

**TELANGANA STATE PUBLIC SERVICE COMMISSION: HYDERABAD**  
**NOTIFICATION NO.22/2022, DATED:09/12/2022**  
**JUNIOR LECTURERS UNDER THE CONTROL OF COMMISSIONER OF**  
**INTERMEDIATE EDUCATION**  
**(GENERAL RECRUITMENT)**

**PARA – I:**

- 1) Applications are invited Online from qualified applicants through the proforma Application to be made available on Commission's website (<https://www.tspsc.gov.in>) to the post of **Junior Lecturers under the control of Commissioner of Intermediate Education in the State of Telangana.**
  - i) Submission of ONLINE applications starts from Dt. **16/12/2022.**
  - ii) Last date and time for submission of ONLINE applications is upto 5.00 PM on **06/01/2023.** The payment of Fee will be accepted upto **5:00 P.M** of last date for submission.
- 2) The details of **Junior Lecturer** subject wise vacancies are given below: -

Pc. No.	NAME OF THE SUBJECT	MULTI ZONE		Total Vacancies	Age as on 01/07/2022 Min. Max.	Scale of Pay Rs.
		MZ-I	MZ-II			
01	Arabic	01	01	02	18-44	54,220- 1,33,630/-
02	Botany	55	58	113		
03	Botany (Urdu Medium)	09	06	15		
04	Chemistry	65	48	113		
05	Chemistry (Urdu Medium)	06	13	19		
06	Civics	35	21	56		
07	Civics (Urdu Medium)	13	03	16		
08	Civics (Marathi Medium)	01	-	01		
09	Commerce	17	33	50		
10	Commerce (Urdu Medium)	03	04	07		
11	Economics	33	48	81		
12	Economics (Urdu Medium)	10	05	15		
13	English	84	69	153		
14	French	-	02	02		
15	Hindi	66	51	117		
16	History	38	39	77		
17	History (Urdu Medium)	09	08	17		
18	History (Marathi Medium)	01	-	01		
19	Maths	85	69	154		
20	Maths (Urdu Medium)	08	01	09		
21	Physics	58	54	112		
22	Physics (Urdu Medium)	05	13	18		
23	Sanskrit	08	02	10		
24	Telugu	21	39	60		
25	Urdu	15	13	28		
26	Zoology	71	57	128		
27	Zoology (Urdu Medium)	07	11	18		
<b>GRAND TOTAL</b>		<b>724</b>	<b>668</b>	<b>1392</b>		

(The **Details of Vacancies** i.e., Community-wise, PH-wise, EWS, Sports Category, Multi Zone and Gender-wise (General/Women) may be seen at **Annexure-I.**)

**IMPORTANT NOTE:-** The number of vacancies are subject to variation on intimation being received from the Department concerned. Addition of vacancies if any, will be accepted only

before the date of examination and an addendum to that effect will be issued. Deletion of vacancies, if any, can be effected upto the declaration of result.

3) (i) **The Examination (Objective Type) is likely to be held in the Month of JUNE/JULY-2023 and the Commission reserves the right to conduct the Examination either through **COMPUTER BASED RECRUITMENT TEST (CBRT) OR OFFLINE OMR BASED EXAMINATION OF OBJECTIVE TYPE.****

(ii) **Exact date for the above examination will be announced later.**

(iii) **Hall Tickets can be downloaded from 7 days prior to the examination.**

(iv) **Candidates are instructed to read the instructions at Annexure-IV of this Notification and Instructions printed on the Hall Ticket carefully.**

4) Before applying for the posts, candidates shall register themselves on the One Time Registration (OTR) through the Official Website of TSPSC (<https://www.tspsc.gov.in>). Those who have registered in OTR already shall apply by login to their profile using their TSPSC ID and Date of Birth as provided in OTR. (In case if the candidate has forgotten the TSPSC ID, the candidate has to visit the TSPSC website and click on the link "Know Your TSPSC\_ID" and enter the Aadhar Number and Date of Birth and get the TSPSC-ID). If the candidate did not register Aadhar Number in OTR, candidate has to enter either his/her registered mobile number or Name and Date of Birth to get the TSPSC ID).

**Note:-** i) One Time Registration is not considered as an application for any post under any circumstances.

ii) The applicants are advised to retain their Mobile Number and email id registered in OTR for receiving OTP/SMS for further communication.

**IMPORTANT NOTE:** Applicants are requested to keep the soft copy of the following documents ready while uploading their Applications and updating the OTRs.

- Aadhar Card /Voter ID / Pass Port / Driving License / Service ID Cards with (Photograph issued by Central/State/PSU/Public Limited Companies) / Passbook with (photograph by Bank / Post Office) / PAN Card.
- Educational Qualifications i.e., SSC, Intermediate, Degree, Post Graduation etc.,
- Study (Bonafide) / Residence Certificate (1<sup>st</sup> to 7<sup>th</sup> Class period).
- Community Certificate (SC/ST/BC), Non-Creamy Layer Certificate in case of BCs issued by the competent authority of Telangana Government.
- Income certificate for the Financial Year prior to the year of application issued by the competent authority of Telangana Government for claiming EWS reservation.
- Certificates claiming Sports & PH reservation, and age relaxation for Ex-Servicemen.

5) The applicants who possess requisite qualification may apply online by satisfying themselves about the terms and conditions of this recruitment.

