

Plan of Written Examination

All the aspirants are informed as under with respect to the written test to be conducted for the recruitment for the post of **Draftsman (Advt. No.05 of 2023)** :-

1. The Exam will be conducted in MCQ (Multiple Choice Questions) format. OMR sheet will be used for answering the questions.
2. The Exam would be of 2 hours duration.
3. The Exam will consist of two parts (Part A and Part B) as follows:-

Part	Topic	No. of Questions	Marks (Each Question carries 1 mark)	Type of Questions
A	Questions from General Knowledge and Current Affairs, Punjab History and Culture, Logical Reasoning and Mental ability, Punjabi, English, ICT, (Annexure-1)	40	40	MCQs (Multiple Choice Questions)
B	Questions from the Subject (Annexure-2)	80	80	MCQs (Multiple Choice Questions)
Total		120	120	

4. ***There will be negative marking. Each question carries 1 mark. For every wrong answer, 1/4th mark i.e. 0.25 mark would be deducted. The question(s) not attempted will receive no credit or discredit.***
5. ***Tentative syllabus for the written examination for the recruitment of Draftsman (Advt. No.05 of 2023) is annexed at Annexure-1 and Annexure-2.***

Annexure - 1

Part A - General Knowledge, Logical Reasoning and Mental Ability.

Sr. No.	Indicative Contents of Syllabus	Weightage (Approx.)
1	<p>General Knowledge and Current affairs of National and International importance including:</p> <p>(i) Polity issues, (ii) Environment issues, (iii) Current Affairs, (iv) Science and Technology, (v) Economic issues, (vi) History of India with special reference to Indian freedom struggle movement. (vii) Sports, (viii) Cinema and Literature. (ix) Geography</p>	10
2	<p>Punjab History and Culture:- Physical features of Punjab and its ancient history. Social, religious and economic life in Punjab. Development of Language & literature and Arts in Punjab, Social and culture of Punjab during Afgan/Mughal Rule, Bhakti Movement, Sufism, Teachings/History of Sikh Gurus and Saints in Punjab. Adi Granth, Sikh Rulers, Freedom movements of Punjab.</p>	5
3	<p>Logical Reasoning & Mental Ability:</p> <p>(i) Logical reasoning, analytical and mental ability. (05 Marks) (ii) Basic numerical skills, numbers, magnitudes, percentage, numerical relation appreciation. (03 Marks) (iii) Data analysis, Graphic presentation charts, tables, spreadsheets. (02 Marks)</p>	10
4.	<p>ਪੰਜਾਬੀ:- ਸ਼ੁੱਧ-ਅਸ਼ੁੱਧ, ਸ਼ਬਦਜੋੜ, ਅਗੇਤਰ ਅਤੇ ਪਿਛੇਤਰ, ਸਮਾਨਾਰਥਕ/ਵਿਰੋਧੀਸ਼ਬਦ, ਨਾਂਵ, ਪੜਨਾਂਵ ਅਤੇ ਕਿਰਿਆ ਦੀਆਂ ਕਿਸਮਾਂ ਤੇ ਸਹੀ ਵਰਤੋਂ, ਲਿੰਗ ਅਤੇ ਵਚਨ, ਪੰਜਾਬੀ ਅਖਾਣ ਤੇ ਮੁਹਾਵਰੇ, ਅੰਗਰੇਜੀ ਤੋਂ ਪੰਜਾਬੀ ਅਨੁਵਾਦ ਅਤੇ ਬਹੁਤੇ ਸ਼ਬਦਾਂ ਦੀ ਥਾਂ ਇੱਕ ਸ਼ਬਦ ਆਦਿ।</p>	5
5.	<p>English:- Basic Grammar, Subject and Verb, Adjectives and Adverbs, Synonyms, Antonyms, One Word Substitution, Fill in the Blanks, Correction in Sentences, Idioms and their meanings, Spell Checks, Adjectives, Articles, Prepositions, Direct and Indirect Speech, Active and Passive Voice, Correction in Sentences, etc.</p>	5
6.	<p>ICT:- Basics of computers, Network & Internet, Use of office productivity tools Word, Excel, Spreadsheet & PowerPoint.</p>	5
Total		40

Annexure – 2
Part B - Subject Syllabus (Draftsman)

1. Importance of B.I.S., Introduction of Code for Practice of Architectural and Building Drawings (IS: 962- 1989), Layout of drawing. Lines, Lettering, Dimensioning. Knowledge of different types of Scales and Principle of R.F., Different types of projection views such as Orthographic, Isometric, Oblique and Perspective.
2. Building Materials- Stones –classification, types, uses. Bricks– Manufacturing, characteristics, types, uses. Lime– characteristics, types, uses. Pozzolanic-classification, types, uses. Cement – Manufacturing, classification, types, uses and test of good cement. Sand – characteristics, types & uses. Clay Products – types, earthenware, stoneware, porcelain, terracotta, glazing. Mortar& Concrete –Types, uses Preparation, Proportion ad mixtures and applications. Timber–types, Structure, disease & defects, characteristics, seasoning. Preservation and uses.
3. Alternative materials of Timber- Plywood, Block Board, Particle Board, Fireproof reinforced plastic, (FRP). Medium density fireboard (MDF) etc.
4. Protective materials- Tar, bitumen, asphalt- Properties, application and uses. Paints–characteristics, types, uses. Varnishes– characteristics, types, uses. Metal– characteristics, types, uses. Plastics –characteristics, types, use.
5. Building Construction:- Sequence of construction of a building. Name of different parts of building.
6. Stone masonry- Terms used and Classification. Principle of construction, Composite masonry. Strength of walls. Strength of Masonry.
7. Brick masonry - Principle of construction of Bonds, Tools and Equipment used.
8. Foundation-Purpose of Foundation, Causes of failure of Foundation, Types of Foundations, Drawing of footing, foundation, Setting out of building on ground excavation, Types of Shoring and Scaffolding details, Types of Underpinning and Timbering details. DPC. Arches. Lintels. Morter. R.C.C. Reinforcement. Doors & windows. Roofs. Floors. Trusses. Carpentry Joints. Stairs.

9. Surveying-Introduction, History and Principal of chain surveying. Instruments Employed. Main divisions (plain & geodetic).Chain Surveying. Compass Surveying. Plane Table Surveying. Leveling. Theodolite. Total Station
10. Computer aided drafting (CAD) -Operating system software & their use. Introduction of CAD. Basic commands of CAD
11. Planning of Building-Principles of Planning& orientation of Building. Local Building Bye Laws
12. Estimating & Costing- Methods of finding Quantities of materials.
13. Roads and Railways- Principles of Planning & construction of Roads. Indian Railways &their Gauges
14. Bridges-Culverts& Bridges.
15. Irrigation & hydrology - Methods. Terms used in Irrigation. Storage & Reservoirs, Canals, Hydroelectric power house.
16. Public Health Engineering- Public health system of Sanitation. Sanitary Fittings etc.