

# **DELHI DEVELOPMENT AUTHORITY**

## **SPECIAL RECRUITMENT DRIVE FOR FILLING UP THE POSTS** **RESERVED FOR PERSONS WITH DISABILITY**

Applications are invited ““On-Line” at DDA’s website [www.dda.org.in](http://www.dda.org.in) from eligible candidates as per the criteria laid down below for filling up of the various posts reserved for Persons with Disability (PwD) in the following categories. The details of the post, pay scales and eligibility conditions are as follows :

Post Code	Name of the post	Group	Pay Band/ Grade pay	Age as on 01.06.2015	Qualifications as per RRs	No. of vacancies	Category of PwD for which post is reserved		
							VH	HH	OH
01	Senior Law Officer	A	15600-39100/- Plus GP Rs. 6600/- (PB-3)	Not exceeding 35 yrs	(i) Possessing Regular Degree in Law (entitling the incumbent for Registration at bar and appearing before the Courts) from a recognized University or equivalent; and (ii) 07 years experience at bar.	1	1	-	-
02	Assistant Executive Engineer (Civil)	A	15600-39100/- Plus GP Rs. 5400/- (PB-3)	21-30 years	Degree in Civil Engineering or equivalent from a recognised University/ Institution	1	-	1	-
03	Assistant Director (Ministerial)	B	9300-34800/- Plus GP Rs. 4800/- (PB-2)	Not exceeding 30 yrs	Master of Business Administration or equivalent with specialization in Personnel, HR, Industrial Relation, Real Estate/Urban Management, Finance & Marketing	4	2	1	1
04	Legal Assistant	B	9300-34800/- Plus GP Rs. 4600/- (PB-2)	Not exceeding 30 yrs	(i) Possessing Regular Degree in Law (entitling the incumbent for Registration at bar and appearing before the Courts) from a recognized university or equivalent; and (ii) 03 years experience at bar.	3	2	-	1

Post Code	Name of the post	Group	Pay Band/ Grade pay	Age as on 01.06.2015	Qualifications as per RRs	No. of vacancies	Category of PwD for which post is reserved		
							VH	HH	OH
05	Programmer	B	9300-34800/- Plus GP Rs. 4200/- (PB-2)	Not exceeding 30 yrs	(i)Engineering Degree in Computer Science/Computer Engineering/Electronics from a recognized university or Engineering College/ institute.  OR (ii)Master Degree in Computer Science/Computer Application from a recognized University, Engineering College/Institute. OR (iii)Should have passed 'B' Level examination from the Deptt. Of Electronics Accreditations of Computer Course (DOEACC). One year experience in Software Development, RDBMS and Data Processing.	1	-	-	1
06	Planning Assistant	B	9300-34800/- Plus GP Rs. 4600/- (PB-2)	Not exceeding 30 yrs	Bachelor Degree in Planning/ Architecture from a recognized University /Institute or equivalent.	1	-	1	-
07	Junior Engineer (Civil)	B	9300-34800/- Plus GP Rs. 4200/- (PB-2)	Between 18 to 27 years	Diploma in Civil Engineering from a University/Institute recognised by Central Government/State Government or equivalent qualification	5	-	3	2
08	Sectional Officer (Horticulture)	B	9300-34800/- Plus GP Rs. 4200/- (PB-2)	Not exceeding 30 yrs	Bachelor Degree in Agriculture or Horticulture or Forestry from a Recognised University /Institute or equivalent	3	-	2	1
09	Assistant	B	9300-34800/- Plus GP Rs. 4600/- (PB-2)	Not exceeding 30 yrs	(i).Bachelor's Degree or equivalent from any recognized university. (ii).Computer Proficiency.	6	2	2	2

2. Number of vacancies indicated above may increase/decrease or even reduce to zero depending upon requirement and availability or non-availability of vacancies due to one or another reason(s). No notification/corrigendum shall be issued for any such change.

**Note:**— For the posts reserved for Persons With Disability (PwD), disabilities are defined as under:-

- (i) **VH- Visually Handicapped**
- (ii) **HH-Hearing Handicapped**
- (iii) **OH-Orthopedically Handicapped**

### 3. **IMPORTANT**

- (i) **The minimum disability should not be less than 40%.**
- (ii) **Candidates to ensure their eligibility for the post applied for :**

The Candidates applying for the above posts should ensure that they fulfill all eligibility conditions for the post applied for. Their admission to all the stages of the examination will be **purely provisional** subject to satisfying the prescribed eligibility conditions. Mere issue of admission certificate to the candidate will not imply that his/her candidature has been finally cleared by the Delhi Development Authority. The DDA take up verification of eligibility conditions with reference to original documents only after the candidate has qualified for interview / personality test / skill test etc. (as applicable).

**If on verification at any time before or after the written examination, and interview, it is found that they do not fulfill any of the eligibility conditions, their candidature for the examination will be cancelled by the DDA. If any of their claims is found to be incorrect, they may render themselves liable to disciplinary action by the DDA, as deemed fit.**

### 4. **ALL COMMUNICATION /ELECTRONICS DEVICES BANNED.**

- i) Mobile phones, pagers or any other communication/electronics devices are not allowed inside the premises where the examination is being conducted. Any infringement of these instructions shall entail disciplinary action against such candidates including ban from future examinations.
- ii) Candidates are advised in their own interest not to bring any of the banned items including mobile phones/pagers to the venue of the examination, as arrangement for safe-keeping cannot be assured.
- iii) Candidates are advised not to bring any valuable/costly items to the examination halls, as safekeeping of the same cannot be assured. DDA will not be responsible for any loss in this regard.

## 5. Eligibility Conditions :

### Nationality

A candidate must be either:

- (a) A citizen of India, or
- (b) A subject of Nepal, or
- (c) A subject of Bhutan, or
- (d) A Tibetan refugee who came over to India, before the 1<sup>st</sup> January 1962, with the intention of permanently settling in India, or
- (e) A person of Indian origin who has migrated from Pakistan, Burma, Sri Lanka, East African countries of Kenya, Uganda, the United Republic of Tanzania (Formerly Tanganyika and Zanzibar) , Zambia, Malawi, Zaire, Ethiopia and Vietnam with the intention of permanently settling in India.

Provided that a candidate belonging to categories (b), (c), (d) and (e) above shall be a person in whose favour a certificate of eligibility has been issued by the Government of India.

