

## **12.0 NO OBJECTION CERTIFICATE (NOC) FOR SERVING EMPLOYEES:**

12.1 Candidates serving (including those undergoing induction training/probation) in any Central/State Government Department including Railways or Public Sector Undertakings may apply directly to the RRBs duly informing their Employer. **Shortlisted candidates should produce NOC from the employer during DV failing which their candidature will be cancelled.**

12.2 Candidates should note that in case a communication is received from their employer by the RRB concerned withholding permission to the candidates applying for/appearing at the examination, their application/candidature will be liable to be rejected /cancelled.

## **13.0 RECRUITMENT PROCESS:**

13.1 Only single online application (common to all the notified posts in opted RRB) has to be submitted by the candidate through the link provided on the official websites of RRBs.

13.2 The recruitment process shall involve Single Stage CBT, Stenography Skill Test, Performance Test/Teaching Skill Test, Translation Test (as applicable) and DV/Medical Examination. However, RRB reserves the right to conduct additional CBTs if considered necessary for all or for a limited number of candidates as may be deemed fit by RRBs.

13.3 The date, time and venue for all the activities viz. CBT, Stenography Skill Test, Performance Test/Teaching Skill Test, Translation Test, DV, Medical Examination or any other additional activity as applicable shall be fixed by the RRBs and shall be intimated to the eligible candidates in due course. Request for postponement of any of the above activity or for change of venue, date and shift will not be entertained under any circumstances.

13.4 The Question Paper for Single Stage CBT will be of 90 minutes duration for 100 questions and 120 minutes for PwBD candidates who are availing the Scribe facility. As regards Question Paper for the posts of Junior Stenographer/Hindi & English, please refer to details as given in Para 13.11 below.

13.5 The Question Papers shall be of objective multiple-choice type.

13.6 The standard of questions for the Single Stage CBT will be generally in conformity with the educational standards prescribed for the posts. The questions pertaining to Professional Ability shall be from the syllabus of every notified post mentioned at Annexure-X to XX.

13.7 **Section-wise marks:** The section wise number of questions and marks are detailed below (except for CBT of Junior Stenographer/Hindi & English posts, for which refer to details as given in Para 13.11 below): -

| <b>Subject</b>       | <b>Number of questions</b> | <b>Marks allotted</b> |
|----------------------|----------------------------|-----------------------|
| Professional Ability | 50                         | 50                    |

|                                    |            |            |
|------------------------------------|------------|------------|
| General Awareness                  | 15         | 15         |
| General Intelligence and Reasoning | 15         | 15         |
| Mathematics                        | 10         | 10         |
| General Science                    | 10         | 10         |
| <b>Total</b>                       | <b>100</b> | <b>100</b> |

Each question will be of one mark each.

The section wise distribution given in the above table is only indicative and there may be some variations in the actual question papers. **There will be negative marking and 1/3 mark shall be deducted for each wrong answer.**

13.8 The Questions will be of objective type with multiple choices and are likely to include questions pertaining to:

**a. Mathematics:**

Number Systems, BODMAS, Decimals, Fractions, LCM and HCF, Ratio and Proportions, Percentage, Mensuration, Time and Work, Time and Distance, Simple and Compound Interest, Profit and Loss, Algebra, Geometry and Trigonometry, Elementary Statistics, Square Root, Age Calculations, Calendar & Clock, Pipes & Cistern.

**b. General Intelligence and Reasoning:**

Analogies, Alphabetical and Number Series, Coding and Decoding, Mathematical Operations, Relationships, Syllogism, Jumbling, Venn Diagram, Data Interpretation and Sufficiency, Conclusions and Decision Making, Similarities and Differences, Analytical Reasoning, Classification, Directions, Statement- Arguments and Assumptions etc.

**c. General Awareness:** Knowledge of Current Affairs, Indian Geography, Culture and History of India including freedom movement, Indian Polity and Constitution, Indian Economy, Environmental issues concerning India and the World, Sports, General scientific and technological developments etc.

**d. General Science:** Physics, Chemistry and Life Sciences (up to 10<sup>th</sup> standard CBSE syllabus).

13.9 Minimum percentage of marks for eligibility in various communities: UR-40%, EWS-40%, OBC-30%, SC-30% and ST-25%. These percentage of marks for eligibility may be relaxed by 2% for PwBD candidates in case of shortage of PwBD candidates against vacancies reserved for them.

13.9.1 Where a second stage CBT is deemed necessary and held, RRBs reserve the right to treat the first stage CBT as a qualifying test for the purpose of shortlisting a reasonable number of candidates for the second stage.

13.10 The normalized marks scored by the candidate in the CBT shall be used for shortlisting the candidates for Stenography Skill Test, Performance Test/Teaching Skill Test, Translation Test, DV (as applicable) for the posts.

