</b>	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Electrical/ Electronics and communication engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 07 years'</b> of experience in research or design or development or production of motors (Both AC and DC) and control system including starters &amp; inverters.</p> <p><b>Desirable:</b></p> <p>(i) Practical experience in operation/ design &amp; development/ manufacturing motors (Both AC and DC) and control system including starters &amp; inverters is preferable.</p> <p>(vii) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(ii) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Electronics &amp; Computer Engg</li> <li>2. Electronics &amp; Control Engg</li> <li>3. Electronics &amp; Communication System Engg</li> <li>4. Electronics &amp; Instrumentation Engg</li> <li>5. Electronics &amp; Tele- Communication Engg</li> <li>6. Electronics &amp; Telematics Engg</li> <li>7. Industrial Electronics Engg</li> <li>8. Tele Communication Engg</li> <li>9. Telecommunication &amp; Information Tech</li> <li>10. Applied Electronics &amp; Instrumentation Engg</li> <li>11. Electronics &amp; Electrical Communication Engg</li> <li>12. Electrical with Communication Engg</li> <li>13. Radio Physics &amp; Electronics</li> <li>14. Electrical &amp; Electronics Engg</li> <li>15. Electronics &amp; Communication Engg (Avionics)</li> <li>16. Electrical Power System Engg</li> <li>17. Electrical &amp; Renewable Energy Engg</li> <li>18. Power Engg</li> <li>19. Power Electronics Engg</li> <li>20. Any other relevant discipline with qualifying degree which mentions 'Electronics' or 'Electrical' as the main discipline</li> </ol>
20	01	<b>Naval Architecture/ Marine/ Civil Engineering *</b>	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Naval Architecture/ Marine/ Civil Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 07 years'</b> of experience in research or design or development or production in the field of submarine design.</p> <p><b>Desirable:</b></p> <p>(i) PG Diploma in Naval Construction is preferred.</p> <p>(ii) Understanding of structures design codes/ norms, strength calculations, hydrodynamics, hydrostatics and stability calculations, proficiency in ANSYS, Auto CAD with knowledge/ experience of working in 3D CAD-PLM environment is preferable.</p> <p>(iii) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(iv) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Naval Engg</li> <li>2. Naval Architecture &amp; Ocean Engg</li> <li>3. Naval Architecture &amp; Offshore Engg</li> <li>4. Naval Architecture &amp; Marine Engg</li> <li>5. Naval Architecture and Shipbuilding</li> <li>6. Oceanography Engg</li> <li>7. Civil &amp; Structural Engg</li> <li>8. Civil &amp; Environmental Engg</li> <li>9. Civil &amp; Rural Engg</li> <li>10. Civil &amp; Water Management Engg</li> <li>11. Civil &amp; Infrastructure Engg</li> <li>12. Construction Engg &amp; Management</li> <li>13. Any other relevant discipline with qualifying essential degree which mentions 'Naval' or 'Marine' or 'Civil' as the main discipline</li> </ol>
21	01	<b>Mechanical / Aeronautical Engineering</b>	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Mechanical / Aeronautical Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 07 years'</b> of experience in research or design or development or production in the field of submarine design.</p> <p><b>Desirable:</b></p> <p>(i) PG Diploma in Naval Construction is preferred.</p> <p>(ii) Understanding of structures design codes/ norms, strength calculations, hydrodynamics, hydrostatics and stability calculations, proficiency in ANSYS, Auto CAD with knowledge/ experience of working in 3D CAD-PLM environment is preferable.</p> <p>(iii) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(iv) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Mechanical &amp; Automation Engg</li> <li>2. Mechanical &amp; Production Engg</li> <li>3. Aerospace Engg</li> <li>4. Aerospace Engg (Avionics)</li> <li>5. Any other relevant discipline with qualifying essential degree which mentions 'Mechanical' or 'Aeronautical' or 'Aerospace' as the main discipline</li> </ol>