A candidate in whose case a certificate of eligibility is necessary may be admitted to the examination / tests etc but the offer of appointment will be given only after submission of the necessary eligibility certificate issued to him/her by the Government of India in DDA office.

### 6. Age Relaxation:

- i) Upto a maximum of 05(five) years if a candidate belongs to a Scheduled Caste or a Scheduled Tribe.
- ii) Upto a maximum of 03(three) years in the case of candidates belonging to Other Backward Classes who are eligible to avail of reservation applicable to such candidates.
- iii) Upto a maximum of 10 (ten)years in the case of **visually impaired, hearing impaired and orthopedically impaired** persons with disability as notified by the Govt. of India from time to time.

**Thus, an unreserved handicapped candidate will be eligible for relaxation in upper age limit of 10 years, for SC/ST candidate 15 years and OBC candidate for 13 years.**

- iv) The date of birth accepted by the Delhi Development Authority is that entered in the Matriculation or Secondary School Leaving Certificate or in a certificate recognised by an Indian University as equivalent to Matriculation or in an extract from a Register of Matriculates maintained by a University, which extract must be certified by the proper authority of the University or in the Higher Secondary or an equivalent examination certificate.
- v) No other document relating to age like horoscopes, affidavits, birth extracts from Municipal Corporation, service records and the like will be accepted.
- vi) The expression Matriculation/Secondary Examination Certificate in this part of the instruction includes the alternative certificates mentioned above.
- vii) Relaxable for Govt. Employees & the employee of the DDA in accordance with the instructions issued by the Central Govt.

**NOTE : Candidates should note that no subsequent request for change of date of birth will be considered or granted.**

## **7. Selection Procedure:**

A written competitive examination for category of posts at Sl. No. 1, 2, 3 & 4 above comprising of objective type questions shall be conducted followed by an interview of shortlisted candidates. For Sl. No. 5 to 9 the selection will be on the basis of a written examination only. The standard and syllabus of the examination will be of the level of prescribed minimum qualification. The medium of the written examination will be Hindi / English only. The question paper shall be of 02 hours duration of 120 marks consisting of 120 questions of objective type (multiple choice questions) of the respective discipline as well as questions on test of reasoning, quantitative aptitude, general awareness and English language. Interview shall be of 20 marks, wherever prescribed.

### **(i) Penalty for wrong answers:**

Candidates should note that in order to discourage the guess work, there will be penalty of 0.33 (negative marking) for wrong answers / multiple answers marked by a candidate in the objective type question papers.

(ii) Minimum passing marks for candidates of UR category shall be 50%, for OBC category 45% and for the candidates belonging to SC/ST will be 40% marks followed by interview of shortlisted candidates. The minimum passing percentage shall be applicable for written examination as well as for aggregate of written examination and interview (wherever prescribed). The merit shall be decided by the aggregate of marks obtained in the aforesaid written examination and interview (wherever prescribed) taken together.

## **8. Preparation of Merit:**

A merit list of all the successful candidates for respective posts shall be prepared separately on the basis of marks secured by the candidates in written examination as well as in the interview, wherever prescribed.

However, in case two or more candidates acquire same merit position, then their date of birth shall be deciding factor to determine their merit, i.e. the elder candidate shall be placed higher in the merit-list.

## **9. General Conditions:**

(i)

(a) All the visually handicapped (VH) candidate with visual disabilities not less than forty percent (40%) including blind and partially blind persons or who have physical limitation to write including that of speed and who have applied for the examination can avail the assistance of a Scribe. Scribe will be provided by the Delhi Development Authority only to such candidates who have sought a Scribe in the online application form. Medium in which the candidate will take the examination will be taken into account for providing the Scribe. No attendant will be allowed with such VH or OH candidates inside the examination premises.

(b) Candidates who are able to read the question paper and write/indicate the answer with the help of magnifying glass shall be allowed to use the magnifying glass in the examination hall. Such candidates will not be treated as visually handicapped candidates for the purpose of availing the assistance of scribe. Such candidates will have to bring their own magnifying glass in the examination hall and shall not be provided with a Scribe.

(c) "One eyed" and Visually Handicapped candidates whose degree of visual disability is less than forty percent (40%) shall not be provided a scribe.

(d) The compensatory time of 20 minutes per hour of examination will be allowed only to such Persons with Disabilities who opt for the facility of Scribe as mentioned in (a) above.

- (ii) No TA/DA will be paid to any candidate for appearing in the written competitive examination, as well as interview.
- (iii) The selected candidate shall be asked to furnish a surety bond of Rs.2,00,000/-(Rupees two lakhs only). If he/she leaves the services of the Authority before completion of three year service(Probation of two year + one year regular service thereafter), the surety furnish by the candidates shall be forfeited.
- (iv) All the terms & conditions prescribed for appointment as a Probationer Trainee shall also be applicable.
- (v) **Period of Probation** : During the probation period of two years, the selected candidates will be given in house training regarding departmental procedures etc.

#### **10. Verification of documents:**

Shortlisted candidates who are successful in the written examination shall be called to appear before the interview board wherever prescribed along with original documents.

It shall be mandatory for the candidates to appear before the interview board or at the time of document and identity verification with the following original documents alongwith self-attested one photo state copy of the same on the date specified for the purpose for verification of his/her original documents:-

- (i) System generated printout of application with candidate's scanned photograph and signature.
- (ii) Certificate/ Marks-sheet of Secondary School Exam in which date of birth of the candidate is indicated.
- (iii) Degrees & Certificates of all educational and professional/ higher qualification, along with marks-sheets of all years/ semesters.
- (iv) Certificate of SC /ST/ OBC, as the case may be, issued by the concerned competent authority (if applicable).
- (v) Medical Certificate (indicating type & percentage of disability) issued by the concerned competent authority.
- (vi) All other documents, as per details given in the advertisement and/or call letter.
- (vii) In case a candidate does not appear before the interview board along with original documents, he/she shall not be eligible for appointment and his/her candidature shall be rejected. No second opportunity shall be provided for verification of documents in any case.

**Where selection is on the basis of written examination only, verification of documents as well as of identity will be done before issuing offer/appointment letter, the date of which will be intimated separately.**

## 11. HOW TO APPLY:

- (i) Candidates are required to apply Online by logging on to the website <http://www.dda.org.in> Detailed instructions for filling up online applications are available on the above mentioned website. Brief instructions for filling up the "Online application form" are given in **Appendix-I**. The candidates must go through these instructions carefully and follow them.

