



भारत संचार निगम लिमिटेड  
(भारत सरकार का उद्यम)  
कार्मिक शाखा, निगम कार्यालय  
चौथा तल, भारत संचार भवन,  
जनपथ, नई दिल्ली 110 001  
Dated 21.12.2023

No. BSNLCO-PERS/15(12)/1/2023-PERS1(Arch.)

To

All Heads of Telecom Circles/Administrative Units,  
BSNL.

Subject: **Revision of Scheme and Syllabus of LICE for promotion to the grade of SDE of Architecture Stream.**

The undersigned is directed to enclose herewith the revised Scheme and Syllabus of Limited Internal Competitive Examination (LICE) for promotion to the grade of SDE of Architecture Stream, for wide publicity among the executives of BSNL.

2. The revised Scheme and Syllabus for LICE quota promotions shall be applicable w.e.f. vacancy year 2023 and all the promotions under LICE quota for vacancy year 2023 and onwards shall be conducted as per revised Scheme and Syllabus.

This issues with the approval of competent authority.

Encl. As above.

(जी.पी. विश्वाई/ G.P. Vishnoi)

उप महाप्रबंधक (कार्मिक-डीपीसी-एसएम)  
Dy. General Manager (Pers-DPC-SM)

Copy to:

1. PPS to CMD, BSNL.
2. PPS to functional Directors of BSNL Board.
3. PPS to CVO, BSNL.
4. All CGMs/PGMs/Sr. GMs/GMs, BSNL CO.
5. All Heads of cadre controlling authorities.
6. General Secretary, SNEA/AIGETOA/SEWA.
7. OL Section for Hindi version.
8. BSNL Intranet portal.

(मूल चंद /Mool Chand)

सहायक महाप्रबंधक(कार्मिक नीति)  
Assistant General Manager (Pers. Policy)

**Scheme and syllabus for the Limited Internal Competitive Examination (LICE) for promotion to the grade of Sub Divisional Engineer (Arch) of Architecture Stream**

**1. SCHEME OF EXAMINATION**

1.1. The examination will consist of one paper (two sections) as given below:

Paper	Maximum Marks	Duration
(i) Written Test (Core)	120 marks (120 questions)	3 Hours
(ii) Written Test (Common)	60 marks (60 questions)	
<b>Total</b>	<b>180 marks</b>	

Note:

- The examination will be conducted in one shift of 3 hours duration.
- In Written Test (Core) questions can also be asked in pictorial/graphic/sketch forming.
- The examination will be multiple choice objective type with negative marking. For each correct answer 01 mark will be awarded and for each wrong answer (-)0.25 marks will be awarded.

**1.2. Determination of final merit list:**

Final merit list shall be published based on marks obtained in the written Examination. Qualifying Marks [Written test (Core) and Written test (Common) put together]: UR-50%; SC/ST-45%, PwBD-45% if sufficient PwBD candidates are not available on prescribed standards.
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**2. SYLLABUS**

**2.1. Syllabus for Written Test (Core) – Architecture**

Sl. No	Topic	Topic sub-heading
1.	<b>Building Materials</b>	The properties and applications of building materials such as stone, brick, lime, sand, cement, mortar, plaster, timber, concrete, glass, paints and varnishes, floor coverings, wall covering etc.
2	<b>Building Construction</b>	Foundation, brick masonry, stone masonry, damp proofing, RCC work, doors, windows, floor, roof, staircase, interior and exterior wall finishes, carpentry and joinery etc.
3.	<b>Structural Systems</b>	The basic principles of various structural systems such as Load bearing, frame structure, composite structures, precast and pre-stressed structures etc.
4.	<b>Building Services</b>	<ol style="list-style-type: none"> <li>Sanitary &amp; water supply services</li> <li>Drainage, Storm water disposal, Rain water harvesting,</li> <li>Garbage/waste disposal,</li> <li>Electro mechanical services e.g. Electric supply, HVAC, Lifts &amp; elevators etc.</li> <li>Firefighting systems,</li> <li>Surveillance systems</li> <li>Data, and communication services,</li> <li>Acoustics,</li> <li>Automation</li> <li>Green Buildings and Solar passive architecture.</li> </ol>

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5	<b>Architecture Design Software</b>	The basic knowledge of computer aided design application such as AUTOCAD, REVIT, 3D MAX, PHOTOSHOP etc.
6.	<b>Specifications &amp; Estimates</b>	Basic knowledge of framing of specifications, plinth area estimates, detailed estimates, market rate justification, AA/ES procedures, types of tenders, surveying, site inspection notes & issuing completion certificates.
7	<b>Building Byelaws</b>	The Building Byelaws, zoning plan, regional plan, master plan and procedure for approval of plans from Local Authorities (statutory bodies)
8	<b>Professional Practice</b>	Duties of Architect, Professional Conduct, Conditions of Engagement and Scale of Charges, Deficiency in services, Professional Liabilities etc. as per Professional guidelines issued by Council of Architecture & BSNL.
9	<b>Construction Management</b>	Concept of Project management, PERT charts and basic knowledge of software in use for Project Management.
10.	<b>History of Architecture &amp; Contemporary Design in India</b>	Broad study of the evolution of Architecture through the ages and across a wide range of geography. Important Contemporary Buildings in India post-Independence.

**2.2 Syllabus for Written Test (Common):**

1	IT Tools	<ul style="list-style-type: none"><li>● MS office: Word, Excel, Power Point</li><li>● E-Office</li><li>● ESS workflows</li><li>● ERP-SAP processes</li><li>● Fundamentals of Artificial Intelligence (AI)</li><li>● Cyber Security from end user perspective</li></ul>
2	Planning & Operation	<ul style="list-style-type: none"><li>● BSNL Procurement Manual</li><li>● GeM, CPP, MSTC</li><li>● Energy Conservation OORJA APP (Project OJAS)</li><li>● BSNL Land Monetization Policy</li><li>● BSNL CROP Policy</li></ul>
3	General Admn.	<ul style="list-style-type: none"><li>● RTI, PGRMS, Grievance Redressal Mechanism</li><li>● Contract Management</li><li>● IPMS</li><li>● BSNL CDA Rules</li></ul>
4	Spectrum & Licensing	<ul style="list-style-type: none"><li>● Types of Telecom License</li><li>● Basics of USO Framework</li><li>● Spectrum allocated to BSNL</li></ul>
5	TRAI regulations	<ul style="list-style-type: none"><li>● Basics of TRAI QoS</li></ul>
6	Project Management	<ul style="list-style-type: none"><li>● Project evaluation (Payback / NPV/Rol)</li><li>● Project Budgeting and RE/BE</li><li>● Project monitoring (CPM/PERT)</li><li>● Capitalization, WIP, Depreciation and Scrapping</li></ul>

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*Handwritten signature and date:*  
21.12.2023