

ADVERTISEMENT FOR RECRUITMENT OF NON-EXECUTIVES IN OMC LTD

No. 46 / OMC

Date: 26/ 02/ 2020

The OMC, a Gold category and largest State PSU in Mining Sector in the Country, undertakes exploration, mining and trading of iron, chrome & bauxite ores. Inspired by the vision to emerge as the market leader and to play a catalytic role in the growth of industrialization, OMC caters to the requirements of mineral based industries. The Corporation has registered annual turnover of Rs.4053 Crores in FY 2018-19 and is on a high growth trajectory.

The Corporation intends to fill up the Non-Executive posts in different disciplines as under:

1. Vacancy :-

All the vacancies are against regular posts. However, the candidates shall initially be appointed as Trainees for a period of 1 (one) year from the date of joining the post with consolidated stipend. On successful completion of training period, the candidates shall be kept under probation initially for a period of one year during which the candidates shall be allowed the regular pay scale & other allowances.

Sl. No.	Name of the Post & Grade	Scale of Pay	Total Vacancy	Category of Posts			
				UR	SEBC	SC	ST
1	Jr. Executive Assistant (Class- III Grade)	Pay Level-8 Rs. 29,200 to Rs.92,300	100	50	09	20	21
2	Jr. Engineer (Mechanical) (Class- III Grade)	Pay Level-9 Rs. 35,400 to Rs.1,12,400	05	02	01	00	02
3	Jr. Engineer (Electrical) (Class- III Grade)	Pay Level-9 Rs. 35,400 to Rs.1,12,400	14	08	01	02	03
4	Jr. Nurse (Class- III Grade)	Pay Level-8 Rs. 29,200 to Rs.92,300 (01 extra increment at the time of entry into regular post)	07	05	01	01	00
5	Jr. Pharmacist (Class- III Grade)	Pay Level-8 Rs. 29,200 to Rs.92,300	02	01	00	01	00
TOTAL			128	66	12	24	26

Interested candidates fulfilling the eligibility criteria for respective posts may apply **through on-line process** of application available in OMC Website omcltd.in during the period **from 02.00PM of 28.02.2020 till 11.59 PM of 19.03.2020**.

The OMC Management reserves the right to cancel, amend or alter the above advertisement without assigning any reason thereof.

GENERAL MANAGER (P&A)
THE ODISHA MINING CORPORATION LTD.
(A GOLD CATEGORY STATE PSU)
OMC House, Post Box No. 34,
Bhubaneswar-751001

2. Eligibility Criteria :-

Sl No	Name of the Posts	Basic Qualification	Maximum Age as on 31.01.2020
1	Jr. Executive Assistant, Class- III Grade	Degree in any discipline from a recognized University with Diploma in Computer Application/ PGDCA. There will be no requirement of DCA/ PGDCA certificate for candidates having MCA, BCA, B.Sc.(IT), B.Sc (CS), etc.	<p>Not below 18 years and above 32 years. (Upper age limit in case of SC/ ST/ SEBC/ Women/ PwD/ Sports Person/ EX-Serviceman shall be relaxed as per norms of Govt.)</p> <p>For candidates working in OMC:</p> <p>a) The Non-Executives recruited under OMC R&P Rules for Non-executives, 2012 and subsequently acquiring requisite qualification for any higher post of the same sub cadre may attend the direct recruitment process whenever recruitment for such higher post is undertaken. In such case, upper age limit may be relaxed up to 10 years.</p> <p>b) The Non-Executives recruited prior to implementation of OMC R&P Rules for Non-executives, 2012 and possessing qualification & experience for any post under these Rules, may also attend the direct recruitment process whenever recruitment to any post as per these Rules is undertaken. In such case, upper age limit may be relaxed up to 10 years and after appointment they will be governed under these Rules.</p>
2	Jr. Engineer (Mechanical), Class- III Grade	Diploma in Mechanical Engineering from an AICTE recognized institute.	
3	Jr. Engineer (Electrical), Class- III Grade	Diploma in Electrical Engineering from a AICTE recognized Institute.	
4	Jr. Nurse, Class- III Grade	+2 Science with Diploma in Nursing from an Institute Recognized by H&FW Department, Government of Odisha.& approved by Odisha Nursing Council/ Indian Nursing Council.	
5	Jr. Pharmacist, Class- III Grade	+2 Science with Diploma In Pharmacy from recognized University / Institute & Approved by Indian Pharmacy Council.	

3. Initial Post & Stipend:-

Sl. No.	Name of the Posts	Stipend per month	Conditions to apply for the training period
1	Jr. Executive Assistant Trainee	Rs. 29200.00	<ol style="list-style-type: none">1. Inter-se seniority of the selected candidates shall be maintained.2. The trainee shall not be allowed any kind of leave except casual leave & compensatory leave (if posted to field office) during the training period.3. The training period shall not be counted for calculation of leave allowed under the OMC Leave Rules, 1976 & sanction of increments.4. The trainee shall not be allowed any kind of allowances and loan except House Rent Allowance.5. The trainee shall be provided Corporation Quarters on availability & eligibility. In lieu of Corporation Quarters, the trainee shall be allowed House Rent Allowance. The Starting Pay+Grade Pay in the corresponding pre-revised scale of pay (ORSP Rules, 2008) of the concerned post shall constitute the basis for sanction of House Rent Allowance.6. The trainee shall be allowed Medical facilities as extended to a regular employee.
2	Jr. Engineer (Mechanical) Trainee	Rs. 35400.00	
3	Jr. Engineer (Electrical) Trainee	Rs. 35400.00	
4	Jr. Nurse Trainee	Rs. 29200.00	
5	Jr. Pharmacist Trainee	Rs. 29200.00	

4. Domicile Status of the candidate:-

Residents of the state of Odisha (candidates who are native to Odisha) only can apply for the above Non-Executive posts. Candidates belonging to other states are not eligible to apply for the posts.