22	01	Electrical Engineering / Electrical & Electronics Engineering	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Electrical Engineering / Electrical &amp; Electronics Engineering</b> from a recognized University/Institute or equivalent.</p> <p>(ii) <b>Minimum 07 years'</b> experience in research or design or development or production in one or more of the following relevant fields.</p> <p>a) Mathematical modelling and simulation of electrical systems using software tools</p> <p>b) Algorithm Design and Analysis</p> <p><b>Desirable:</b></p> <p>(i) Post graduate Degree in Electrical / Electrical &amp; electronics / computer Science Engineering.</p> <p>(ii) Doctorate Degree in Electrical / Electrical &amp; electronics / Computer Science Engineering.</p> <p>(iii) Post Doctoral / Doctorate Degree in Engineering or Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(iv) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Electronics &amp; Electrical Communication Engg</li> <li>2. Electrical with Communication Engg</li> <li>3. Electrical Power System Engg</li> <li>4. Electrical &amp; Renewable Energy Engg</li> <li>5. Power Engg</li> <li>6. Power Electronics Engg</li> <li>7. Any other relevant discipline with qualifying degree which mentions 'Electrical' as the main discipline</li> </ol>
<b>Scientist 'C' (Basic Pay: Rs. 67,700/- , Level 11 as per 7<sup>th</sup> CPC) – 27 Vacancies</b>				
23	01	Mechanical /Aeronautical Engineering	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Mechanical /Aeronautical</b> Engineering from a recognized university or equivalent.</p> <p>(ii) Minimum 03 years' of experience in research or design or development or production of Marine structures.</p> <p><b>Desirable:</b></p> <p>(i) PG Diploma in Naval Construction is preferred.</p> <p>(ii) Experience in interpreting technical documentation of ship design and construction.</p> <p>(iii) Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(iv) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Mechanical &amp; Automation Engg</li> <li>2. Mechanical &amp; Production Engg</li> <li>3. Aerospace Engg</li> <li>4. Aerospace Engg (Avionics)</li> <li>5. Any other relevant discipline with qualifying essential degree which mentions 'Mechanical' or 'Aeronautical' or 'Aerospace' as the main discipline</li> </ol>
24	01	Metallurgy or Material Science & Engineering *	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Metallurgy or Material Science &amp; Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 03 years'</b> of experience in macro and micro structural analysis of metals and its alloys.</p> <p><b>Desirable:</b></p> <p>(i) Knowledge of product/ material specifications and equivalent materials.</p> <p>(ii) Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(iii) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Metallurgy &amp; Material Tech</li> <li>2. Metallurgical Engg</li> <li>3. Materials Engg</li> <li>4. Material Science &amp; Metallurgical Engg</li> <li>5. Any other relevant discipline with qualifying degree which mentions 'Material Engg' or 'Material Science' or 'Metallurgy' as the main discipline</li> </ol>
25	02	Computer Science & Engineering/ Information Technology*	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Computer Science &amp; Engineering/ Information Technology</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 03 years'</b> of experience in research or design or development of computer networking.</p> <p><b>Desirable:</b></p> <p>(i) Experience in database management and network security.</p> <p>(ii) Experience in ERP/ SAP.</p> <p>(iii) Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(iv) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Computer Science/Engg &amp; Info Tech</li> <li>2. Computer Science &amp; System Engg</li> <li>3. Software Engg/ Technology</li> <li>4. Computer Science &amp; Automation Engg/ Tech</li> <li>5. Computer Science/Technology &amp; Informatics Engg/Tech</li> <li>6. Information Science &amp; Engg/Technology</li> <li>7. Computer &amp; Communication Engg</li> <li>8. Computer Networking</li> <li>9. Any other relevant discipline with qualifying essential degree which mentions 'Computer Science' or 'Information Technology' as the main discipline</li> </ol>

26	01	<b>Mechanical Engineering</b>	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Mechanical Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 03 years'</b> of research experience in the area of Shock, Noise and Vibration.</p> <p><b>Desirable:</b></p> <p>(i) Design of machinery as per ASME/ relevant codes.</p> <p>(ii) Experience in Linear/ Non- Linear FEA, Vibration/ Noise/ Shock mitigation strategies, Reliability Assessment of Equipment.</p> <p>(iii) Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(iv) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Mechanical &amp; Automation Engg</li> <li>2. Mechanical &amp; Production Engg</li> <li>3. Any other relevant discipline with qualifying essential degree which mentions 'Mechanical' as the main discipline</li> </ol>