13.11 The question paper for the Junior Stenographer (Hindi) & Junior Stenographer (English) will consist of two parts only. The subjects of the paper for CBT, No. of questions, the time allowed, the maximum marks for each subject will be as follows:

| Part | Subject                   | No. of questions | Questions (from – to) | Total Marks | Time duration |
|------|---------------------------|------------------|-----------------------|-------------|---------------|
| I    | General Awareness         | 50               | 1 to 50               | 100         | 90 Minutes    |
| II   | Hindi or English Language | 50               | 51 to 100             | 100         |               |

All the candidates will have to attempt Part I & II (both the subjects) compulsorily. There shall be a single composite paper for both the subjects. Candidates will be required to qualify in each of the two subjects separately.

**Part-I** – Questions of the General Awareness portion shall be from the syllabus of Mathematics, General Intelligence and Reasoning, General Awareness and General Science as mentioned in above para 13.8.

This portion needs to be translated in regional Languages as per extant instructions.

**Part-II** (Either Hindi or English as per option filled up in application form) – The questions shall be designed to check the language skill and knowledge of Hindi/English including grammar. This portion needn't be translated in regional Languages. The syllabus of the questions to be asked in this part is given at Annexure – VIII to IX.

In addition to CBT there shall be Shorthand Test, which will carry 300 marks. Candidates equal to 10 times the number of vacancies, based on the merit of CBT, will be called for Shorthand Test (Stenography Skill Test).

The candidates have to pass Stenography Skill Test as per criteria mentioned below:

| Type of Stenographer | Speed                     | Duration   | Transcription Time |
|----------------------|---------------------------|------------|--------------------|
| English              | 80 words per minute (wpm) | 10 minutes | 50 minutes         |
| Hindi                | 80 words per minute (wpm) | 10 minutes | 65 minutes         |

The Stenography Skill Test will be conducted on **Personal Computer only** without editing tools and spell check facility. For guidelines of those who appear for Skill Test in Hindi, KrutiDev and Mangal font shall be made available on Personal Computer.

As regards the evaluation of transcription sheets of the Stenography Skill Test, with each Full or Major mistakes, candidates will loose one mark. Similarly, Half or Minor mistake would lead to deduction of half a mark. Maximum number of mistakes (both Full/Major or Half/Minor added together) permitted are limited to 10% of the total words dictated. It would mean that candidates, committing more than 10% mistakes will be treated as failed. Procedure to evaluate the transcription and nature of mistakes are elaborated below:-

(I) **FULL MISTAKES:**

- a) Every omission of a word or figure including omission of a definite or indefinite article. In case a group of words is omitted, mark as many mistakes as the actual number of words omitted.
- b) Every substitution of a wrong word or figure. The number of mistakes will be equal to the number of words/figures dictated which have been replaced/substituted by other word(s)/figure(s).
- c) Every addition of a word or figure or a group of words or figures not occurring in the passage.

(II) **HALF MISTAKES:**

- a) Mis-spelling, including transposition of letters in a word and also omission of a letter or letters from a word. However, mis-spelling of proper nouns and unfamiliar names may be ignored.
- b) Using singular for plural noun and vice-versa.
- c) Wrong use of Capital or small letters at the beginning of the sentence.

**Note:** (a) All the errors are counted but the total mistakes counted in a single word should not exceed one Full Mistake.

(b) Candidates will not be penalized for any type of errors or mistakes other than those described above.

(c) Computer and Shorthand Notebook for the test will be provided by the Exam Conducting Agency (ECA) and candidates have to hand over the used Shorthand Notebook to the invigilator on exam duty after completion of Skill Test. Further it is also clarified that candidates will not be allowed to bring their own key board.

(d) Editing Tools and Spell Check facility will not be available to the candidates.

**13.11.1** Merit list for the post of Junior Stenographer will be prepared based on aggregate of marks obtained in the CBT and Stenography Skill Test.

**13.12 Junior Translator/Hindi:**

A single stage Computer Based Test will be conducted followed by a qualifying translation test. The Question Paper shall be designed to test equally both the knowledge of English language as well as knowledge of Hindi language. Atleast 50% of the questions will be designed to test language proficiency – 20% for English and 30% for Hindi. The remaining questions will be designed to test General Knowledge, General Intelligence, Simple Arithmetic and basics of computer.

**Translation Test**

(i) Translation Test shall not be a part of the main examination. Candidates 10 times the number of vacancies shall be called for the translation test, based on the merit of the objective type CBT, duly taking into account reservation requirements.

(ii) The Translation Test shall be only a qualifying test and the qualifying pass marks shall be 60%.

13.12.1 Merit list of Junior Translator will be based on the marks obtained in the CBT alone. Those who do not qualify in translation test with 60% marks shall be disqualified.

**13.13 Performance Test/Teaching Skill Test**

Apart from the CBT of 100 marks as brought at para 13.7, teachers will be subjected to Performance Test (PT) and Teaching Skill Test (TST).

For the Post Graduate Teachers(PGTs), Trained Graduate Teachers(TGTs), Physical Training Instructor (PTI)&Assistant Mistress/Junior School (PRTs) the recruitment shall be done on the basis of Written Test (CBT) and Teaching Skill Test in the ratio of 85:15.