5. How to Apply:-

General Instructions	
1.	Read the Instructions carefully and select (√) "I Agree" and Press ' START ' button to proceed further.
2.	For detailed Notification/Advertisement, click ' here ' and read it carefully before filling-up the on-line application.
3.	Before start of filling-up of application through on-line mode, the candidate should keep ready, the following details/ documents: a) Valid e-mail ID & Mobile Number. b) Scanned copy of the recent passport size color Photograph (not older than 3 weeks). Candidates should ensure that the same photograph is used throughout this recruitment process. c) Scanned signature & Left hand Thumb Impression. d) Required certificates and documents as mentioned in the Advertisement.

4.	Category and Sub-category [General (UR)/SC/ST/SEBC/PwD/Ex-Serviceman] once filled by candidate in the on-line application form will not be changed and no benefit of other category will be admissible.
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#	How to apply						
I.	Candidates should have a valid personal e-mail ID and mobile number. It should be kept active during the entire recruitment process. Registration number, password, and all other important communication will be sent on the same registered e-mail ID (please ensure that email sent to this mailbox is not redirected to your junk / spam folder).						
II.	Candidates should take utmost care to furnish the correct details while filling in the on-line application. YOU CAN EDIT THE INFORMATION BEFORE SUBMISSION OF STEP-I and STEP-II. Once the form is submitted, it can't be edited.						
III.	The step by step process for submitting the application form is given below: <table border="1" style="width: 100%; margin-top: 5px;"> <tr> <td style="width: 15%;">Step-I</td> <td style="width: 5%; text-align: center;">:</td> <td>Registration of Personal Details, and Contact details. Login Id and password will be sent to you through e-mail on registered e-Mail ID.</td> </tr> <tr> <td>Step-II</td> <td style="text-align: center;">:</td> <td>Please log out and re-log in to go to the Application Form. Fill up the Eligibility Details, Personal Details, Qualification Details, Upload relevant documents and submit Fee (if applicable) online via SBI MOPS through net banking/debit card/credit card/wallets</td> </tr> </table>	Step-I	:	Registration of Personal Details, and Contact details. Login Id and password will be sent to you through e-mail on registered e-Mail ID.	Step-II	:	Please log out and re-log in to go to the Application Form. Fill up the Eligibility Details, Personal Details, Qualification Details, Upload relevant documents and submit Fee (if applicable) online via SBI MOPS through net banking/debit card/credit card/wallets
Step-I	:	Registration of Personal Details, and Contact details. Login Id and password will be sent to you through e-mail on registered e-Mail ID.					
Step-II	:	Please log out and re-log in to go to the Application Form. Fill up the Eligibility Details, Personal Details, Qualification Details, Upload relevant documents and submit Fee (if applicable) online via SBI MOPS through net banking/debit card/credit card/wallets					
IV.	Application once submitted cannot be withdrawn and fee once paid will not be refunded in any case, neither shall be held reserved for any other recruitment nor selection process in future.						
STEP-I Registration							
a.	The candidates agreeing to the terms & conditions may proceed further by clicking " I agree " check box given below and press the " Start " button.						
b.	The candidate should fill up all the desired information i.e. Personal Details, Contact Details, etc. correctly.						
c.	On completion of Step-I registration, the candidate will receive a message in the registered e-mail ID conveying his/her login ID and password.						
d.	The candidate has to log-out and log in again in order to fill up other details in application form.						
STEP-II Completion of Application form							
e.	After registration, candidate may re-login and click on "Go to Application Form" icon at top right corner, select his category and other mandatory details and complete Personal Details, Qualification Details, Upload photo/signature/relevant documents and submission of Fee through Online mode via Debit card, Credit card or Internet Banking through SBI MOPS.						
f.	Instructions regarding scanning of Photograph, Left hand Thumb Impression, Signature, Self-declaration and Certificates. Candidate should upload the scanned (digital) image of his/her photograph and signature as per the process given below. The applicant should note that only jpg/jpeg format is acceptable: <ol style="list-style-type: none"> i. Photograph Image: <ul style="list-style-type: none"> • Photograph must be a recent passport size colour picture on light coloured background. • The size of the scanned image should be between 50kb -100kb in jpg/ jpeg format only. ii. Signature image: <ul style="list-style-type: none"> • The applicant has to sign on white paper with Black/Blue ball point pen. • Size of file should be between 50kb – 100kb in jpg/jpeg format only. iii. Thumb Impression Image: <ul style="list-style-type: none"> • The applicant has to put his/her Left hand Thumb Impression on white paper using Blue ink pad. • Size of file should be between 50kb – 100kb in jpg/jpeg format only. iv. Certificate image: <ul style="list-style-type: none"> • Please scan the relevant Certificates. • Each Certificate in JPG/JPEG/PDF format only and Size of file should be between 50kb – 1000kb. 						

	<p>v. Self declaration image:</p> <ul style="list-style-type: none"> Please scan the relevant self declaration for caste & resident / resident. The self declaration to be in JPG/JPEG/PDF format only and Size of file should be between 50kb – 1000kb.
g.	Once the application is submitted, candidates will automatically be redirected to SBI payment gateway to deposit the fee of INR 500/- + Bank charges (if applicable) through Debit Card/Credit Card/Net Banking etc. Candidate may generate payment acknowledge slip for future reference.
h.	<p>Guidelines for remittance of fee are as under:</p> <ul style="list-style-type: none"> Post submission, the candidate will be re-directed to Payment gateway to make the online payment of application fees. Kindly verify the details and make the payment for application fees via the different payment modes. Post successful payment of application fees, candidate will be redirected to his/her application form.
	<ul style="list-style-type: none"> For the purpose of all future reference, the candidates are advised to keep a printout of their application form, after successful submission. For technical queries/ clarifications relating to the filling up of ONLINE APPLICATION, please feel free to contact the helpdesk at Email: omclhelpdesk2020@gmail.com or Phone No: 022-61306204

6. Position of Vacancies and Reservation Thereof:-

The vacancy position along with reservation thereof is given below.