**The candidate is required to upload a scanned (digital) image of his/her recent photograph (less than 100 KB) and signature (less than 50 KB) After submission of the application form online, the applicant is also required to upload the legible scanned copy of the disability certificate ( in PDF format and maximum size should be 3 MB). The disability certificate should be issued by the competent medical authority. If an applicant fails to upload the scanned copy of the disability certificate, in that case application form submitted online shall not be considered.**

The applicants are advised to submit only single application; however, if due to any unavoidable situation, if he/she submits another/multiple applications, then he/she must ensure that application with the higher Registration ID (RID) (i.e. the application which is registered later) is complete in all respects like applicants' details, photograph, signature, disability certificate etc. The applicants who are submitting multiple applications should note that only the applications with higher RID shall be entertained by the DDA.

### (ii) IMPORTANT DATES

Website Link open date	05/10/2015	10.00AM
Website link close date	02/11/2015	till 06.00 PM
Tentative Month of Examination	December 2015	

**NOTE: All these dates are tentative and in case of any situation beyond control, these dates may be changed at any time. Information about such change(s), if any, will be given on website. Candidates are advised to remain in touch with website for information regarding this recruitment process and changes in the schedule, if any.**

- (iii) The eligible candidates shall be issued an e-Admission Certificate three weeks before the commencement of the examination. The e-Admission Certificate will be made available in the DDA website [<http://www.dda.org.in>] for downloading by candidates. No Admission Certificate shall be sent by post.

### (iv) FACILITATION COUNTER FOR GUIDANCE OF CANDIDATES:

In case of any guidance/information/clarification regarding their applications, candidature etc. candidates can contact DDA's Facilitation Center at Vikas Sadan, INA, New Delhi in person, or over Telephone No. 011-24649644 on working days between 10.00 hrs and 17.00 hrs.

- v) All candidates, whether already in Government service, Government owned industrial undertakings or other similar organisations or in private employment should required to submit NOC from their present employer before issue of offer/appointment letter.

- vi) Persons already in Government service, whether in a permanent or temporary capacity or as work charged employees other than casual or daily rated employees or those serving under the public enterprises are however, required to submit an undertaking that they have informed in writing to their Head of Office/Department that they have applied for the Examination. Candidates should note that in case a communication is received from their employer by the DDA withholding permission to the candidates applying for/appearing at the examination, their application will be liable to be rejected/candidature will be liable to be cancelled.

A candidate who is or has been declared by the DDA to be guilty of :

(i) Obtaining support for his/her candidature by the following means, namely :-

- (a) offering illegal gratification to, or
- (b) applying pressure on, or
- (c) blackmailing, or threatening to blackmail any person connected with the conduct of the examination, or

(ii) impersonating, or

(iii) procuring impersonation by any person, or

(iv) submitting fabricated documents or documents which have been tampered with, or

(v) making statements which are incorrect or false or suppressing material information, or

(vi) resorting to the following means in connection with his/her candidature for the examination, namely

- (a) obtaining copy of question paper through improper means,
- (b) finding out the particulars of the persons connected with secret work relating to the examination.
- (c) influencing the examiners, or

(vii) using unfair means during the examination, or

(viii) writing obscene matter or drawing obscene sketches in the scripts, or

(ix) misbehaving in the examination hall including tearing of the scripts, provoking fellow examinees to boycott examination, creating a disorderly scene and the like, or

(x) harassing or doing bodily harm to the staff employed by the DDA for the conduct of their examinations, or

(xi) being in possession of or using mobile phone, pager or any electronic equipment or device or any other equipment capable of being used as a communication device during the examination; or

(xii) violating any of the instructions issued to candidates along with their Admission Certificates permitting them to take the examination, or

(xiii) attempting to commit or as the case may be abetting the DDA of all or any of the acts specified in the foregoing clauses; may in addition to rendering himself/herself liable to criminal prosecution, be liable.

- (a) to be disqualified by the DDA from the examination for which he/she is a candidate and/or
- (b) by the DDA from any examination or selection held by them;
- (c) if he/she is already in service under Government to disciplinary action under the appropriate Rules.

## **12. Correspondence with the DDA:**

The DDA will not enter into any correspondence with the candidates about their candidature except in the following cases:

i) The eligible candidates shall be issued an e-Admission Certificate by the dates specified above. If a candidate does not receive his/her e-Admission Certificate or any other communication regarding his/her candidature for the examination **by the stipulated date** before the commencement of the examination, he/she should at once contact the DDA. Information in this regard can also be obtained from the Facilitation Counter located in the **DDA's Office Vikas Sadan, INA, New Delhi-23 either in person. In case no communication is received in the DDA's Office from the candidate regarding non-receipt of his/her e-Admission Certificate at least 3 weeks before the examination, he/she himself/ herself will be solely responsible for non-receipt of his/her e-Admission Certificate. No candidate will ordinarily be allowed to take the examination unless he/she holds a certificate of admission for the examination.** The candidates should note that their admission to the examination will be purely provisional based on the information given by them in the Application Form. This will be subject to verification of all the eligibility conditions by the DDA. **The mere fact that a certificate of admission to the Examination has been issued to a candidate, will not imply that his/her candidature has been finally cleared by the DDA or that entries made by the candidate in his/her application for the examination have been accepted by the DDA as true and correct. Candidates may note that the DDA takes up the verification of eligibility conditions of a candidate, with reference to original documents, only after the candidate has qualified for Examination. Unless candidature is formally confirmed by the DDA, it continues to be provisional.** The decision of the DDA as to the eligibility or otherwise of a candidate for admission to the Examination shall be final. Candidates should note that the name in the e-Admission Certificate in some cases, may be abbreviated due to technical reasons.

(ii) In the event of a candidate downloading more than one Admission Certificate from the DDA's website, he/she should use only one of these Admission Certificates for appearing in the examination and report about the other(s) to the DDA's Office.

(iii) If a candidate receives an e-Admission Certificate in respect of some other candidate the same should be immediately returned to the DDA with a request to issue the correct e-Admission Certificate. Candidates may note that they will not be allowed to take the examination on the strength of an Admission Certificate issued in respect of another candidate.