27	01	<b>Material Science &amp; Engineering/ Naval Architecture/ Metallurgy/ Polymer Science &amp; Engineering *</b>	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Material Science &amp; Engineering/ Naval Architecture/ Metallurgy/ Polymer Science &amp; Engineering</b> from a recognized university or equivalent.</p> <p>(ii) <b>Minimum 03 years'</b> of research experience in Polymer Technology/ Nanotechnology/Composites/ Metamaterial/ Bio-inspired materials/ Self-heating materials/ Material Science &amp; Engineering/ Metallurgy.</p> <p><b>Desirable:</b></p> <p>(i) PG Diploma in Naval Construction is preferred.</p> <p>(v) Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(ii) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Metallurgy &amp; Material Tech</li> <li>2. Metallurgical Engg</li> <li>3. Materials Engg</li> <li>4. Material Science &amp; Metallurgical Engg</li> <li>5. Naval Engg</li> <li>6. Naval Architecture &amp; Ocean Engg</li> <li>7. Naval Architecture &amp; Offshore Engg</li> <li>8. Naval Architecture &amp; Marine Engg</li> <li>9. Naval Architecture and Shipbuilding</li> <li>10. Oceanography Engg</li> <li>11. Any other relevant discipline with qualifying degree which mentions 'Material Engg' or 'Material Science' or 'Metallurgy' or 'Naval' or 'Polymer Science' as the main discipline</li> </ol>
28	01	<b>Mechanical Engineering</b>	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Mechanical Engineering</b> from a recognized University/Institute or equivalent.</p> <p>(ii) <b>Minimum 03 years'</b> experience in research or design or development or production in one or more of the following relevant fields.</p> <ol style="list-style-type: none"> <li>a) Product design, analysis &amp; optimization</li> <li>b) Design &amp; development of mechanisms</li> <li>c) Multibody dynamics analysis &amp; simulation</li> </ol> <p><b>Desirable:</b></p> <p>(i) Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(ii) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Mechanical &amp; Automation Engg</li> <li>2. Mechanical &amp; Production Engg</li> <li>3. Any other relevant discipline with qualifying essential degree which mentions 'Mechanical' as the main discipline</li> </ol>
29	01	<b>Aerospace Engineering</b>	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Aerospace Engineering</b> from a recognized University/Institute or equivalent.</p> <p>(ii) <b>Minimum 03 years'</b> experience in research or design or development or production in one or more of the following relevant fields.</p> <ol style="list-style-type: none"> <li>a) CFD (Computational Fluid Dynamics) code development and simulations of turbulent flows and combustion modeling using software tools.</li> <li>b) Multi-phase flows, fluid structure interaction and Combustion analysis</li> </ol> <p><b>Desirable:</b></p> <p>(i) Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(ii) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Aeronautical Engg</li> <li>2. Aerospace Engg (Avionics)</li> <li>3. Any other relevant discipline with qualifying essential degree which mentions 'Aerospace' or 'Aeronautical' as the main discipline</li> </ol>

30	01	<b>Electronics and communications/Electrical and Electronics Engineering</b>	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Electronics and communications /Electrical and Electronics Engineering</b> from a recognized University/Institute or equivalent.</p> <p>(ii) <b>Minimum 03 years'</b> experience in research or design or development or production in one or more of the following relevant fields.