Sl. No	Name of the Post/ Grade	Total No. of vacancies	No. of posts reserved for						
			UR	SEBC	SC	ST	PwD	EX-SM	S.P.
1	2	3	4	5	6	7	8	9	10
(i)	Jr. Executive Assistant Class- III Grade	100 (33-w)	50 (16-w)	09 (03-w)	20 (07-w)	21 (07-w)	04 (01-w) (a)Blindness and Low Vision-1 (b)Deaf and hard of hearing-1 (c)Locomotor disability including Cerebral Palsy, leprosy cured, dwarfism, acid attack victims and muscular dystrophy-1 (d)Autism, intellectual disability, specific learning disability and mental illness & (e)Multiple disabilities from amongst persons under clause (a) to (d) including deaf-blindness in the posts identified for each disability from time to time.-1)	01	01
(ii)	Jr. Engineer (Mechanical) Class- III Grade	05 (02-w)	02 (01-w)	01	00	02 (01-w)			
(iii)	Jr. Engineer (Electrical) Class- III Grade	14 (05-w)	08 (03-w)	01	02 (01-w)	03 (01-w)			
(iv)	Jr. Nurse Class- III Grade	07	05	01	01	00			
(v)	Jr.Pharmacist Class- III Grade	02 (01-w)	01	0	01	00			
Total		128	66	12	24	26	04	01	01

Note:

1. **"UR"** denotes **Un-Reserved**
2. **"SC"** denotes **Schedule Cast**
3. **"ST"** denotes **Schedule Tribes**
4. **"SEBC"** denotes **Socially & Economically Backward Class**
5. **"W"** denotes **Woman**
6. **"PwD"** denotes **Person with Disability**
7. **"Ex-SM"** denotes **Ex-Serviceman**
8. **"SP"** denotes **Sports Person**

- (a) Variation in number of vacancies against categories is due to adjustment of backlog / previous shortfall.
- (b) Out of the vacancies mentioned above, 04 posts are reserved for **PwD** category. **Inter-se exchange in category is allowed.**
- (c) Persons with disability of 40% or more, if they desire, will have to bring scribe/ reader of their own to assist them in examination. There is no restriction w.r.t. educational qualification etc. for scribe/reader. But, it should be ensured that a scribe should not possess same/ similar/ higher qualification and must not also be from same discipline. The candidates with disability of 40% or more shall be allowed compensatory time of 20 minutes per hour of Computer Based Test (CBT).
- (d) Besides, 01 post is reserved for Ex-Serviceman and 01 post is reserved for Sports person.
- (e) *For Ex-serviceman, who has put in not less than 6 months continuous service in Armed Forces of the Union shall be allowed to deduct the period of such service from his actual age and if the resultant age doesn't exceed the maximum age limit shall be deemed to satisfy the conditions regarding age limits.*
- (f) Candidates belonging to PwD, Ex-Serviceman & Sports Persons, when selected as per reservation provided for them, shall be adjusted against the categories to which they belong, which means that the PwD / Ex-Serviceman / Sports Persons, if belonging to Scheduled Caste will claim the vacancy reserved for SC, if belonging to Scheduled Tribe will claim the vacancy reserved for ST and so on. Thus, the PwD/ Ex-Serviceman/ Sports Persons, who do not belong to either any of the reserved communities i.e. SC/ ST/ SEBC, would claim the unreserved vacancies.
- (g) In case of non-availability of eligible/ suitable women candidate (s) belonging to the respective category, the unfilled vacancies of that category shall be filled up by eligible & suitable male candidate (s) of the same category.
- (h) The exchange of reservation between SC & ST and vice-versa will not be considered.
- (i) The number of vacancies to be filled up on the basis of this recruitment is subject to change by the OMC Ltd. without notice, depending upon the exigencies of public service at the discretion of the OMC Ltd.
- (j) The candidates belonging to SC/ST/SEBC Category are required to upload the self-declaration towards caste and residence proof as per the format as mentioned at **Annexure- VI.**
- (k) The candidates belonging to Un-Reserved Category are required to upload the self-declaration towards residence proof as per format as mentioned at **Annexure-VII.**
- (l) The candidates, if called for document verification by OMC Ltd, need to produce the valid Resident Certificate issued by the Competent Authority at that stage of document verification. Further, the candidates belonging to SC/ST/SEBC category are required to produce the valid caste certificate issued by the Competent Authority at the time of document verification stage if called for the same by OMC Ltd.
- (m) Women candidates belonging to SC / ST/ SEBC are required to submit Caste Certificate by birth showing **"daughter of"** at the time of document verification. Caste Certificates obtained by virtue of marriage (**i.e. showing wife of"**) is not acceptable.
- (n) The candidates shall submit the Resident Certificate issued by the Competent Authority on or after **28.02.2015.**

7. Selection Methodology :-

- i. Selection for the above posts will be made in two stages. There shall be no short listing of candidates before Computer Based Test (CBT).