For the post of Primary Teacher (Music), Primary Teacher (Dance) and Art Master (PGT/TGT), the Weightage of Written Test (CBT), Performance Test and Skill Test should be in the ratio of 60:25:15 respectively.

**Teaching Skill Test:-** Teaching Skill Test shall be based on Teaching Ability, Teaching Methodology, Content Expertise, Appropriateness of material, Incorporation of recent development in the discipline, Communication skill, Presentation Skill, Classroom Management Skill, understanding of Subject Matter,

Problem Solving ability, Decision making, Creativity, Leadership & Motivation Quality. Candidates will be asked to teach some topics of their subject through power point presentation in front of the Committee. Topics will be decided by the Committee on the spot. Candidates will be given sufficient time to prepare and will be asked to use PowerPoint presentation or any other teaching aid as per the availability of equipments at the point of skill Test. The Skill Test shall range between 15 to 30 minutes as decided by the Committee. Skill Test will be of 150 marks. There will not be any minimum qualifying marks for Skill Test. However, weightage of Skill test should be 15% in total marks. There is a possibility that the Skill Test can be video-graphed.

**Performance Test:** Primary Teacher (Music) and Primary Teacher (Dance) may be adjudged on the basis of skill of singing, playing the various instrumental music, performance of dance, Presentation Skill, Coordination, Expression, Energy level, Rhythm, Experimentation with art forms, imagination and innovation and Artistic temperament.

Art Master (PGT/TGT) may be adjudged on performance of art forms/paintings/sketches, innovative and creative approach, Aesthetic sensibilities, Observation skill, interpretation and Originality, Correlation with real life, Experimentation with different art Modes and mediums, Proportion in size and clarity and importance of colour, balance and brightness.

Topics will be decided by the Committee on the spot. Candidates will be given sufficient time to prepare and will be asked to use any teaching aid as per the availability of equipments at the place of Performance Test.

Performance Test shall be of 100 marks. There will not be any minimum qualifying marks for the Performance Test. However, weightage of Performance Test shall be 25% of the total marks. There is a possibility that the Performance Test may be video-graphed.

#### **13.14 Document Verification (DV):**

Based on the performance of candidates in CBT and Stenography Skill Test, Performance Test/Teaching Skill Test, Translation Test (as applicable), candidates equal to the number of vacancies will be called for Document Verification as per their merit and options. In addition, candidates equal to 50% (may increase or decrease at the discretion of RRBs) of the number of vacancies for various posts will also be called for DV. These additional

candidates will, however, be considered for empanelment only if there is a shortfall in empanelment from the merit list or/and as replacement against the shortfall on account of non-joining of recommended candidates in the working post or/and any other special requirements. In case of two or more candidates securing same marks, their merit position shall be determined by age criteria i.e., older person shall be placed at higher merit and in case age being same, then alphabetical order (A to Z) of the name shall be taken into account to break the tie.

13.15 Appointment of selected candidates is subject to their passing requisite Medical Fitness Test to be conducted by the Railway Administration/RRB, final verification of educational and community certificates and verification of antecedents/character of the candidates. Candidates may please note that RRBs only recommend names of the empaneled candidates and appointment is offered ONLY by the respective Railway Administrations.

13.16 It may also be noted that all candidates successful in Document Verification (DV) are sent for medical examination. Clearing of such medical examination by additional candidates (those called for DV beyond the notified number of vacancies) will give such candidates **no right** to be considered for appointment.

#### 14.0 NORMALISATION OF MARKS:

Short listing of Candidates for various stages shall be based on the normalized marks obtained by them whenever CBT is conducted in multiple sessions for the same syllabus. The normalization scheme to be adopted for short listing the candidates for Stenography Skill Test, Performance Test/Teaching Skill Test, Translation Test (as applicable)/DV is detailed in following paragraphs.

14.1 **CALCULATION OF NORMALIZED MARKS FOR MULTI-SESSION PAPERS:** In CBT, the examination may have to be conducted in multiple sessions. For these multisession papers, a suitable normalization is applied to take into account any variation in the difficulty levels of the question papers across different sessions. The formula for calculating the normalized marks for the multi-session papers is detailed below:

Normalization mark of  $j^{\text{th}}$  candidate in  $i^{\text{th}}$  session  $\widehat{M}_{ij}$  is given by :

$$\widehat{M}_{ij} = \frac{\overline{M}_i^g - M_q^g}{M_{ii} - M_{iq}} (M_{ij} - M_{iq}) + M_q^g$$

$M_{ij}$  : is the actual marks obtained by the  $j^{\text{th}}$  candidate in  $i^{\text{th}}$  session.

$\overline{M}_i^g$  : is the average marks of the top 0.1% of the candidates considering all sessions.

$M_q^g$  : is the sum of mean and standard deviation marks of the candidates in the paper considering all sessions.

$M_{ii}$  : is the average marks of the top 0.1% of the candidates in the  $i^{\text{th}}$  session or marks of topper if session strength is less than 1000.

$M_{iq}$  : is the sum of the mean marks and standard deviation of the  $i^{\text{th}}$  session.