</p> <p>a) Electronic equipment manufacturing and testing for defense/ aerospace/ automotive application</p> <p>b) Embedded system design (VLSI (Very Large Scale Integration) / embedded software/ micro-controller based designs)</p> <p>c) Avionics/ automotive electronics architecture design/ Integration and testing/</p> <p>d) Electrical CAD (Computer Aided Design)</p> <p><b>Desirable:</b></p> <p>(i) Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(ii) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Electronics Engg</li> <li>2. Electronics &amp; Computer Engg</li> <li>3. Electronics &amp; Control Engg</li> <li>4. Electronics &amp; Communication System Engg</li> <li>5. Electronics &amp; Instrumentation Engg</li> <li>6. Electronics &amp; Tele-Communication Engg</li> <li>7. Electronics &amp; Telematics Engg</li> <li>8. Industrial Electronics Engg</li> <li>9. Tele Communication Engg</li> <li>10. Telecommunication &amp; Information Tech</li> <li>11. Applied Electronics &amp; Instrumentation Engg</li> <li>12. Electronics &amp; Electrical Communication Engg</li> <li>13. Electrical with Communication Engg</li> <li>14. Radio Physics &amp; Electronics</li> <li>15. Electrical Engg</li> <li>16. Electronics &amp; Communication Engg (Avionics)</li> <li>17. Any other relevant discipline with qualifying degree which mentions 'Electronics' or 'Electrical' as the main discipline</li> </ol>
31	03	<b>Electronics and Communication Engineering</b>	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Electronics and Communication Engineering</b> or equivalent from UGC recognized university.</p> <p>(ii) <b>Minimum 03 years'</b> experience in Research or Design and Development or production in one or more of the following areas:</p> <p>a) In area of design, simulation using Microwave CAD tools (HFSS/ADS/Microwave office / CST studio etc.), development, testing/ characterization of Broadband RF circuits and Antennas (or)</p> <p>b) In area of design, simulation, analysis, testing &amp; qualification, integration and performance evaluation of Radar/Communication/ EW Subsystem/ System (or)</p> <p>c) In area of hardware and software design, algorithm development using MATLAB/ C/C++, simulation, analysis, testing, Integration and performance evaluation of Signal Processing unit (or)</p> <p>d) In area of Embedded System Hardware/Software design and development using MATLAB/ C/C++, Operating system/device drivers etc., (or)</p> <p>e) In area of FPGA based hardware and firmware development using VHDL/Verilog, VLSI/Chip design etc.,</p> <p><b>Desirable:</b></p> <p>(i) Doctorate Degree in Engineering in the Electronics and Communication Engineering or equivalent discipline.</p> <p>(ii) Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(iii) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Electronics Engg</li> <li>2. Electronics &amp; Computer Engg</li> <li>3. Electronics &amp; Control Engg</li> <li>4. Electronics &amp; Communication Technology</li> <li>5. Electronics &amp; Communication Engg (Industry Integrated)</li> <li>6. Electronics &amp; Communication System Engg</li> <li>7. Electronics &amp; Communication Engg(Microwaves)</li> <li>8. Electronics &amp; Communication Engg(Sandwich)</li> <li>9. Electronics &amp; Communication Engg(Radio &amp; System)</li> <li>10. Electronics &amp; Instrumentation Engg</li> <li>11. Electronics &amp; Tele- Communication Engg</li> <li>12. Electronics &amp; Tele- Communication Technology(Electronic Radio)</li> <li>13. Electronics &amp; Telematics Engg</li> <li>14. Industrial Electronics Engg</li> <li>15. Tele Communication Engg</li> <li>16. Telecommunication &amp; Information Tech</li> <li>17. Applied Electronics &amp; Instrumentation Engg</li> <li>18. Electronics &amp; Electrical Communication Engg</li> <li>19. Electrical with Communication Engg</li> <li>20. Radio Physics &amp; Electronics</li> <li>21. Electrical Engg</li> <li>22. Electrical &amp; Electronics Engg</li> <li>23. Electronics &amp; Communication Engg (Avionics)</li> <li>24. Any other relevant discipline with qualifying degree which mentions 'Electronics' as the main discipline</li> </ol>

32	01	<b>Electronics &amp; Instrumentation / Electronics &amp; Communication/ Instrumentation and Control / Electrical and Electronics</b>	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First class Bachelor's Degree in Engineering or Technology in <b>Electronics &amp; Instrumentation / Electronics &amp; Communication/ Instrumentation and Control / Electrical and Electronics</b> from a recognized University or Equivalent.</p> <p>(ii) <b>Minimum 03 years'</b> experience in Automotive Engine/Transmission/Powerpack R&amp;D Testing.</p> <p>(iii) Including one or more of the following areas</p> <ul style="list-style-type: none"> <li>◆ Test preparation, Configuration of Instrumentation System</li> <li>◆ Data Acquisition System Hardware and Software</li> <li>◆ Conducting tests, Data collection</li> <li>◆ Calibration of Test Equipment</li> <li>◆ Measurement systems and Report generation.