1. STAGE ONE : (Computer Based Test)

- Eligible candidates will be called for Computer Based Test (CBT), comprising 120 (One Hundred Twenty) number of Multiple Choice Questions (MCQs) as under:

Sl. No.	Post	Subjects	Allocation of Marks
1	Jr. Executive Assistant	General Awareness	20
		Reasoning & Mental Ability	20
		Quantitative Aptitude	30
		English	50
		Total	120
2	Jr. Engineer (Mechanical)	Core Subject	60
		General Awareness	15
		Reasoning & Mental Ability	15
		Quantitative Aptitude	15
		English	15
		Total	120
3	Jr. Engineer (Electrical)	Core Subject	60
		General Awareness	15
		Reasoning & Mental Ability	15
		Quantitative Aptitude	15
		English	15
		Total	120
4	Jr. Nurse	Core Subject	60
		General Awareness	15
		Reasoning & Mental Ability	15
		Quantitative Aptitude	15
		English	15
		Total	120
5	Jr. Pharmacist	Core Subject	60
		General Awareness	15
		Reasoning & Mental Ability	15
		Quantitative Aptitude	15
		English	15
		Total	120

- The Computer Based Test (CBT) for the post of Jr. Engineer (Mechanical), Jr. Engineer (Electrical), Jr. Nurse & Jr. Pharmacist will be of **2 (Two)** hours duration. However, the Computer Based Test (CBT) for the post of Jr. Executive Assistant will be of **2 ½ (Two and half)** hours duration.
- The Syllabus for the posts of Jr. Executive Assistant, Jr. Engineer (Mechanical), Jr. Engineer (Electrical), Jr. Nurse & Jr. Pharmacist are detailed at **Annexure-I, Annexure-II, Annexure-III, Annexure-IV** and **Annexure-V** respectively.

- **For every correct answer, one mark shall be awarded. For every wrong answer attempted by the candidates, negative marking of ¼ marks (i.e., 0.25 marks) will be deducted. No marks will be awarded/deducted for un-attempted questions.**

2. STAGE TWO: (Computer Proficiency Test & Document Verification)

- i. There shall be no viva-voice test. Merit on descending order of Merit (category- wise) shall be the basis for recruitment.
- ii. In case of filling up of the posts of Jr. Executive Assistant, the candidates must be qualified in Computer Proficiency Test (must obtain minimum of 30 marks out of 100 marks). The candidates for the posts of Jr. Executive Assistant shall be called for **Computer Proficiency Test** in the ratio of 1:5 in descending order of merit. Marks obtained in the Computer Proficiency Test shall not be added to the marks secured by the candidate in the written test.
- iii. After the Computer Based Test (CBT) for the posts of Jr. Engineer (Mechanical), Jr. Engineer (Electrical), Jr. Nurse & Jr. Pharmacist, the candidates shall be called for verification of documents in the ratio of 1:3 in the descending order of merit in the Computer Based Test (CBT). However, for the post of Jr. Executive Assistant (JEA), **the qualifying candidates (in the Computer Proficiency Test)** shall be called for verification of documents in the ratio of 1:3 in descending order of merit in the Computer Based Test (CBT).
- iv. The candidates to be called for Document Verification will have to produce original mark-sheets, certificates, documents from (HSC/ 10th onwards) towards proof of age, qualification, caste / residence etc.
- v. In case of Sports Person, the candidate needs to submit the Identity Card issued by Sports & Youth Services Department, Govt. of Odisha at the stage of Document Verification.
- vi. The candidates already employed in Government/ Semi- Government/ Central PSU/ State PSU shall submit "**No Objection Certificate**" issued by their present employer at the stage of document verification.
- vii. The Candidature of the candidates, not producing the required original documents at the time of document verification, shall be cancelled/ rejected.
- viii. Filling-up of vacancies is solely at the discretion of the Management based on suitability of candidates & hence, no claim shall arise for appointment, if vacancies are not filled up due to un-suitability / insufficient number of candidates.

8. General Condition :-

- i. **The Candidates who are waiting for final result of prescribed base educational qualification for the posts of Jr. Executive Assistant, Jr. Engineer (Mech.), Jr. Engineer (Elect.), Jr. Nurse & Jr. Pharmacist are not eligible to apply.**
- ii. The candidate (except SC/ST/PwD & Departmental candidate) is required to pay a non-refundable and non-adjustable amount of **Rs.500/-** (Rupees Five Hundred) only for each post towards Application fee in **Online Mode** (As mentioned at "**Instruction Sheet**"). Candidates belonging to SC/ST category, PwD candidates and Departmental candidates are exempted from payment of examination fee.
- iii. The candidates are advised to submit only one Application for each post. In case a candidate submits Multiple Applications against a particular category of post, then the Latest Application submitted by the candidate shall be considered. In such a case of Multiple Applications, the applicant has to submit the application fee against his/her latest Application. No request for adjustment of application fee for such latest application against the fee paid for the earlier applications, if any, shall be allowed.
- iv. Candidates are requested to visit Corporation website omcltd.in > **Recruitment Portal** only at regular intervals for any notification, news, updates, results etc. relating to recruitment.
- v. The decision of OMC Management will be final & binding on candidates in matters relating to eligibility, acceptance or rejection of the application, selection of candidate, cancellation of the recruitment process, etc. No enquiry / correspondence will be entertained in this regard. OMC

Management, at its discretion, may alter the terms & conditions of recruitment including the ratio in which the candidates are to be called for Computer Proficiency Test & Document Verification.

- vi. At any stage of recruitment process, if it is found that the candidate has furnished false or incorrect information, then the candidature /appointment of the candidate shall be cancelled.
- vii. Canvassing in any form shall be viewed adversely & shall lead to disqualification.
- viii. The selected candidates shall produce the required documents at the time of joining at their place of posting as per provisions of OMC R&P Rules for Non-Executives 2012 (visit Corporation website omcltd.in).
- ix. OMC service is not pensionable.
- x. Any dispute arising out of this connection will be subject to jurisdiction of appropriate Courts in Bhubaneswar only.
- xi. Interested eligible candidates may visit OMC Website omcltd.in and apply online within the scheduled dates as prescribed in "**Instruction Sheet**" as well as in this advertisement.