(iv) Candidates must ensure that their e-mail IDs given in their online applications are valid and active.

**Important :** All communications to the DDA should invariably contain the following particulars.

1. Name and year of the examination.
2. Registration ID (RID)
3. Roll Number (if received)
4. Name of candidate (in full and in block letters)
5. Complete postal address as given in the application.

**N.B. I. Communication not containing the above particulars may not be attended to.**

**N.B. II. Candidates should also note down their RID number for future reference.**

**They may be required to indicate the same in connection with their candidature for the Examination.**

**13.** The eligibility for availing reservation against the vacancies reserved for the physically disabled persons shall be the same as prescribed in "The Persons with Disability (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995." Provided further that the physically disabled candidates shall also be required to meet special eligibility criteria in terms of physical requirements/functional classification (abilities/disabilities) consistent with requirements of the identified Service/Post as may be prescribed by its Cadre Controlling Authority. The physical requirement and functional classification can for example be one or more of the following :

(i) **Code of Physical Requirements**

S Sitting ST Standing W Walking SE Seeing H Hearing/Speaking RW Reading and Writing C Communication MF Manipulation by Finger PP Pushing & Pulling L Lifting KC Kneeling and Crouching BN Bending

(ii) **Code of Functional Classification**

OH	-	Orthopedically Handicapped
VH	-	Visually Handicapped
HH	-	Hearing Handicapped
OA	-	One Arm
OL	-	One Leg
BA	-	Both Arm
BH	-	Both Hands
MW	-	Muscular Weakness
OAOL	-	One Arm One Leg
BLA	-	Both Legs and Arms
BLOA	-	Both Legs One Arm
LV	-	Low Vision
B	-	Blind
PD	-	Partially Deaf
FD	-	Fully Deaf

**Note :** The above list is subject to revision.

**14.** A candidate will be eligible to get the benefit of community reservation only in case the particular caste to which the candidates belong is included in the list of reserved communities issued by the Central Government. If a candidate indicates in his/her application form for examination that he/she belongs to unreserved (UR) category but subsequently writes to the DDA to change his/her category to a reserved one, such request shall not be entertained by the DDA. Similar principle will be followed for physically disabled categories also. While the above principle will be followed in general, there may be a few cases where there was a little gap (say 2-3 months) between the issuance of a Government Notification enlisting a particular community in the list of any of the reserved communities and the date of submission of the application by the candidate. In such cases the request of change of community from general to reserved may be considered by the DDA on merit. In case of a candidate unfortunately becoming physically disabled during the course of the examination, the candidate should produce valid documents to enable the DDA to take a decision in the matter on merit.

**15.** Candidates seeking reservation/ relaxation benefits available for SC/ST/ OBC/PWD must ensure that they are entitled to such reservation/ relaxation as per eligibility prescribed in the rules/notice. They should also be in possession of all the requisite certificates in the prescribed format in support of their claim as stipulated in the rules/ notice for such benefits, and these certificates should be dated earlier than the due date (closing date) of the application for Examination.

**16. Withdrawal of applications:**

No request for withdrawal of candidature received from a candidate after he/she has submitted his/her application will be entertained under any circumstances.

**17. Other Instructions:-**

- (i) Delhi Development Authority reserves the right to cancel/restrict/enlarge/modify/alter the recruitment process, if needed, without issuing any notice.
- (ii) Legal jurisdiction will be Delhi in case of any dispute.

**Commissioner (Personnel)**  
**Delhi Development Authority**

**GENERAL INSTRUCTIONS :**

1. Candidates are requested to read the advertisement copy carefully and check that they are eligible to apply for.
2. **Applications shall only be filled and submitted only through DDA website ([www.dda.org.in](http://www.dda.org.in)).**
3. E-mail ID and mobile number furnished must remain valid for at least one year from the date of application. Under no circumstances, he / she should share /mention registration no. to any other person. In case, a candidate does not have a valid personal email ID, he / she should create his / her new email ID before applying Online.
4. No Fee is to be paid with the application.
5. Applicants are first required to go to the web-site [www.dda.org.in](http://www.dda.org.in) , Thereafter, open the Recruitment Notification.
6. Candidates have to visit the Home/Recruitment Page of the website and going to the sublink titled "**Online APPLICATION FOR SPECIAL RECRUITMENT DRIVE FOR THE POSTS RESERVED FOR PERSONS WITH DISABILITY**". **Click on this sublink will open up the appropriate Online Application Format.**
7. The online application involves the following process: Registration/Login, Personal details, Educational qualification & experience, uploading of photograph, signature & Disability certificate, final submission and Registration Slip generation.
8. Before applying online a candidate will be required to have a scanned (digital) image in JPG or JPEG format of his recent Photograph(less than 100 kb) and Signature (less than 50 kb) as per the specifications given on the website. Candidates should first scan their photograph and signature ensuring that both the photograph and signature are saved in PC/Laptop.
9. Candidates should also be ready with the scanned copy of their disability certificate in PDF format. Maximum size of this PDF should be 3 MB.
10. Candidates are required to fill in the details asked in the form carefully without making any spelling mistake. On submission of online application successfully, the system will generate a registration slip mentioning a unique application number.
11. The candidates should take a printout of the online registration slip and preserve it with them for their record.
12. If a candidate wants to apply for more than 1 post, he/she needs to apply separately for both the posts. In case of any clash in the test date/time for any two or more posts, candidates need to decide the test they would like to take & DDA will not entertain any request of change in test date/time later on.
13. **The Date of Birth & Name of the candidate or his/ her father/ husband etc should be spelt correctly in the application as it appears in the certificates/ mark sheets of Secondary School Exam. Any change / alteration found may disqualify his/her candidature.**
14. **Candidates will have to download their admit/call letter from website by entering Application number & Date of Birth.** Candidates will be intimated about the same by email/sms. Physical call letters will **NOT** be sent by post.
15. Delhi Development Authority reserves the right to cancel/restrict/enlarge/modify/alter the recruitment process, if needed, without issuing any notice.

**Certificate No.....**

**Date :.....**

**DISABILITY CERTIFICATE**

Recent  
Photograph of  
the candidate  
showing the  
disability  
attested by the  
Chairperson of  
the Medical

This is to certify that Shri/Smt/Kum.....son/wife/daughter of  
Shri..... age.....sex.....identification mark(s)  
..... is suffering from permanent  
disability of following category.