</li> </ul> <p><b>Desirable:</b></p> <p>(i) Utility system operation and maintenance. Knowledge of Combustion Measurement systems.</p> <p>(ii) Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(iii) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Electronics Engg</li> <li>2. Electronics &amp; Computer Engg</li> <li>3. Electronics &amp; Control Engg</li> <li>4. Electronics &amp; Communication System Engg</li> <li>5. Electronics &amp; Instrumentation Engg</li> <li>6. Electronics &amp; Tele-Communication Engg</li> <li>7. Electronics &amp; Telematics Engg</li> <li>8. Industrial Electronics Engg</li> <li>9. Tele Communication Engg</li> <li>10. Telecommunication &amp; Information Tech</li> <li>11. Applied Electronics &amp; Instrumentation Engg</li> <li>12. Electronics &amp; Electrical Communication Engg</li> <li>13. Electrical with Communication Engg</li> <li>14. Radio Physics &amp; Electronics</li> <li>15. Electrical Engg</li> <li>16. Electronics &amp; Communication Engg (Avionics)</li> <li>17. Any other relevant discipline with qualifying degree which mentions 'Electronics' or 'Electrical' or 'Instrumentation' as the main discipline</li> </ol>
33	01	<b>Mechanical Engineering</b>	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First Class Bachelor's Degree in Engineering or Technology from a recognized university in <b>Mechanical Engineering</b></p> <p>(ii) <b>Minimum 03 years'</b> experience in any one of the following areas</p> <ol style="list-style-type: none"> <li>a) Research or Design or Production in the fields of ship/underwater vehicles/Propellers</li> <li>b) In design, Installation and verification of Pressure Vessels</li> </ol> <p><b>Desirable:</b></p> <ol style="list-style-type: none"> <li>(i) Ph. D in the areas of expertise specified above</li> <li>(ii) Non-destructive and destructive testing of pressure vessels/shells</li> <li>(iii) Experience in CFD and naval design packages</li> <li>(iv) Experience or expertise in the area of project management of research projects, viz. preparation of technical, commercial proposals</li> <li>(v) Master's Degree in Engineering or Technology in the subject concerned.</li> <li>(vi) Knowledge of German, French, Russian, Japanese or Chinese</li> </ol>	<ol style="list-style-type: none"> <li>1. Mechanical &amp; Automation Engg</li> <li>2. Mechanical &amp; Production Engg</li> <li>3. Any other relevant discipline with qualifying essential degree which mentions 'Mechanical' as the main discipline</li> </ol>
34	01	<b>Naval Architecture/Ocean Engineering/Marine Engineering*</b>	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First Class Bachelor's Degree in Engineering or Technology from a recognized university in <b>Naval Architecture/Ocean Engineering/Marine Engineering</b></p> <p>(ii) <b>Minimum 03 years'</b> experience in any one of the following areas</p> <ol style="list-style-type: none"> <li>a) Research or Design or Production in the fields of ship/underwater vehicles/Propellers</li> <li>b) Marine Systems Design/ Development/ Evaluation</li> </ol> <p><b>Desirable:</b></p> <ol style="list-style-type: none"> <li>(i) Ph. D in the areas of expertise specified above</li> <li>(ii) Experience in CFD and naval design packages</li> <li>(iii) Experience or expertise in the area of project management of research projects, viz. preparation of technical, commercial proposals</li> <li>(iv) Master's Degree in Engineering or Technology in the subject concerned.</li> <li>(v) Knowledge of German, French, Russian, Japanese or Chinese</li> </ol>	<ol style="list-style-type: none"> <li>1. Naval Engg</li> <li>2. Naval Architecture &amp; Ocean Engg</li> <li>3. Naval Architecture &amp; Offshore Engg</li> <li>4. Naval Architecture &amp; Marine Engg</li> <li>5. Naval Architecture and Shipbuilding</li> <li>6. Oceanography</li> <li>7. Physical Oceanography</li> <li>8. Any other relevant discipline with qualifying essential degree which mentions 'Naval' or 'Marine' or 'Ocean' as the main discipline</li> </ol>