GENERAL MANAGER (P&A)
THE ODISHA MINING CORPORATION LTD.
(A GOLD CATEGORY STATE PSU)
OMC House, Post Box No. 34,
Bhubaneswar-751001

SYLLABUS FOR JR. EXECUTIVE ASSISTANT

Duration of Written Test- 2 ½ Hours		Total- 120 Marks	
Sl. No	Descriptive		Marks
1.	General Awareness	:	(20 Marks)
	a) Current national events b) Current international events c) Physical Geography of India & Odisha d) Scientific Invention & use of Science in everyday life e) Issues of environment, Ecology, Bio-diversity & Climate Change f) Books and Authors		
2.	Reasoning & Mental Ability	:	(20 Marks)
	A. Verbal I. Number Series II. Alphabet Series III. Test of Direction Sense IV. Coding-decoding V. Number Ranking VI. Arithmetic Reasoning VII. Problem of Age Calculation		
	B. Non-verbal I. Non-verbal Series II. Mirror Images III. Cubes & Dice IV. Grouping Identical Figures V. Embedded Figures etc		
3.	Quantitative Aptitude	:	(30 Marks)
	a) Ratio and Proportion b) Time and Work c) Speed and Distance d) Square roots e) Percentages and Averages f) Profit, Loss and Discount g) Probability		
4.	English	:	(50 Marks)
	A. Grammar		
	I. Fill in the blanks with articles II. Verb III. Agreement of the verb with subject IV. Adverb V. Preposition VI. Tenses VII. Conjunction VIII. One word substitution IX. Synonyms & Antonyms X. Correct the sentence		
	B. Comprehension		
	C. Sentence Re-arrangement		

SYLLABUS FOR JR. ENGINEER (MECHANICAL)**Duration of Written Test- 2 Hours****Total- 120 Marks****A. Core Subject****(60 Marks)**

1. **Engineering Mechanics:** Static Mechanics, Resolution of force, Moment, Equilibrium, Friction, Centroid and Moment of Inertia, Dynamics, Simple Machines.
2. **Strength of Material:** Simple stress & strain, Thin Cylinder and spherical shell under internal pressure, Two dimensional stress systems, Bending moment & shear force, Theory of simple bending, combined direct & bending stresses, Torsion.
3. **Engineering Material:** Engineering materials and their properties, Ferrous Materials and alloys, Iron-Carbon system, Crystal imperfections, Heat Treatment, Non-ferrous alloys, Bearing Material, Spring Materials, Polymers, Composites and Ceramics, Surface preparation and Industrial painting.
4. **Thermal Engineering I:** Thermodynamics Concepts and terminology, Energy and Work Transfer, Laws of Thermodynamics, Working Substances, Properties of gases, Ideal Gases and real gases, IC engine, Gas power cycle, Fuels and combustions.
5. **Production Technology:** Metal Forming Processes, Welding, Casting, Powder Metallurgy, Press Work, Jigs and fixtures.
6. **Theory of Machine:** Simple mechanism, Friction, Power Transmission, Governors and Flywheel, Balancing of Machine, Vibration of machine parts.
7. **Manufacturing Technology:** Tool Materials, Cutting Tools, Lathe Machine, Shaper, Planning Machine, Milling Machine, Slotter, Grinding, Internal Machining Operations (Drilling, Boring, Broaching), Surface finish, lapping.
8. **Thermal Engineering II:** Properties of Vapour and Vapour Power Cycles, Steam Generators, Steam Turbines, Gas Power Cycles, Fuels and Combustion, Heat Transfer, Refrigeration Cycles, Air Compressors.
9. **Fluid Mechanics and Hydraulics Machines:** Properties of Fluid, Fluid Pressure and its measurements, Hydrostatics, Fluid Flow, Flow through pipe, Impact of jets, Hydraulic turbines, Hydraulic Pumps.
10. **Environmental Studies:** Renewable and non renewable resources, ECO Systems, Biodiversity, Environmental Pollution, Disaster Management, Social Issues and the Environment, Sustainable development, Water conservation, Rain water harvesting.
11. **Machine Design:** Design of fastening elements, Design of shafts and keys, Design of belt drivers and pulleys, Design of closed coil helical spring and leaf spring.
12. **Industrial Engineering and Quality Control:** Plant location and Layout, Operations Research, Inventory Control, Plant maintenance, Inspection and Quality Control, Contemporary Quality Management concepts.
13. **Automobile Engineering:** Automobiles: Definition, need and classification, Layout of automobile chassis with major components, Transmission system, Braking system, Auto electric system, Suspension System, Cooling and Lubrication, Fuel and Ignition system.

Sl. No	Descriptive		Marks
B.	General Awareness	:	(15 Marks)
	a) Current national events b) Current international events c) Physical Geography of India & Odisha d) Scientific Invention & use of Science in everyday life e) Issues of environment, Ecology, Bio-diversity & Climate Change f) Books and Authors		
C.	Reasoning & Mental Ability	:	(15 Marks)
	A. Verbal I. Number Series II. Alphabet Series III. Test of Direction Sense IV. Coding-decoding V. Number Ranking VI. Arithmetic Reasoning VII. Problem of Age Calculation		
	B. Non-verbal I. Non-verbal Series II. Mirror Images III. Cubes & Dice IV. Grouping Identical Figures V. Embedded Figures etc		
D.	Quantitative Aptitude	:	(15 Marks)
	a) Ratio and Proportion b) Time and Work c) Speed and Distance d) Square roots e) Percentages and Averages f) Profit, Loss and Discount g) Probability		
E.	English	:	(15 Marks)
	Grammar		
	I. Fill in the blanks with articles II. Verb III. Agreement of the verb with subject IV. Adverb V. Preposition VI. Tenses VII. Conjunction VIII. One word substitution IX. Synonyms & Antonyms X. Correct the sentence		