## JUNIOR STENOGRAPHER/HINDI

**Note:** Sr. No. 1 to 6 will be printed in HINDI only irrespective of other languages of other questions as Stenographer (Hindi) should be able to read Hindi.

| SI No.       | Topics  | No. of Questions |
|--------------|---|------------------|
| 1.           | विलोम शब्द (Antonyms)   | 6 to 8           |
| 2.           | समानार्थक शब्द (Synonyms)   | 6 to 8           |
| 3.           | रिक्त स्थान भरें (Fill in the Blanks)                                 | 6 to 8           |
| 4.           | वाक्यांश के लिए एक शब्द (Give one word for)                           | 6 to 8           |
| 5.           | मुहावरे और लोकोक्तियाँ (Idioms and phrases)                           | 7 to 9           |
| 6.           | शब्द/वाक्य शुद्धि (Corrections in sentences)                          | 7 to 9           |
| 7.           | <b>Basics of Computers and applications:</b>                          | 5 to 7           |
|              | Input & output devices; MS Office; and Basic applications of computer |                  |
| <b>Total</b> |   | <b>50</b>        |



**JUNIOR STENOGRAPHER/ENGLISH**

**Note:** Sr. No. 1 to 6 will be printed in ENGLISH only irrespective of other languages of other questions as Stenographer (English) should be able to read Hindi.

| <b>SI No.</b> | <b>Topics</b>   | <b>No. of Questions</b> |
|---------------|---|-------------------------|
| 1.            | Antonyms  | 6 to 8                  |
| 2.            | Synonyms  | 6 to 8                  |
| 3.            | Fill in the Blanks  | 6 to 8                  |
| 4.            | Give one word for   | 6 to 8                  |
| 5.            | Idioms and phrases  | 7 to 9                  |
| 6.            | Corrections in sentences                                  | 7 to 9                  |
| 7.            | <b>Basics of Computers and applications:</b>              | 5 to 7                  |
|               | Input & output devices; MS Office; and basic applications |                         |
| <b>Total</b>  |   | <b>50</b>               |

## JUNIOR TRANSLATOR/HINDI

1. The General Portion for this paper will contain 50 questions. These questions will be translated in the languages to be advised by Board.
2. In the language portion, 30 questions will be from Hindi language and 20 questions will be from English language. These 50 questions will not be translated in other languages. As such, **questions pertaining to Hindi language will be printed in Hindi only and questions pertaining to English language will be printed in English only.**

**NOTE: Difficulty Level Shall Be 10+2**

| (Three Questions each) |                         |
|------------------------|-------------------------|
| Sl. No.                | Topics                  |
| 1.                     | समानार्थी शब्द          |
| 2.                     | पर्यायवाची शब्द         |
| 3.                     | विलोम शब्द              |
| 4.                     | प्रत्यय                 |
| 5.                     | उपसर्ग                  |
| 6.                     | संधि विच्छेद            |
| 7.                     | मुहावरेऔरलोकोक्तियाँ    |
| 8.                     | तत्सम-तद्भव             |
| 9.                     | वाक्यांश के लिए एक शब्द |
| 10.                    | शब्द/वाक्य शुद्धि       |

## STAFF &amp; WELFARE INSPECTOR

| SI No.       | Topics  | No. of Questions |
|--------------|---|------------------|
| 1.           | <b>Industrial Relations:</b> Industrial Disputes Act, 1947; Indian Trade Union Act, 1926; Industrial Employment [Standing Orders] Act.  | 9 to 11          |
| 2.           | <b>Social Security Legislation:</b> Workmen's Compensation Act, 1923; Employees' Provident Fund Act, 1952; Employees' State Insurance Act, 1948; The Maternity Benefit Act, 1961. | 9 to 11          |
| 3.           | <b>Law relating to wages:</b> The Minimum Wages Act, 1948; Payment of Wages Act, 1936; The Payment of Bonus Act, 1965; Payment of Gratuity Act.                                   | 9 to 11          |
| 4.           | <b>Legislation affecting Conditions of work:</b> Indian Factories Act, 1948; The Mines Act, 1952.   | 7 to 10          |
| 5.           | <b>Basics of Computers and applications:</b> Input & output devices; MS Office;   | 3 to 5           |
| 6.           | <b>Right To Information Act - provisions thereof.</b>   | 2 to 4           |
| 7.           | <b>New Pension Scheme.</b>  | 1 to 3           |
| <b>Total</b> |   | <b>50</b>        |