35	01	Physiology*	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) A medical qualification included in the First Schedule or the Second Schedule or the Para II of the Third Schedule to the Indian Medical Council Act, 1956 (102 of 1956). Holders of medical qualifications included in the Part II of the said, Third Schedule also fulfill the conditions specified in sub-section (3) of the section 13 of the said act.</p> <p>(ii) Required Post-Graduate Degree qualification in <b>Physiology</b></p> <p>(iii) <b>Minimum 03 years'</b> experience in the field of environmental physiology/high altitude physiology /cardiovascular physiology /neurophysiology.</p> <p>(iv) Knowledge of German, French, Russian, Japanese or Chinese.</p>	
36	01	Biotechnology/ Biochemistry*	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First Class M.Sc. in <b>Biotechnology/ Biochemistry</b> from a recognized university or equivalent</p> <p>(ii) <b>Minimum 03 years'</b> research experience in in-vitro and in-vivo studies (preferably, mice model) in the area of Cell Biology or Radiation Biology or Metabolic Cell signalling.</p> <p><b>Desirable:</b></p> <p>(i) Research experience in the areas of Cell and Molecular Biology / Cell Signalling/ Stress Biology</p> <p>(ii) Doctorate Degree in Science in the subject concerned.</p> <p>(iii) Knowledge of German, French, Russian, Japanese or Chinese.</p>	1. Clinical Biochemistry
37	01	Electrical/ Electronics and Communication/ Engineering/Electronics & Instrumentation Engineering/ Electrical & Electronics Engineering/ Applied Electronics & Instrumentation Engineering	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First Class Bachelor's Degree in Engineering or Technology in <b>Electrical/ Electronics and Communication Engineering/Electronics &amp; Instrumentation Engineering/ Electrical &amp; Electronics Engineering/ Applied Electronics &amp; Instrumentation Engineering</b> from a recognized university or equivalent</p> <p>(ii) <b>Minimum 03 years'</b> experience in research or design or development of Power Electronics systems based on FPGA/Microcontrollers</p> <p><b>Desirable:</b></p> <p>(i) Master's Degree in Engineering or Technology in the discipline of Electrical Engineering/ Applied Electronics &amp; Instrumentation/ Power Electronics/ Embedded Systems/ Control Systems.</p> <p>(ii) Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(iii) Knowledge of German, French, Russian, Japanese or Chinese.</p>	1. Electronics Engg 2. Electronics & Computer Engg 3. Electronics & Control Engg 4. Electronics & Communication System Engg 5. Electronics & Tele-Communication Engg 6. Electronics & Telematics Engg 7. Industrial Electronics Engg 8. Tele Communication Engg 9. Telecommunication & Information Tech 10. Electronics & Electrical Communication Engg 11. Electrical with Communication Engg 12. Radio Physics & Electronics 13. Electronics & Communication Engg (Avionics) 8. Electrical Power System Engg 9. Electrical & Renewable Energy Engg 10. Power Engg 11. Power Electronics Engg 14. Any other relevant discipline with qualifying degree which mentions 'Electronics' or 'Electrical' as the main discipline

38	03	<b>Mechanical/Electrical/ Instrumentation Engineering</b>	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First Class Bachelor's Degree in Engineering or Technology in <b>Mechanical/Electrical/Instrumentation Engineering</b> from a recognized university or equivalent</p> <p>(ii) <b>Minimum 03 years'</b> experience in the area of underwater transducers or electromechanical transducers or electro acoustic transducers or acoustical engineering.</p> <p><b>Desirable:</b></p> <p>(i) Master's Degree in Engineering or Technology in the discipline of Mechanical Engineering, Ocean Engineering or Computer Aided Design.</p> <p>(ii) Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(iii) Knowledge of German, French, Russian, Japanese or Chinese</p>	<ol style="list-style-type: none"> <li>1. Mechanical &amp; Automation Engg</li> <li>2. Mechanical &amp; Production Engg</li> <li>3. Electrical Power System Engg</li> <li>4. Electrical &amp; Electronics Engg</li> <li>5. Electrical &amp; Renewable Energy Engg</li> <li>6. Power Engg</li> <li>7. Power Electronics Engg</li> <li>8. Electronics &amp; Electrical Communications Engg</li> <li>9. Electrical with Communication Engg</li> <li>10. Instrumentation &amp; Control Engg</li> <li>11. Electronics &amp; Instrumentation Engg</li> <li>12. Electronic Instrumentation &amp; Control Engg</li> <li>13. Applied Electronics and Instrumentation Engg</li> <li>14. Electrical and Instrumentation Engg</li> <li>15. Electrical Instrumentation &amp; Control Engg</li> <li>16. Power Electronics &amp; Instrumentation Engg</li> <li>17. Electronics Communication &amp; Instrumentation Engg</li> <li>18. Any other relevant discipline with qualifying essential degree which mentions 'Mechanical' or 'Instrumentation' or 'Electrical' as the main discipline</li> </ol>