SYLLABUS FOR JR. ENGINEER (ELECTRICAL)**Duration of Written Test- 2 Hours****Total- 120 Marks****A. Core Subject**

(60 Marks)

1. **Basic concepts:** Concepts of resistance, inductance, capacitance, and various factors affecting them. Concepts of current, voltage, power, energy and their units.
2. **Circuit law:** Kirchhoff's law, Simple Circuit solution using network theorems.
3. **Magnetic Circuit:** Concepts of flux, mmf, reluctance, Different kinds of magnetic materials, Magnetic calculations for conductors of different configuration e.g. straight, circular, solenoidal, etc. , Electromagnetic induction, self and mutual induction.
4. **AC Fundamentals:** Instantaneous, peak, R.M.S. and average values of alternating waves, Representation of sinusoidal wave form, simple series and parallel AC Circuits consisting of R.L. and C, Resonance, Tank Circuit. Poly Phase system — star and delta connection, 3 phase power, DC and sinusoidal response of R-L and R-C circuit.
5. **Measurement and measuring instruments:** Measurement of power (1 phase and 3 phases, both active and re-active) and energy, 2 wattmeter method of 3 phase power measurement, Measurement of frequency and phase angle, Ammeter and voltmeter (both moving oil and moving iron type), extension of range wattmeter, Multimeters, Megger, Energy meter AC Bridges, Use of CRO, Signal Generator, CT, PT and their uses, Earth Fault detection.
6. **Electrical Machines:**
 - (a) D.C. Machine — Construction, Basic Principles of D.C. motors and generators, their characteristics, speed control and starting of D.C. Motors. Method of braking motor, Losses and efficiency of D.C. Machines.
 - (b) 1 phase and 3 phase transformers — Construction, Principles of operation, equivalent circuit, voltage regulation, O.C. and S.C. Tests, Losses and efficiency. Effect of voltage, frequency and wave form on losses. Parallel operation of 1 phase /3 phase transformers. Auto transformers.
 - (c) 3 phase induction motors, rotating magnetic field, principle of operation, equivalent circuit, torque-speed characteristics, starting and speed control of 3 phase induction motors. Methods of braking, effect of voltage and frequency variation on torque speed characteristics.

Fractional Kilowatt Motors and Single Phase Induction Motors: Characteristics and applications.
7. **Synchronous Machines:** Generation of 3-phase e.m.f. armature reaction, voltage regulation, parallel operation of two alternators, synchronizing, control of active and reactive power, Starting and applications of synchronous motors.

8. **Generation, Transmission and Distribution:** Different types of power stations, Load factor, diversity factor, demand factor, cost of generation, interconnection of power stations. Power factor improvement, various types of tariffs, types of faults, short circuit current for symmetrical faults, Switchgears — rating of circuit breakers, Principles of arc extinction by oil and air, H.R.C. Fuses,

Protection against earth leakage/ over current, etc. Buchholtz relay, Merz-Price system of protection of generators & transformers, protection of feeders and bus bars., Lightning arresters, various transmission and distribution system, comparison of conductor materials, efficiency of different system. Cable — Different type of cables, cable rating and derating factor.
9. **Estimation and costing:** Estimation of lighting scheme, electric installation of machines and relevant IE rules, Earthing practices and IE Rules.
10. **Utilization of Electrical Energy:** Illumination, Electric heating, Electric welding, Electroplating, Electric drives and motors.
11. **Basic Electronics:** Working of various electronic devices e.g. P N Junction diodes, Transistors (NPN and PNP type), BJT and JFET., Simple circuits using these devices.
12. **Electrical Engineering Materials:** Conducting materials, semi conducting materials, Insulating materials, dielectric materials, materials for special purpose.
13. **Instrumentation And Control:** Sensor & transducer, oscilloscope, measurement on non-electric quantities, control system, servo mechanism, mathematical model of physical system, servo motor, block diagram of control system, stability of control system.
14. **Power Electronic & Drives:** Thyristor, Firing ckt of thyristor, Phase controlled rectifier, inverter, chopper, cycloconverter, power semiconductor devices, thyristor application, AC & DC drives

Sl. No	Descriptive		Marks
B.	<u>General Awareness</u>	:	(15 Marks)
	a) Current national events b) Current international events c) Physical Geography of India & Odisha d) Scientific Invention & use of Science in everyday life e) Issues of environment, Ecology, Bio-diversity & Climate Change f) Books and Authors		
C.	<u>Reasoning & Mental Ability</u>	:	(15 Marks)
	A. Verbal		
	I. Number Series II. Alphabet Series III. Test of Direction Sense IV. Coding-decoding V. Number Ranking VI. Arithmetic Reasoning VII. Problem of Age Calculation		
	B. Non-verbal		
	I. Non-verbal Series II. Mirror Images III. Cubes & Dice IV. Grouping Identical Figures V. Embedded Figures etc		

D.	<u>Quantitative Aptitude</u>	:	(15 Marks)
	a) Ratio and Proportion b) Time and Work c) Speed and Distance d) Square roots e) Percentages and Averages f) Profit, Loss and Discount g) Probability		
E.	<u>English</u>	:	(15 Marks)
	Grammar		
	I. Fill in the blanks with articles II. Verb III. Agreement of the verb with subject IV. Adverb V. Preposition VI. Tenses VII. Conjunction VIII. One word substitution IX. Synonyms & Antonyms X. Correct the sentence		