## CHIEF LAW ASSISTANT

| SI No. | Topics  | No. of Questions |
|--------|---|------------------|
| 1.     | <b>Indian Constitution:</b> Preamble and Salient Features, Fundamental Rights and Duties, Directive Principles of State Policy, Union Legislature, Executive & Judiciary.   | 3 to 5 Questions |
| 2.     | <b>Administrative Law:</b> Nature and Scope of Administrative Law; Legislative power of the administration; Judicial power of Administration; Judicial control of Administrative action; Corporations and Public undertaking.                   | 2 to 3 Questions |
| 3.     | <b>Jurisprudence:</b> Nature and Concept, Schools of Jurisprudence, Sources of Law, Legal Concepts, Legal Persons   | 3 to 4 Questions |
| 4.     | <b>Law of Torts:</b> General concepts.  | 2 to 3 Questions |
| 5.     | <b>Hindu Law:</b> Sources, Marriage, Divorce, Maintenance, Adoption, Gift, Succession.  | 3 to 4 Questions |
| 6.     | <b>Code of Civil Procedure:</b> General; Suits, Execution; Appeals; Reference, Review and Revision; Written Statement, Set-off and Counter-claim; Examination, Discovery, Admissions and Documents Law.   | 5 to 7 Questions |
| 7.     | <b>Code of Criminal Procedure:</b> Various sections.  | 2 to 3 Questions |
| 8.     | <b>Indian Penal Code:</b> General; Punishments; Abetment, Criminal Conspiracy; Offences against the State, Contempt's of the Lawful Authority of Public Servants, False Evidence; Offences affecting the Human Body and Property.               | 2 to 3 Questions |
| 9.     | <b>Indian Evidence Act:</b> Relevancy of Facts; Facts which need not be proved; Oral Evidence; Documentary Evidence; Burden of Proof; Estoppel; Examination of Witnesses and of the Improper Admission and Rejection of Evidence.               | 2 to 3 Questions |
| 10.    | <b>Indian Contract Act:</b> Agreement, Contract and Proposal; Acceptance; Consideration; Capacity to Contract; Factors vitiating Consent; Legality of Object; Performance of Contracts; Breach of contract; Indemnity and Guarantee ; Bailment. | 2 to 3 Questions |
| 11.    | <b>Limitation Act, 1963:</b> Preliminary and Limitation of Suits, Appeals and Applications; Period of Limitation; Acquisition of Ownership by Possession and Miscellaneous.   | 2 to 3 Questions |
| 12.    | <b>Specific Relief Act, 1963:</b> Specific Relief & Preventive Relief.  | 1 to 2 Questions |
| 13.    | <b>Indian Partnership Act, 1932:</b> Nature of Partnership and Relations of Partners to one another; Relations of Parties to Third Person; Incoming and Outgoing Partners; Dissolution of a Firm; Registration of Firms.                        | 1 to 2 Questions |
| 14.    | <b>Arbitration and Conciliation Act, 1996:</b> Arbitration; Conciliation  | 2 to 3 Questions |

| Sl No.       | Topics   | No. of Questions |
|--------------|--|------------------|
| 15.          | <b>Consumer Protection Act:</b> General Provisions.  | 1 to 2 Questions |
| 16.          | <b>Protection of Human Rights:</b> General Provisions.   | 1 to 2 Questions |
| 17.          | <b>Transfer of Property Act:</b> General, Transfers of Property by Act of Parties; Sales of Immovable Property; Mortgages of Immovable Property and Charges; Lease of Immovable Property; Exchanges; Gifts.  | 2 to 3 Questions |
| 18.          | <b>Right to Information Act:</b> Obligations of public authorities; Central & State information commission; Appeals and penalties.   | 1 to 2 Questions |
| 19.          | <b>Company Law:</b> Formation, Registration and Incorporation of company; Capital Formation; Corporate Administration and Winding up of Companies.   | 2 to 3 Questions |
| 20.          | <b>Labour Laws:</b> Industrial Disputes Act, 1947; Trade Unions Act, 1926; The Employees State Insurance Act, 1948; The Employees Provident Fund Act, 1952; The Maternity Benefit Act, 1961; The Minimum Wages Act, 1948; The Factories Act; Payment of Wages Act, 1936. | 3 to 5 Questions |
| <b>Total</b> |  | <b>50</b>        |

## FINGER PRINT EXAMINER

| SI No.       | Topics   | No. of Questions |
|--------------|--|------------------|
| 1.           | <b>Forensic Science</b>  | 4 to 6           |
|              | Rules, Laws, Procedures, Scope, Importance etc., Processing Physical Evidence, Questioned Documents and Handwriting, Fingerprints, Tool marks etc, Forensic Psychology.          |                  |
| 2.           | <b>Computers and its Applications</b>  | 4 to 6           |
|              | Evolution of Computers, Computer Basics, Hardware & Software, Internet.  |                  |
|              | MS-Windows, MS-Word, MS-Excel, MS-PowerPoint.  |                  |
| 3.           | <b>Fingerprint Expert</b>  | 40 to 44         |
|              | Introduction to Fingerprints, History and Development of Fingerprints, Classification of Fingerprints, Henry system of fingerprint classification, various fingerprint patterns, |                  |
|              | Identifying individuals from fingerprint patterns.   |                  |
|              | Lifting finger prints from various objects.  |                  |
|              | Types of Fingerprints and Class & Individual Characteristics,  |                  |
|              | Different methods of latent fingerprint development.   |                  |
|              | Photography of fingerprints.   |                  |
|              | Fingerprint Chart Preparation.   |                  |
|              | Comparison/Verification of fingerprints.   |                  |
|              | Automatic fingerprint identification system.   |                  |
|              | Finger print expert in court.  |                  |
|              | Expert Opinion Writing etc.  |                  |
| <b>Total</b> |  | <b>50</b>        |