39	01	<b>Electronics and Communication Engineering/Electronics &amp; Instrumentation Engineering/ Electronics &amp; Telecommunication Engineering/ Electrical &amp; Electronics Engineering / Information technology</b>	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First Class Bachelor's Degree in Engineering or Technology in <b>Electronics and Communication Engineering/Electronics &amp; Instrumentation Engineering/ Electronics &amp; Telecommunication Engineering/ Electrical &amp; Electronics Engineering / Information technology</b> from a recognized university or equivalent</p> <p>(ii) <b>Minimum 03 years'</b> experience in research or design or development in the field of smart embedded devices and emerging technology (IOTS); on reverse engineering tools like IDA PRO, baksmali and JEB for Androids, with Linux, Command line, configuration and scripting; Mobile security techniques and fundamentals; with reverse engineering, specially mobile apps and ARM CPUs; Firmware extraction using I2C/JTag/SPI etc.</p> <p><b>Desirable:</b></p> <p>(i) Master's degree in engineering or technology in Electronics and Communication/ Engineering/Electronics &amp; Instrumentation Engineering/ Electronics &amp; Telecommunication Engineering/ Electrical &amp; Electronics Engineering or Embedded security/Cyber Security or related disciplines</p> <p>(ii) Working knowledge of androids/IOS internals</p> <p>(iii) Knowledge of Malware detection technologies</p> <p>(iv) Experience with DALVIK / Android run-time(ART)</p> <p>(v) Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(vi) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Electronics Engg</li> <li>2. Electronics &amp; Computer Engg</li> <li>3. Electronics &amp; Control Engg</li> <li>4. Electronics &amp; Communication System Engg</li> <li>5. Electronics &amp; Telematics Engg</li> <li>6. Industrial Electronics Engg</li> <li>7. Tele Communication Engg</li> <li>8. Telecommunication &amp; Information Tech</li> <li>9. Applied Electronics &amp; Instrumentation Engg</li> <li>10. Electronics &amp; Electrical Communication Engg</li> <li>11. Electrical with Communication Engg</li> <li>12. Radio Physics &amp; Electronics</li> <li>13. Electrical Engg</li> <li>14. Electronics &amp; Communication Engg (Avionics)</li> <li>15. Any other relevant discipline with qualifying degree which mentions 'Electronics' or 'Information Technology' as the main discipline</li> </ol>

40	01	Computer Science & Engineering. / Information Technology*	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First Class Bachelor's Degree in Engineering or Technology in <b>Computer Science &amp; Engineering / Information Technology</b> from a recognized university or equivalent</p> <p>(ii) <b>Minimum 03 years'</b> experience in research or design or development in the field of Big Data Analysis/Technologies(Machine Learning, Common Natural Language Processing, Map Reduce, YARN, Hadoop, Elastic Search, Mahout, Hive and similar technologies)</p> <p><b>Desirable:</b></p> <p>(i) Master's degree in engineering or technology in Computer Sc. &amp; Engineering. / Information Technology / Computer Security/ Cyber Security or related disciplines</p> <p>(ii) Proficiency in C/C++, Python, Java and knowledge of scripting languages</p> <p>(iii) Machine learning: Research and implement Data-Mining and Machine learning algorithms</p> <p>(iv) Develop extensible, scalable, reliable software for high volume, real-time data processing</p> <p>(v) Developing reports, dash board in Tableau. Sound knowledge on visualization products such as D3, JQuery, Tableau and similar technologies</p> <p>(vi) Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(vii) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Computer Science/ Engg/ Technology</li> <li>2. Computer Science and Engg/Technology</li> <li>3. Computer Science/Engg &amp; Info Tech</li> <li>4. Computer Science &amp; System Engg</li> <li>5. Software Engg/ Technology</li> <li>6. Computer Science &amp; Automation Engg/ Tech</li> <li>7. Computer Science/Technology &amp; Informatics Engg/Tech</li> <li>8. Information Science &amp; Engg/Technology</li> <li>9. Computer &amp; Communication Engg</li> <li>10. Computer Networking</li> <li>11. Information Technology &amp; Mathematical Innovations</li> <li>12. Any other relevant discipline with qualifying essential degree which mentions 'Computer Science' or 'Information Technology' as the main discipline</li> </ol>