**A. Locomotor or cerebral palsy :**

- (i) BL-Both legs affected but not arms.
- (ii) BA-Both arms affected
  - (a) Impaired reach
  - (b) Weakness or grip
- (iii) BLA-Both legs and both arms affected
- (iv) OL-One leg affected (right or left)
  - (a) Impaired reach
  - (b) Weakness or grip
  - (c) Ataxic
- (v) OA-One arm affected
  - (a) Impaired reach
  - (b) Weakness or grip
  - (c) Ataxic
- (vi) BH-Stiff back and hips (Cannot sit or stood)
- (vii) MW-Muscular weakness and limited physical endurance

**B. Blindness or Low Vision :**

- (i) B-Blind
- (ii) PB-Partially Blind

**C. Hearing impairment :**

- (i) D-Deaf
- (ii) PD-Partially Deaf

(Delete the category whichever is not applicable)

2. This condition is progressive/non progressive / likely to improve/ not likely to improve . Re-assessment of this case is not recommended / is recommended after a period of -----years -----months.\*

3. Percentage of disability in his/her case is ----- percent.

4. Sh./Smt/Kum-----meets the following physical requirements for discharge of his/her duties.

- |        |   |        |
|--------|---|--------|
| (i)    | F-can perform work by manipulating with fingers | Yes/No |
| (ii)   | PP-can perform work by pulling and pushing      | Yes/No |
| (iii)  | L-can perform work by lifting                   | Yes/No |
| (iv)   | KC-can perform work by kneeling and crouching   | Yes/No |
| (v)    | B-can perform work by bending                   | Yes/No |
| (vi)   | S-can perform work by sitting                   | Yes/No |
| (vii)  | ST- can perform work by standing                | Yes/No |
| (viii) | W- can perform work by walking                  | Yes/No |
| (ix)   | SE- can perform work by seeing                  | Yes/No |
| (x)    | H- can perform work by hearing/speaking         | Yes/No |
| (xi)   | RW- can perform work by reading and writing     | Yes/No |

(Dr.....)

(Dr.....)

(Dr.....)

Member

Member

Chairperson

Medical Board

Medical Board

Medical Board

Countersigned by the  
Medical Superintendent /  
CMO/Head of Hospital  
(with seal)

\*Strike put which is not applicable

Secretary

# Syllabus for various posts under Special Recruitment Drive for Persons with Disability in Delhi Development Authority

## ➤ Senior Law Officer

Constitution of India,

The Delhi Development Act, 1957 with the Rules and Regulations framed under the Act

Transfer of Property Act, 1882

Code of Civil Procedure, 1908 as amended up to date.

Administrative Tribunal Act, 1985

Arbitration and Conciliation Act, 1996

Consumer Protection Act, 1986

Contract, 1872

Evidence Act, 1872

Hindu Succession Act, 1956

Indian Succession Act

Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013

Right to Information Act, 2005

Registration Act, 1908

Public Premises (Eviction of Unauthorised Occupants) Act, 1971

Delhi Co-operative Societies Act, 2003 with Rules

Delhi Apartment Ownership Act, 1986

Industrial Dispute Act, 1947

Limitation Act, 1963

Competition Act, 2002

Criminal Procedure Code 1973 as amended up to date

## ➤ Assistant Executive Engineer (Civil)

**General Awareness**-→ Questions will be aimed at testing the candidates general awareness of the environment around him and its application to society. Questions will also be designed to test knowledge of current events and of such matters of everyday observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India and its neighbouring countries especially pertaining to Sport, History, Culture, Geography, Economic Scene, General Polity, Indian constitution and Scientific Research, etc. These questions will be such that they do not require a special study of any discipline.

### Civil Engineering

#### **1. BUILDING MATERIALS**

**Timber** : Different types and species of structural timber, density- moisture relationship, strength in different directions, defects, influence of defects on permissible stress,

preservation, dry and wet rots, codal provisions for design, plywood. **Bricks** : Types, Indian Standard classification, absorption, saturation factor, strength in masonry, influence of mortar strength on masonry strength. **Cement** : Compounds of, different types, setting times, strength. Cement Mortar : Ingredients, proportions, water demand, mortars for plastering and masonry. **Concrete** : Importance of W/C Ratio, Strength, ingredients including admixtures, worksability, testing for strength, elasticity, non-destructive testing, mix design methods.

**2. SOLID MECHANICS** Elastic constants, stress, plane stress, Mohr's circle of stress, strains, plane strain, Mohr's circle of strain, combined stress; Elastic theories of failure; Simple bending, shear; Torsion of circular and rectangular sections and simple members.

**3. STRUCTURAL ANALYSIS** Analysis of determinate structures - different methods including graphical methods. Analysis of indeterminate skeletal frames - moment distribution, slope deflection, stiffness and force methods, energy methods, Muller-Breslau principle and application. Plastic analysis of indeterminate beams and simple frames - shape factors.

**4. DESIGN OF STEEL STRUCTURES** Principles of working stress method. Design of connections, simple members, Built-up sections and frames, Design of Industrial roofs. Principles of ultimate load design. Design of simple members and frames.

#### **5. DESIGN OF CONCRETE AND MASONRY STRUCTURES**

Limit state design for bending, shear, axial compression and combined forces. Codal provisions for slabs, beams, walls and footings. Working stress method of design of R.C. members. Principles of prestressed concrete design, materials, methods of prestressing losses. Design of simple members and determinate structures. Introductions to prestressing of indeterminate structures. Design of brick masonry as per I.S. Codes.

#### **6. CONSTRUCTION PRACTICE, PLANNING AND MANAGEMENT**

Concreting Equipment: Weight Batcher, Mixer, vibrator, batching plant, concrete pump. Cranes, hoists, lifting equipment. Earthwork Equipment : Power shovel, hoe, dozer, dumper, trailers and tractor, rollers, sheep footrollers, pumps. Construction, Planning and Management : Bar chart, linked bar chart, workbreak down structures, Activity - on - arrow diagrams. Critical path, probabilistic activity durations; Event-based networks. PERT network: Time-cost study, crashing; Resource allocation.