## COOK/HEAD COOK

NOTE: DIFFICULTY LEVEL SHALL BE “MATRIC”

| Sl No.  | Topics  | No. of Questions |
|---|---|------------------|
| 1.  | <b>Science:</b> (11 to 13 Questions).   |                  |
|   | <b>Chemistry:</b> Atoms and Molecules, Structure of Atom, Periodic Classification of Elements, Chemical Reactions and Equations, Acids, Bases and Salts, Metals and Non-metals, Carbon and its Compounds.   | 4 to 6           |
|   | <b>Physics:</b> Motion , Force and Laws of Motion, Gravitation, Work and Energy, Elasticity, Sound, Light – Reflection and Refraction, The Human Eye, Electricity, Magnetic Effects of Electric Current, Sources of Energy- Renewable & Non Renewable.  | 4 to 6           |
|   | Environment, Ecosystem and its cycles & Pollution – Air, Water, Sound, Soil/Land and its management.  | 1 to 3           |
| 2.  | <b>Maths:</b><br><b>Algebra</b> - Linear Equations in Two Variables, Quadratic Equations,<br><b>Geometry &amp; Mensuration</b> - Lines and Angles, Triangles, Quadrilaterals, Circles - Areas, Surface Areas and Volumes.<br><b>Co-Ordinate Geometry</b> – Lines.<br><b>Trigonometry:</b> Heights and Distances.  | 7 to 9           |
| 3.  | Concepts of foods and nutrition; various food groups; Energy giving foods; Body Building Foods; Protective Foods; Effect of processing on food products; Food Spoilage & Foods Preservation; Foods Adulteration, Foods safety, Food Additives. Carbohydrates; Lipids & Fatty acids; Proteins; Vitamins; Minerals; Water; Enzymes; Nucleic acid.   | 9 to 11          |
| 4.  | <b>Cookery:</b>   | 20 to 24         |
|   | Aims & Objectives of Cooking, Kitchen Layout and Organisation, Hierarchy and Staffing, Equipment, Fuel and Tools used in Cookery, Ingredients: Shortenings, Raising Agents, Sugar, Milk products, Rice and Cereal, Vegetables and Fruits.   |                  |
|   | <b>Preparation and Methods of Cooking</b> - Preparation of Ingredients, Methods & Principles of Cooking Food – Roasting, Grilling, Frying, Baking, Broiling, Poaching, Boiling, Steaming, Stewing and Braising.   |                  |
|   | <b>Basics of Cooking</b> - Stock, Soups, Sauces.  |                  |
|   | <b>Indian Cuisine</b> – Introduction to Indian Foods, Spices used in Indian Foods, Masalas, Indian Curries and Gravies, Indian Rice Preparations, Indian Salads and Soups, Indian Snacks and Chats, Indian Sweet Preparations, Indian Festival Dishes, Indian Breads , Preparing Tandoor, Types, Marinade preparation, Types of Tandoori dishes, Tandoori breads, Tandoori accompaniments |                  |
| <b>Continental Cuisine</b> - Continental Cuisine; Chinese Cuisine; American and Fusion Cuisine; Other International Cuisine |   |                  |
| 5.  | <b>Computer and its applications.</b>   | 1 to 3           |
| <b>Total</b>  |   | <b>50</b>        |

## PUBLICITY INSPECTOR/SENIOR PUBLICITY INSPECTOR

| SI No.       | Topics   | No. of Questions |
|--------------|--|------------------|
| 1.           | <b>Communications</b><br>Introduction to communication; History of communication; Tools; Fundamentals of communication; Types of communication; Essentials of communication; Theories of communication; Effective principles; Process of communication; Factors affecting process of communication; Forms of communication; Oral Communication.  | 12 to 15         |
| 2.           | <b>Mass Communication</b><br>Eras of Mass Communication; Introduction & history of mass communication; Culture & functions of mass communication; Tools of Mass communication; Journalism; Press Codes & Ethics; Elements of mass communication; The Psychology and Sociology of Media Audiences; Models of mass communication; Theories of mass communication; Issues in communication; Mass media and public opinion.  | 12 to 15         |
| 3.           | <b>Advertising</b><br>Concept, Functions of Advertising, Factors determining advertising opportunity of a product/service/idea, Types and classification of Advertising Display/Classified/Trade/Product/Financial/Corporate etc., Brand Management and Positioning, Creative and Campaign Concepts; Social and Economic Impact of Advertising, Advertising: Ethics, code and Law, Brand equity and advertising.<br>Advertising Agency - Types of agency, Structure, Functions, Roles, & Scope.<br>Agency client relations, Apex organizations: DAVP, INS, ISA, AAI.   | 10 to 13         |
| 4.           | <b>Public Relations</b><br>Public Relations; Development of Public Relations; PR in India; Public Opinion; PR Process; PR for Internal Communication; PR for External Public; Mass Media of Communication; Ethics and PR; Dealing with Media/Functioning of Media; Role of Writing in PR; Emerging Challenges in PR.<br>PR Management - Event Management, Crisis Management, Time Management & Stress Management.<br>PR Laws - Code of ethics, PR and Press Council, Defamation, Official Secret Act 1923, Copyright Act 1957, Press Registration of Book Act 1867.<br>Contempt of court<br>COMPUTER and its APPLICATIONs (2 to 3 questions) | 10 to 13         |
| 5.           | Topic and coverage on Social Media like Blogs, Twitter, Youtube etc.   | 3 to 5           |
| <b>Total</b> |  | <b>50</b>        |