41	02	Computer Science & Engineering / Information Technology*	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First Class Bachelor's Degree in Engineering or Technology in <b>Computer Science &amp; Engineering / Information Technology</b> from a recognized university or equivalent</p> <p>(ii) <b>Minimum 03 years'</b> experience in research or design or development in the field of advanced persistent threat analysis and assembly language debugging, system programming, driver programming, kernel programming.</p> <p><b>Desirable:</b></p> <p>(i) Master's degree in engineering or technology in Computer Sc. &amp; Engineering. / Information Technology / Computer Security/ Cyber Security or related disciplines</p> <p>(ii) Proficiency in C/C++ and knowledge of scripting languages</p> <p>(iii) Hands-on experience with analysis tools (Sysinternals, Sniffers, Anti-route kits etc.)</p> <p>(iv) Hands-on experience with publically available automated Malware analysis systems (Cuckoo, Buster etc.)</p> <p>(v) Web protocols and standards (TCP/IP, HTTP, SSL, HTML, Java script, DNS etc.)</p> <p>(vi) Assembly language debugging experience with static and dynamic analysis tools such as IDA, Ollydbg and similar technologies</p> <p>(vii) Anti-virus behavior knowledge</p> <p>(viii) Knowledge of PE, Doc, PDF etc. file formats and packers unpackers</p> <p>(ix) Hands on experience with Crash analysis, Patch analysis, LLVM tool chain</p> <p>(x) Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(xi) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Computer Science/ Engg/ Technology</li> <li>2. Computer Science and Engg/Technology</li> <li>3. Computer Science/Engg &amp; Info Tech</li> <li>4. Computer Science &amp; System Engg</li> <li>5. Software Engg/ Technology</li> <li>6. Computer Science &amp; Automation Engg/ Tech</li> <li>7. Computer Science/Technology &amp; Informatics Engg/Tech</li> <li>8. Information Science &amp; Engg/Technology</li> <li>9. Computer &amp; Communication Engg</li> <li>10. Computer Networking</li> <li>11. Information Technology &amp; Mathematical Innovations</li> <li>12. Any other relevant discipline with qualifying essential degree which mentions 'Computer Science' or 'Information Technology' as the main discipline</li> </ol>
42	02	Computer Science & Engineering / Information Technology*	<p><b>Qualification:</b></p> <p><b>Essential:</b></p> <p>(i) At least First Class Bachelor's Degree in Engineering or Technology In <b>Computer Science &amp; Engineering / Information Technology</b> From A Recognized University or Equivalent</p> <p>(ii) <b>Minimum 03 years'</b> experience in Research or Design or Development in the field of Vulnerability Discovery, Fuzzing, Crash Analysis, Remote Code Execution Analysis, Patch Diffing.</p> <p><b>Desirable:</b></p> <p>(i) Master's degree in engineering or technology in Computer Sc. &amp; Engineering. / Information Technology / Computer Security/ Cyber Security or related disciplines</p> <p>(ii) Proficiency in C/C++ and knowledge of scripting languages</p> <p>(iii) Knowledge of kernel mode and user mode debugger (Windbg, Immunity or Ollydbg)</p> <p>(iv) Experience of working windows internals and reverse engineering</p> <p>(v) Knowledge of Assembly and dis-assembler, (IDA Pro or equivalent)</p> <p>(vi) Master's Degree in Engineering or Technology in the subject concerned.</p> <p>(vii) Knowledge of German, French, Russian, Japanese or Chinese.</p>	<ol style="list-style-type: none"> <li>1. Computer Science/ Engg/ Technology</li> <li>2. Computer Science and Engg/Technology</li> <li>3. Computer Science/Engg &amp; Info Tech</li> <li>4. Computer Science &amp; System Engg</li> <li>5. Software Engg/ Technology</li> <li>6. Computer Science &amp; Automation Engg/ Tech</li> <li>7. Computer Science/Technology &amp; Informatics Engg/Tech</li> <li>8. Information Science &amp; Engg/Technology</li> <li>9. Computer &amp; Communication Engg</li> <li>10. Computer Networking</li> <li>11. Information Technology &amp; Mathematical Innovations</li> <li>12. Any other relevant discipline with qualifying essential degree which mentions 'Computer Science' or 'Information Technology' as the main discipline</li> </ol>