#### **7. (a) FLUID MECHANICS, OPEN CHANNEL FLOW, PIPE FLOW**

Fluid Properties, Pressure, Thrust, Buoyancy; Flow Kinematics; Integration of flow equations; Flow measurement; Relative motion; Moment of momentum; Viscosity, Boundary layer and Control, Drag, Lift; dimensional Analysis, Modelling; Cavitation; Flow oscillations; Momentum and Energy principles in Open channel flow, Flow controls, Hydraulic jump, Flow sections and properties; Normal flow, Gradually varied flow; Surges; Flow development and losses in pipe flows, Measurements; Siphons; Surges and Water hammer; Delivery of Power Pipe networks.

### **(b) HYDRAULIC MACHINES AND HYDROPOWER**

Centrifugal pumps, types, performance parameters, scaling, pumps in parallel; Reciprocating pumps, air vessels, performance parameters; Hydraulic ram; Hydraulic turbines, types, performance parameters, controls, choice; Power house, classification and layout, storage, pondage, control of supply.

### **8. (a) HYDROLOGY**

Hydrological cycle, precipitation and related data analyses, PMP, unit and synthetic hydrographs; Evaporation and transpiration; Floods and their management, PMF; Streams and their gauging; River morphology; Routing of floods; Capacity of Reservoirs.

### **(b) WATER RESOURCES ENGINEERING**

Water resources of the globe: Multipurpose uses of Water: Soil- Plant- Water relationships, irrigation systems, water demand assessment; Storages and their yields, ground water yield and well hydraulics; Waterlogging, drainage design; Irrigation revenue; Design of rigid boundary canals, Lacey's and Tractive force concepts in canal design, lining of canals; Sediment transport in canals; Non-Overflow and overflow sections of gravity dams and their design, Energy dissipaters and tailwater rating; Design of headworks, distribution works, falls, cross-drainage works, outlets; River training.

## **9. ENVIRONMENTAL ENGINEERING**

### **(a) WATER SUPPLY ENGINEERING**

Sources of supply, yields, design of intakes and conductors; Estimation of demand; Water quality standards; Control of Water-borne diseases; Primary and secondary treatment, detailing and maintenance of treatment units; Conveyance of treatment units; Conveyance and distribution systems of treated water, leakages and control; Rural water supply; Institutional and industrial water supply.

### **(b) WASTE WATER ENGINEERING:**

Urban rain water disposal; Systems of sewage collection and disposal; Design of sewers and sewerage systems; pumping; Characteristics of sewage and its treatment, Disposal of products of sewage treatment, streamflow rejuvenation Institutional and industrial sewage management; Plumbing Systems; Rural and semi-urban sanitation.

### **(c) SOLID WASTE MANAGEMENT**

Source, classification collection and disposal; Design and Management of landfills.

### **(d) AIR AND NOISE POLLUTION AND ECOLOGY**

Sources and effects of air pollution, monitoring of air pollution; Noise pollution and standards; Ecological chain and balance, Environmental assessment.

## **10 (a) SOIL MECHANICS**

Properties of soil, classification and interrelationship; Compaction behaviour, methods of compaction and their choice; Permeability and seepage, flow nets, Inverted filters;

Compressibility and consolidation; Shearing resistance, stresses and failure; soil testing in laboratory and insitu; Stress path and applications; Earth pressure theories, stress distribution in soil; soil exploration, samplers, load tests, penetration tests.

#### **(b) FOUNDATION ENGINEERING**

Types of foundations, Selection criteria, bearing capacity, settlement, laboratory and field tests; Types of piles and their design and layout, Foundations on expansive soils, swelling and its prevention, foundation on swelling soils.

#### **11 (a) SURVEYING**

Classification of surveys, scales, accuracy; Measurement of distances - direct and indirect methods; optical and electronic devices; Measurement of directions, prismatic compass, local attraction; Theodolites - types; Measurement of elevations - Spirit and trigonometric levelling; Relief representation; Contours; Digital elevation modelling concept; Establishment of control by triangulations and traversing - measurements and adjustment of observations, computation of coordinates; Field astronomy, Concept of global positioning system; Map preparation by plane tabling and by photogrammetry; Remote sensing concepts, map substitutes.

#### **(b) TRANSPORTATION ENGINEERING**

Planning of highway systems, alignment and geometric design, horizontal and vertical curves, grade separation; Materials and construction methods for different surfaces and maintenance: Principles of pavement design; Drainage. Traffic surveys, Intersections, signalling: Mass transit systems, accessibility, networking. Tunnelling, alignment, methods of construction, disposal of muck, drainage, lighting and ventilation, traffic control, emergency management. Planning of railway systems, terminology and designs, relating to gauge, track, controls, transits, rolling stock, tractive power and track modernisation; Maintenance; Appurtenant works; Containerisation. Harbours - layouts, shipping lanes, anchoring, location identification; Littoral transport with erosion and deposition; sounding methods; Dry and Wet docks, components and operational Tidal data and analyses. Airports - layout and orientation; Runway and taxiway design and drainage management; Zoning laws; Visual aids and air traffic control; Helipads, hangers, service equipment.

### ➤ Assistant Director (Ministerial)

**(A) General Intelligence & Reasoning:** It would include questions of both verbal and non-verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, Visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non-verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Classification, Symbolic/Number Classification, Figural Classification, Semantic Series, Number Series, Figural Series, Problem Solving, Word Building, Coding & de-coding,

Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing inferences, Punched hole/pattern–folding & unfolding, Figural Pattern– folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small & Capital letters/numbers coding, decoding and classification, Embedded Figures, Critical thinking, Emotional Intelligence, Social Intelligence, Other sub-topics, if any.

**(B) General Awareness:** Questions in this component will be aimed at testing the candidates general awareness of the environment around him and its application to society. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India and its neighbouring countries especially pertaining History, Culture, Geography, Economic Scene, General Policy & Scientific Research.

**(C) Quantitative Aptitude:** The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be computation of whole numbers, decimals , fractions and relationships between numbers, Percentage. Ratio & Proportion, Square roots, Averages, Interest, Profit and Loss, Discount, Partnership Business, Mixture and Allegation, Time and distance, Time & Work, Basic algebraic identities of School Algebra & Elementary surds, Graphs of Linear Equations, Triangle and its various kinds of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angles subtended by chords of a circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons , Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular or square base, Trigonometric ratio, Degree and Radian Measures, Standard Identities, Complementary angles, Heights and Distances, Histogram, Frequency polygon, Bar diagram & Pie chart

**(D) English Language & Comprehension:** Questions in this components will be designed to test the candidate's understanding and knowledge of English Language and will be based on spot the error, fill in the blanks, synonyms, antonyms, spelling/detecting misspelt words, idioms & phrases, one word substitution, improvement of sentences, active/passive voice of verbs, conversion into direct/indirect narration, shuffling of sentence parts, shuffling of sentences in a passage, cloze passage & comprehension passage.