## PHOTOGRAPHER

NOTE: DIFFICULTY LEVEL OF PAPER SHALL BE “MATRIC”

| SI No.       | Topics  | No. of Questions |
|--------------|---|------------------|
| 1.           | <b>Science:</b> ( 11 to 13 Questions)   |                  |
|              | <b>Chemistry:</b> Atoms and Molecules, Structure of Atom, Periodic Classification of Elements, Chemical Reactions and Equations, Acids, Bases and Salts, Metals and Non-metals, Carbon and its Compounds.   | 4 to 6           |
|              | <b>Physics:</b> Motion , Force and Laws of Motion, Gravitation, Work and Energy, Simple Harmonic Motion, Elasticity, Atomic Physics, Sound, Light – Reflection and Refraction, The Human Eye, Electricity, Magnetic Effects of Electric Current, Sources of Energy- Renewable & Non Renewable.  | 4 to 6           |
|              | Environment,Ecosystem and its cycles &biodiversity&Pollution – Air, Water, Sound, Soil/Land and its management.   | 1 to 3           |
| 2.           | <b>Maths:</b><br><b>Algebra</b> - Polynomials, Linear Equations in Two Variables, Quadratic Equations, Arithmetic Progressions.<br><b>Geometry</b> - Lines and Angles, Triangles, Quadrilaterals, Area, Circles, Constructions.<br><b>Co-Ordinate Geometry</b> – Lines.<br><b>Mensuration</b> - Areas, Surface Areas and Volumes.<br><b>Statistics and Probability</b><br><b>Trigonometry:</b> Heights and Distances. | 7 to 9           |
| 3.           | Knowledge and capabilities of handling still equipment, as well as still digital and digital videography, Types of photography, exposures, films. Knowledge of software such as photoshop for editing, creation of edited video from raw footage, etc.  | 28 to 32         |
| <b>Total</b> |   | <b>50</b>        |

## ALL POST GRADUATE TEACHERS (PGTs)/TRAINED GRADUATE TEACHERS (TGTs)

| Sl No. | Topics   | No. of Questions |
|--------|--|------------------|
| 1.     | <b>Education</b>   | 22 to 28         |
|        | <b>Philosophy of Education</b> – various schools of Philosophy; Education according to Indian thinkers and Western thinkers.   |                  |
|        | <b>Sociology and Education in the Indian Context</b> - Sociological basis of education, Aspiration of Indian Society, Role & functions of home, school community, religion, media and state as agents of socialization. Education as an agent of social change, social adjustment and socio-economic development.  |                  |
|        | <b>Education, Culture and Human Values</b> - Meaning and classification of values. Nature of moral and ethical values; Value oriented Education. Value crisis and role of education in resolving value crisis. Meaning and characteristics of culture and its relationship with education. Indian cultural Heritage and education. Cultural pluralism, cultural lag, cultural conflict, ambivalence and tolerance. |                  |
|        | <b>Democracy and Education</b> - Concepts of equality, freedom, democracy, authority and discipline. Human rights education with reference to child's rights.  |                  |
|        | <b>Education and Integration</b> - Role of teacher and Educational Institutions  |                  |
| 2.     | <b>Psychology of Learner &amp; Teaching</b>  | 13 to 18         |
|        | Meaning, scope & Importance of educational psychology. Relationship of Education and Psychology; Process of Growth and Development; Intelligence: Its theories and measurement. Learning and Motivation; Psychology and education of exceptional children-creative, gifted, backward, learning disables and mentally retarded. Evaluation  |                  |
| 3.     | <b>Curriculum and Instruction</b> - (8 to 12 Questions):   | 8 to 12          |
|        | Curriculum Development, Transaction,   |                  |
|        | <b>Instructional Methods</b> - Teacher–Controlled Instruction (TCI); Learner–Controlled Instructions (LCI); Group–Controlled Instruction (GCI);  |                  |
|        | Skills and Competencies; Means of Instruction Delivery.  |                  |
|        | <b>Total</b>   | <b>50</b>        |