SYLLABUS FOR JR. NURSE**Duration of Written Test- 2 Hours****Total- 120 Marks****A. Core Subject****(60 Marks)**

1. **Nursing Art:** Preparation of patient unit, Admission of patient, Observation, Personal hygiene, Nutrition, Comfort major, Elimination, Hot & Cold application, administration of medicine, Injection, Skeletal skull and maternal pelvis, Antenatal care, Normal labour, Antepartum Hemorrhage, Gynaecology, Multiple pregnancy, Complication third stage of labour, Abnormal Puerperium, Operating obstetrics.
2. **Anatomy Physiology:** Cardiovascular system, lymphatic system, Nervous system, Endocrine system, Respiratory system, Digestive system, Urinary system, Skin, Immunity, Reproductive system, Muscular system.
3. **Microbiology:** Fungi, Bacteria, Virus, Parasites, Common parasitic diseases- Protozoal & Helminthic.
4. **Medical Surgical Nursing:** Common problems of adult patients, Respiratory nursing, Oncological nursing, Alimentary nursing, Gastrointestinal nursing, Hepatobiliary pancreatic nursing, Orthopedic nursing, Neurological nursing, Endocrinological nursing, Urological nursing, Renal Nursing, Dermatological nursing, Ophthalmic nursing, Cardiovascular resuscitation.
5. **Mental Health:** Principles and concept, Nurse patient relations, Schizophrenia Management, Psychotic disorder, Management of Mood disorder, Neurotic, Stress related, Substance use, Personality, Sexual, Eating disorder, Organic brain disorder management, legal issue in mental health nursing, Community mental health nursing.
6. **Midwifery &Gynaecology:** Anatomy of female reproductive system, Fundamentals of reproduction, Diagnosis of pregnancy, Fetus in utero, The fetus.
7. **Paediatric Nursing:** Immunization, Nutrition, Newborn infant, Healthy child, Sick child, Congenital anomalies, Nutrition deficiency disorder.
8. **Community Health Nursing:** Health System in India, Health care delivery system, Health planning in India, Specialized community health services and Nurse's role, National health problem, National health programs, Demography and family welfare, Health Team, Health Information System, Health Agencies.

Sl. No	Descriptive	Marks
B.	<u>General Awareness</u>	: (15 Marks)
	a) Current national events b) Current international events c) Physical Geography of India & Odisha d) Scientific Invention & use of Science in everyday life e) Issues of environment, Ecology, Bio-diversity & Climate Change f) Books and Authors	

C.	<u>Reasoning & Mental Ability</u>	:	(15 Marks)
	A. Verbal I. Number Series II. Alphabet Series III. Test of Direction Sense IV. Coding-decoding V. Number Ranking VI. Arithmetic Reasoning VII. Problem of Age Calculation		
	B. Non-verbal I. Non-verbal Series II. Mirror Images III. Cubes & Dice IV. Grouping Identical Figures V. Embedded Figures etc		
D.	<u>Quantitative Aptitude</u>	:	(15 Marks)
	a) Ratio and Proportion b) Time and Work c) Speed and Distance d) Square roots e) Percentages and Averages f) Profit, Loss and Discount g) Probability		
E.	<u>English</u>	:	(15 Marks)
	Grammar		
	I. Fill in the blanks with articles II. Verb III. Agreement of the verb with subject IV. Adverb V. Preposition VI. Tenses VII. Conjunction VIII. One word substitution IX. Synonyms & Antonyms X. Correct the sentence		

SYLLABUS FOR JR. PHARMACIST**Duration of Written Test- 2 Hours****Total- 120 Marks****A. Core Subject****(60 Marks)****1. Pharmaceutics-I**

- a) Metrology
- b) Sterilization
- c) Processing of Tablets
- d) Processing of Capsules

2. Pharmaceutical Chemistry- I

- a) Acids, Bases and Buffers, Boric Acid, Hydrochloric Acid, Strong Ammonium Hydroxide, Calcium Hydroxide, Sodium Hydroxide and official Buffers.
- b) Antioxidants, Hypophosphorous acid, Sulfur dioxide sodium bisulphate, Sodium metabisulfate, Sodium thiosulphate, Nitrogen and Sodium Nitrite.
- c) Gastrointestinal Agents, Topical Agents, Dental Products, Inhalants, Respiratory Stimulants Expectorants and Emetics, Antidotes.
- d) Electrolytes used for Replacement Therapy, Physiological Acid Base- Balance and Electrolytes used.

3. Human Anatomy and Physiology

- a) Structure and Functions of Various Parts of Heart, Respiratory Systems, Urinary Systems, Skeletal Muscle, Central Nervous System, Brain, Taste, Smell, Ear, Eye & Skin.
- b) Digestive System, Endocrine Glands and Hormones and Reproduction System.

4. Pharmacognosy

- a) Occurance, distribution Organoleptic, evaluation- Laxative, Cardiotonics, Carminatives and G. I regulations, Astringents, Drugs acting on Nervous System
- b) Anti Hypertensive, Antitussives, Anti rheumatics, Anti tumour, Antileprotics, Anti Diabetics, Antidysenterics, Anti septic and disinfectants, Anti malarials, Oxytocics, Vitamins, Enzymes, Perfumes and Flavouring Agents, Pharmaceutical Aids, Miscellaneous.
- c) Study of Source, Preparations & identification of Fibres used in sutures and surgical dressing.
- d) Gross anatomical Studies of Senna, Dhatura, Cinnamon, Clove, Ginger, Nux-vomica and Ipecacuanhe.