## ➤ Legal Assistant

Constitution of India,

The Delhi Development Act, 1957 with the Rules and Regulations framed under the Act  
Transfer of Property Act, 1882

Code of Civil Procedure, 1908 as amended up to date.

Contract, 1872

Evidence Act, 1872

Hindu Succession Act, 1956

Indian Succession Act

Criminal Procedure Code 1973 as amended up to date

## ➤ Programmer

1. Computer Architecture, Complete Organization. Data Communication And Net-Working, Artificial Intelligence, Micro-Processors, Number Systems & Digital Logics, Peripherals And Storage Devices.
2. Operating Systems: Windows, Unix And Linux
3. Programming:- Programming In Asp.Net, Java And Android/ Mobile Aps Programming, Programming In D2k, Programming In Visual Basic, PL/SQL, HTML.
4. Data Base Management (DBMS):- Oracle 8i And Above, SQL, Open Sources DBMS Etc.
5. Internet And Web Technologies
6. Questions on Test of Reasoning, Quantitative Aptitude, General Awareness, and English Language

## ➤ Planning Assistant

- a) **General Aptitude** -Questions on Test of Reasoning, Quantitative Aptitude, General Awareness, and English Language
- b) **Planning Legislation**
  - 1) About Delhi
  - 2) D.D. Act, 1957
  - 3) Master Plan of Delhi-2021
  - 4) Building Byelaws

### C) Architecture and Planning

**City planning:** Evolution of cities; principles of city planning; types of cities & new towns; planning regulations and building byelaws; eco-city concept; sustainable development.

**Housing :** Concept of housing; neighbourhood concept; site planning principles; housing typology; housing standards; housing infrastructure; housing policies, finance and management; housing programs in India; self help housing.

**Landscape Design:** Principles of landscape design and site planning; history of landscape styles; landscape elements and materials; plant characteristics & planting design; environmental considerations in landscape planning.

**Computer Aided Design:** Application of computers in architecture and planning; understanding elements of hardware and software; computer graphics; programming languages- C and visual Basic and usage of packages such as AutoCAD, 3D-Studio, 3D Max.

**Environmental Studies in Building Science:** Components of Ecosystem; ecological principles concerning environment; climate responsive design; energy efficient building design; thermal comfort; solar architecture; principles of lighting and styles for illumination; basic principles of architectural acoustics; environment pollution, their control & abatement.

**Visual and Urban Design:** Principles of visual composition; proportion, scale, rhythm, symmetry, harmony, datum, balance, form, colour, texture; sense of place and space, division of space; barrier free design; focal point, vista, image ability, visual survey, figure-background relationship.

**History of Architecture:** Indian- Indus valley, Vedic, Buddhist, indo-Aryan, Dravidian and mughal periods; European Egyptian, Greek Roman, medieval and renaissance periods-construction and architectural styles; vernacular and traditional architecture.

**Development of Contemporary Architecture:** Architectural developments and impacts on society since industrial revolution; influence of modern art on architecture; works of national and international architects; art novae, eclecticism, international styles, post modernism, deconstruction in architecture.

**Building Services:** Water supply, sewerage and drainage systems; sanitary fittings and fixture; plumbing systems, principles of internal & external drainage systems , principles of electrification of buildings, intelligent buildings; elevators & escalators, their standards and uses; air-conditioning systems; fire fighting systems, building safety and security systems.

**Building Construction and Management:** Building construction techniques, methods and details; building systems and prefabrication of building elements; principles of modular coordination; estimation, specification , valuation, professional practice; project management techniques e.g., PERT, CPM etc;

**Materials and Structural Systems:** Behavioral characteristics of all types of building materials e.g. mud, timber, bamboo, brick, concrete, steel, glass, FPR, different polymers, composites; principles of strength of materials; design of structural elements in wood, steel and RCC; elastic and limit state design; complex structural systems; principles of pre-stressing; tall buildings; principles of disaster resistant structure.

**Planning Theory:** Regional planning; settlement system planning; history of human settlements; growth of cities & metropolises; principles of Ekistics; rural-urban migration; urban conservation; urban renewal; Five-year plan; structural and sectoral plan.

**Techniques of Planning:** Planning survey techniques; preparation of urban and regional structure plans, development plans, action plans; site planning principles and design; statistical methods of data analysis; application of GIS and remote sensing techniques in urban and regional planning; decision making models.

**Traffic and Transportation Planning:** Principles of traffic engineering and transportation planning; traffic survey methods; design of roads, intersections, grade separators and parking areas; hierarchy of roads and levels of services; traffic and transport management in urban areas, intelligent transportation system; mass transportation planning; para-transits and other modes of transportation, pedestrian & slow moving traffic planning.

**Infrastructure, Services and Amenities:** Principles of water supply and sanitation systems; water treatment; solid waste disposal systems; waste treatment, recycle & reuse; urban rainwater harvesting; power supply and communication systems- network, design &

guidelines; demography related standards at various levels of the settlements for health, education, recreation, religious & public-semi public facilities.

**Development Administration and Management:** Planning laws; development control and zoning regulations; laws relating to land acquisition; development enforcements, urban land ceiling; land management techniques; planning and municipal administration; disaster mitigation management; 73<sup>rd</sup> & 74<sup>th</sup> Constitutional amendments; valuation & taxation; revenue resources and fiscal management; public participation and role of NGO & CBO; Institutional networking & capacity building.

## ➤ Junior Engineer (Civil)

**General Awareness**-→ Questions will be aimed at testing the candidates general awareness of the environment around him and its application to society. Questions will also be designed to test knowledge of current events and of such matters of everyday observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India and its neighbouring countries especially pertaining to Sport, History, Culture, Geography, Economic Scene, General Polity, Indian constitution and Scientific Research, etc. These questions will be such that they do not require a special study of any discipline.

### Civil Engineering

**Building Materials:** Physical and Chemical properties, classification, standard tests, uses and manufacture/quarrying of materials e.g. building stones, silicate based materials, cement (Portland), Asbestos products, Timber and Wood based Products, laminates, bituminous materials, paints, varnishes.