## PHYSICAL TRAINING INSTRUCTOR (PTI)

| SI No.       | Topics  | No. of Questions |
|--------------|---|------------------|
| 1.           | <p><b>Physical Education in India</b></p> <p>Objectives, Principles and Components of Physical Education; Indian Olympic Association and International Olympic Committee; Role of Different Agencies in Promoting Health (WHO, UNICEF, Local Bodies); Concepts of Incentive, Achievement; Organisation of other Physical Education and Sports Event (Seminar, Clinic, Lecture); Use of Audio-Visual Aids in Physical Education.</p>   | 10 to 12         |
| 2.           | <p><b>Anatomy, Physiology, Exercise, Nutrition Diet &amp; Hygiene</b></p> <p><b>Physical Activity</b> -Concept, Benefits of Participation in Physical Activities with Specific Reference to Health; concept, need, components and Significance of total fitness. Principles of Physical Fitness, Warming Up, Conditioning, and cooling down, Methods to Develop; and Measure Health and Skill related components of Physical fitness.</p> <p><b>Wellness</b> -Concept components, Significance with reference to positive lifestyle. Concept of nutrition, balanced diet, Dietary Aids.</p> <p><b>Energy and Activity</b> - Calorie Intake and expenditure, energy balance equation, role of personal hygiene, mental hygiene, sleep hygienic, occupational hygiene in physical education and sports.</p>   | 15 to 17         |
| 3.           | <p><b>Sports Injuries, Prevention &amp; Health Education, Sports Medicine</b></p> <p>Basic Concept, need and importance of anatomy and physiology in physical education. Definition and description of cell, tissue, organ and system Brief introduction to skeletal system, muscular system, circulatory system, respiratory system, digestive system, excretory system, nervous system and endocrine system.</p> <p>Physiological factors affecting development of physical fitness components. Concepts of fatigue, stitch, cramp, oxygen debt, second wind.</p> <p><b>Markers for training effects</b> – Maximum heart rate, vital capacity, snake volume, temperature regulation.</p> <p><b>Postural Deformities</b> – Types and causes (hypnosis, scoliosis, lordosis, knock knees, bow knees, flat foot) Corrective exercises.</p> <p><b>Sports medicine and athletic care</b> – Concept and significance, factors causing injuries.</p> <p><b>General principles of prevention of injuries</b> - Common sport injuries (strain and muscle and ligament sprain, frozen shoulder, lower back strain, Tennis and Golfer's elbow, Runner's knee, shin pain, blister, concussion, laceration, abrasion, hematoma, fracture, dislocation).</p> <p>Management of injuries (strain and muscle and ligament sprain, frozen shoulder, lower back strain, Tennis and Golfer's elbow, Runner's knee, shin pain, blister, concussion, laceration, abrasion, fracture, dislocation). Sport injuries and first aid.</p> <p><b>Rehabilitation</b> – Aim and objective, recovery (lee bath, contrast bath, hot fomentation)Therapeutic modalities (therapeutic ultrasound, Inferential Therapy Unit, TENS infrared lamp, wax bath, short wave diathermy).</p> <p><b>Definition, scope and importance of sports psychology</b></p> <p><b>Learning</b> – Concept and principles of learning, learning curve. Emotion, anxiety and stress management in Sports.</p> | 16 to 20         |
| 4.           | <b>Camping for Recreation</b>   | 2 to 3           |
| 5.           | <b>Important games and sports</b>   | 4 to 6           |
| <b>Total</b> |   | <b>50</b>        |

**ASSISTANT MASTER/MISTRESS (JUNIOR SCHOOL)**

| <b>SI No.</b> | <b>Topics</b>   | <b>No. of Questions</b> |
|---------------|---|-------------------------|
| 1.            | <b>Educational Psychology</b>   | 25 to 29                |
|               | Intelligence: Nature, Meaning & Measurement; Learning; Growth and development of Child; Personality Development and Adjustment; Individual Differences among Children |                         |
| 2.            | <b>Education Technology &amp; Teaching-Learning Process; Communication Skills</b>   | 18 to 22                |
|               | Teaching –learning materials: textbook, multi-media materials, multilingual resource of the classroom; Remedial Teaching.   |                         |
| 3.            | Computer and its Applications   | 2 to 4                  |
|               | <b>Total</b>  | <b>50</b>               |

**MUSIC TEACHER/MISTRESS**

| <b>SI No.</b> | <b>Topics</b>  | <b>No. of Questions</b> |
|---------------|--|-------------------------|
| 1.            | Appreciation of music, Bada Khayal and Chota Khayal, Brief History of BharatnatyaShatra and Sangeet Ratnakar, Classification of music.   | 8 to 12                 |
| 2.            | Concept of rags and talas in Indian music, classification of ragas, concept singing, different gharanas and their histories, evolution of notation system, forms of light music. | 8 to 12                 |
| 3.            | History of Indian music, arts, importance of music festivals/ seminars/ conferences.   | 7 to 11                 |
| 4.            | Laws of acoustics, musical sound wave motion, frequency pitch, volume  | 7 to 11                 |
| 5.            | Music and Literature, Place of music in fine arts, Role of music in multi-media, Taal study, Vocal and Instrumental music  | 7 to 11                 |
| 6.            | Computer and its Applications  | 2 to 4                  |
| <b>Total</b>  |  | <b>50</b>               |