5. Biochemistry and Clinical Pathology

- a) Brief Chemistry and role of proteins, Polypeptides and Amino Acids, Carbohydrates, Vitamins and Co-enzymes.
- b) Brief Concepts of normal and abnormal metabolism of Proteins, Carbohydrates and Lipids.
- c) Introduction to pathology of Blood and Urine- Lymphocytes and Platelets, Erythrocytes, Abnormal Constituents of Urine and their Significance in disease.

6. Health Education And Community Pharmacy

- a) Concept of Nutrition and Health
- b) First Aid
- c) Communicable Diseases- Respiratory Infection, Intestinal Infections, Arthropod Bone Infections, Surface Infections, Sexually transmitted diseases.
- d) Non-communicable diseases

7. **Pharmaceutics-II**

- a) Dispensing Pharmacy- Prescription, Incompatibilities in prescriptions, Posology.
- b) Dispensing Medications- Powders, Liquid oral Dosage forms, Ointments, Pastes, Jellies, Suppositories and pessaries.
- c) Sterile dosage forms- Parenteral, Sterility testing, ophthalmic products.

8. **Pharmaceutical Chemistry- II:** Pharmaceutical Organic Chemistry- Antiseptics and Disinfectants, Sulfonamides, Antileprotic Drugs, Antitubercular drugs, Anti Amoebic & Antihelminthic Drugs, Antibiotics, Antifungal Agents, Antimalarials drugs, Hypnotics, General Anesthetics, Local Anesthetics, Anti Depressant Drugs, Diuretic Drugs, Cardiovascular Drugs, Hypoglycemic Agents, Coagulants & Anticoagulants, Histamine & Antihistamine Agents, Analgesics and Antipyretics, Non Steroidal & Inflammatory Agents, Thyroxine & Anti Thyroids, Diagnostic Agents, Anti Neoplastic drugs.

9. **Pharmacology & Toxicology**

- a) General Mechanism of Drugs Action
- b) Pharmacological Classification- Local Anaesthetics, Respiratory System, Cardiovascular, Hormones & Hormone Antagonists.
- c) Chemotherapy of Microbial Disease, Protozoal Diseases, Cancer.
- d) Disinfectants & Antiseptics

10. **Pharmaceutical Jurisprudence**

- a) Pharmacy act, 1948
- b) The Drugs & Cosmetics Act, 1940
- c) The Drugs & Magic remedies (Objectionable Advertisement) Act, 1954
- d) Narcotic Drugs & Psychotropic Substances Act, 1985
- e) Poisons Act, 1919
- f) Medicinal & Toilet preparations (excise duties) Act, 1955, Medical Termination of Pregnancy Act, 1971

11. **Drug Store and Business Management:** Forms of Business Organisation, Channels of Distribution, Drugs House Management, Cash Book, General Ledger and Trial Balance

12. **Hospital and Clinical Pharmacy**

- a) Drug distribution system in Hospitals- Out Patients service, inpatients service
- b) Manufacturing- Economical Considerations, Sterile Manufacture, Non- Sterile Manufacture, Procurement of stores and Testing Raw Materials
- c) Pharmacy Therapeutic Committee (PTC)
- d) Surgical Dressing, Application of Computers in Hospital Pharmacy
- e) Drugs Interactions, Drug-Drug Interaction, Drug Food interaction, Mechanism of drug interaction
- f) Adverse Drug reaction, Drugs in Clinical Toxicity
- g) Drug Dependence, Drug Abuse, Addictive Drugs & Treatment.

Sl. No	Descriptive		Marks
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C.	<u>Reasoning & Mental Ability</u>	:	(15 Marks)
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D.	<u>Quantitative Aptitude</u>	:	(15 Marks)
	a) Ratio and Proportion b) Time and Work c) Speed and Distance d) Square roots e) Percentages and Averages f) Profit, Loss and Discount g) Probability		
E.	<u>English</u>	:	(15 Marks)
	Grammar		
	I. Fill in the blanks with articles II. Verb III. Agreement of the verb with subject IV. Adverb V. Preposition VI. Tenses VII. Conjunction VIII. One word substitution IX. Synonyms & Antonyms X. Correct the sentence		

SELF DECLARATION FORM FOR CASTE/RESIDENT PROOF

I Smt./ Ms. / Sri _____ Daughter/Son of _____ Age
(as per advertisement) _____ Years _____ months _____ days, Caste (ST/SC/SEBC)
_____ Resident of Village _____ P.O. _____ P.S. _____ Town (NAC/
Municipality/ Municipal Corporation) _____ Tahsil _____ District _____
Odisha, PIN Code _____, do hereby declare that the information given above is true to the
best of my knowledge and belief. I am well aware of the fact that if the information given by
me is proved false/ not true, I will be liable for action as per law and all the benefits, if any,
availed by me shall be summarily withdrawn.

Date:

Place:

Signature of the Applicant

(Name of the applicant)

NOTE:

- I) The certificates towards proof of caste & resident etc shall be called for verification during the document verification process before the final selection.
- II) The resident certificate must have been issued on or after 28.02.2015.

SELF DECLARATION FORM FOR RESIDENT PROOF

I Smt./ Ms. / Sri _____ Daughter/Son of _____ Age
(as per advertisement) _____ Years _____ months _____ days, Resident of Village
_____ P.O. _____ P.S. _____ Town (NAC/ Municipality/ Municipal
Corporation) _____ Tahsil _____ District _____ Odisha, PIN Code _____,
do hereby declare that the information given above is true to the best of my knowledge and
belief. I am well aware of the fact that if the information given by me is proved false/ not
true, I will be liable for action as per law and all the benefits, if any, availed by me shall be
summarily withdrawn.

Date:

Place:

Signature of the Applicant

(Name of the applicant)

NOTE:

- I) The certificates towards proof of resident shall be called for verification during the document verification process before the final selection.
- II) The resident certificate must have been issued on or after 28.02.2015.