**Surveying:** Principles of surveying, working of properties, compass and bearing, plane table surveying, theodolite traverse, adjustment of theodolite, levelling and contouring, curvature, refraction, permanent adjustment of dumpy level, methods of contouring and uses of a control map, tachometric survey.

**Soil Mechanics:** Origin of soil phase diagram, definitions of void ratio, porosity, degree of saturation, water content, specific gravity of soil grains and unit weights, grain size distribution curves for different soil and their uses. Atterberg's limits, ISI soil classification, plasticity chart, coefficient of permeability, effective stress, consolidation of soils. Calculation of shear strength of soils, direct shear test, vane shear test, triaxial test, soil compaction, Lab compaction, Lab compaction test, moisture content and bearing capacity of soils, plate load test, standard penetration test.

**Hydraulics:** Fluid properties, hydrostatics, measurements of flow, Bernoulli's theorem and its application, flow through pipes, flow in open channels, weirs, flumes, spillways, pumps and turbines.

**Environmental Engineering:** Quality of water, source of water supply, purification of water, distribution of water, need of sanitation, sewerage system, circular sewers, oval sewer, sewer appurtenances, surface water drainage, sewage treatments.

**Structural Engineering:** Theory of structures: Elasticity constants, type of beams, determinate and indeterminate, bending moment and shear force diagrams of simply supported, cantilever and over hanging beams. Moment of area and moment of inertia for rect. & circular section, bending moment and shear stress for tee, channel and compound sections, chimneys, dams and retaining walls, eccentric loads, slope deflection of simply supported and cantilever beams, critical load and columns, torsion of circular section.

**Concrete Technology :** Properties, Advantages and uses of concrete, cement aggregates quality, water cement ratio, workability, mix design, storage, batching, mixing, placement, compaction, finishing and curing of concrete, quality control of concrete, hot weather and cold weather concreting, repair and maintenance of concrete structure.

### **RCC Design:**

**RCC beams:** flexural strength, shear strength, bond strength, design of single reinforced beams, lintels, cantilever beams, double reinforced beams, one way slabs, two way slabs, isolated footings, reinforced brick work. T-beams, columns, staircases, retaining walls, water tanks (RCC design questions may be based on both Limit State method and Working Stress method).

**Steel Design:** Steel design and construction of steel columns, beams, roof trusses, plate girders.

## ➤ Sectional Officer (Horticulture)

Candidates must have knowledge of – Horticulture, Styles of Gardening, Lawn Development, Roadside\plantation of trees/shrubs. Flowering shrubs, Hedges, Bonsai and its maintenance, Annual flowers, Topiary, Indoor and outdoor potted plants, Propagation of roses , Chrysanthemum, Dahlia, Bougainvillea, Hanging Basket, Cultivation of Cut flowers i.e. Roses, Gladiolus, Orchids, Tuberose, Lilium and Anthurium , Ground Covers, Medicinal Plants, Scented Shrubs/Trees, Propagation, Plant Protection, Nursery management, Routine Garden operations, Features of the garden, Flower shows and Garden Competitions, Floral ornaments and Flower Arrangements.

Questions on Test of Reasoning, Quantitative Aptitude, General Awareness, and English Language.

## ➤ Assistant

(A) **General Intelligence & Reasoning:** It would include questions of both verbal and non-verbal type. This component may include questions on analogies, similarities and differences, space visualization, spatial orientation, problem solving, analysis, judgement, decision making, Visual memory, discrimination, observation, relationship concepts, arithmetical reasoning and figural classification, arithmetic number series, non- verbal series, coding and decoding, statement conclusion, syllogistic reasoning etc. The topics are, Semantic Analogy, Symbolic/Number Analogy, Figural Analogy, Semantic Classification, Symbolic/Number Classification, Figural Classification, Semantic Series, Number Series, Figural Series, Problem Solving, Word Building, Coding & de-coding,

Numerical Operations, symbolic Operations, Trends, Space Orientation, Space Visualization, Venn Diagrams, Drawing inferences, Punched hole/pattern–folding & unfolding, Figural Pattern– folding and completion, Indexing, Address matching, Date & city matching, Classification of centre codes/roll numbers, Small & Capital letters/numbers coding, decoding and classification, Embedded Figures, Critical thinking, Emotional Intelligence, Social Intelligence, Other sub-topics, if any.

**(B) General Awareness:** Questions in this component will be aimed at testing the candidates general awareness of the environment around him and its application to society. Questions will also be designed to test knowledge of current events and of such matters of every day observations and experience in their scientific aspect as may be expected of any educated person. The test will also include questions relating to India and its neighbouring countries especially pertaining History, Culture, Geography, Economic Scene, General Policy & Scientific Research.

**(C) Quantitative Aptitude:** The questions will be designed to test the ability of appropriate use of numbers and number sense of the candidate. The scope of the test will be computation of whole numbers, decimals , fractions and relationships between numbers, Percentage. Ratio & Proportion, Square roots, Averages, Interest, Profit and Loss, Discount, Partnership Business, Mixture and Allegation, Time and distance, Time & Work, Basic algebraic identities of School Algebra & Elementary surds, Graphs of Linear Equations, Triangle and its various kinds of centres, Congruence and similarity of triangles, Circle and its chords, tangents, angles subtended by chords of a circle, common tangents to two or more circles, Triangle, Quadrilaterals, Regular Polygons , Circle, Right Prism, Right Circular Cone, Right Circular Cylinder, Sphere, Hemispheres, Rectangular Parallelepiped, Regular Right Pyramid with triangular or square base, Trigonometric ratio, Degree and Radian Measures, Standard Identities, Complementary angles, Heights and Distances, Histogram, Frequency polygon, Bar diagram & Pie chart

**(D) English Language & Comprehension:** Questions in this components will be designed to test the candidate’s understanding and knowledge of English Language and will be based on spot the error, fill in the blanks, synonyms, antonyms, spelling/detecting misspelt words, idioms & phrases, one word substitution, improvement of sentences, active/passive voice of verbs, conversion into direct/indirect narration, shuffling of sentence parts, shuffling of sentences in a passage, cloze passage & comprehension passage.

**Note: For all the posts, the level of the examination will be as per the prescribed qualification.**