6) **EDUCATIONAL QUALIFICATIONS:** Applicants must possess the requisite qualifications as detailed below, specified in the relevant Service Rules, indented by the Department, **as on the Date of Notification.**

Pc. No.	Name of the post	Educational Qualifications as specified in the Service Rules of the department.
01 to 05 and 09 to 27	Junior Lecturers in various subjects	Must possess a Second Class Post Graduate Degree (M.A., or M.Sc., or M.Com.,) OR B.A. (Hons) or B.Sc., (Hons) or B.com (Hons) or any other equivalent Post-Graduate Degree in the relevant subject/language of any University in India established or incorporated by or under a Central Act, State Act, or a provincial Act or an Institution recognized by the University Grants Commission or an equivalent qualification with a minimum of 50% marks in Post Graduate Degree Examination.
06, 07 & 08	Junior Lecturers in Civics	Must possess Second Class P G Degree in Political Science or Public Administration with minimum of 50% marks or its equivalent.
	<b>NOTE:-</b>	For Subjects in Urdu medium / Marathi Medium:- The candidates who have studied in Urdu / Marathi medium upto X Class Level (OR) the candidates who have studied Urdu / Marathi as first language at X Class/SSC level and Urdu/Marathi as Second Language at Bachelor's Degree level are eligible to apply for the Subjects in Urdu/Marathi Medium.

**N.B:- i) Distance Education:-** The Applicants who have obtained requisite Degrees through Open Universities / Distance Education mode are required to have recognition by the University Grants Commission / AICTE / Distance Education Bureau as the case may be. Unless such Degrees have been recognised by the relevant Statutory Authority, they will not be accepted for purpose of Educational Qualification vide its Public Notice No. F.27-1/2012 (CPP-II), Dt. 27/06/2013. (A university established or incorporated by or under a State act shall operate only within the territorial jurisdiction allotted to it under its Act and in no case beyond the territory of the State of its location). The onus of proof of recognition by the relevant Statutory Authority that their Degrees / Universities have been recognised rests with the candidate.

**ii) Equivalent Qualification:** At the time of verification of certificates, if it is noticed that any applicant possessing other than prescribed qualification and claims it as equivalent to the prescribed qualifications, then an Expert Committee will be constituted including the Unit Officer by the Commission and the Commission will take a decision based on the report of the Expert Committee.

**7) AGE:** The candidates should possess Minimum 18 years & Maximum 44 years. The age is reckoned as on 01/07/2022 (Rule-12(1)(a)(v) of State and Subordinate Service Rules).

**(As per G.O.Ms.No.42, G.A. (Ser.A) Department, Dt. 19/03/2022 the upper age limit is raised up to 10 years i.e., from 34 years to 44 years)**

**Minimum Age (18 years):** An Applicant should not be born after **01/07/2004.**

**Maximum Age (44 years):** An applicant should not be born before **02/07/1978.**

The Upper Age limit will be relaxed as per Rules and will be calculated on the above lines.

**Age Relaxations:** The upper age limit prescribed above is however relaxable in the following cases:

Sl. No.	Category of candidates	Relaxation of age permissible
1.	Telangana State Government Employees (Employees of TSRTC, Corporations, Municipalities etc. are not eligible).	Upto 5 Years based on the length of regular service.
2.	Ex-Service men	3 years & length of service rendered in the armed forces.
3.	N.C.C. (who have worked as Instructor in N.C.C.)	3 Years & length of service rendered in the N.C.C.
4.	SC/ST/BCs & EWS	5 Years
5.	Physically Handicapped persons	10 Years

**Note:** Provided that the persons referred at Sl.No. 2&3 above shall, after making deductions referred to in Sub Rule-12(c)(i)&(ii) of Telangana State and Subordinate Service Rules not exceed the maximum age limit prescribed for the post.

- The age relaxation for Ex-servicemen is applicable for those who have been released from Armed forces other than by way of Dismissal or Discharge on account of misconduct or Inefficiency.
- The age relaxation for NCC, a Person who was recruited as a whole-time Cadet Corpse Instructor on or after the 1st January, 1963 on his discharge from the NCC either before or after the expiry of the initial or extended tenure of his office in NCC having served for a period of not less than six months prior to his release from the NCC.

**N.B.** However, no person shall be eligible if he/she crossed 61 years of age (Superannuation age) after availing the eligible age relaxations as on 01/07/2022.

**8) (A) FEE:**

- Application Processing Fee:-** Each applicant must pay Rs. 200/- (Rupees Two Hundred Only) towards Online Application Processing Fee.
- Examination Fee:-** The applicants have to pay RS. 120/- (Rupees One Hundred and Twenty Only) towards Examination Fee. However,
  - All unemployees are exempted from payment of examination fee, and
  - All Employees of any Government (Central / State / PSUs / Corporations / Other Government Sector) have to pay the prescribed examination fee.

**B) Mode of Payment of Fee:**

The Fee mentioned at Para-I(8)(A) is to be paid online through payment gateway duly following online instructions once the application form details are submitted.

The fee once remitted, shall not be refunded or adjusted under any circumstances. Failure to pay the Application Processing fee and Examination fee, wherever applicable, will entail total rejection of application. Unless full payment of both Examination fee (**unless exempted**) and Application fee is made, the candidature of the applicant will be rejected and no correspondence or concession in this regard will be entertained. The list of Banks providing service for the purpose of online remittance of fee is given in **ANNEXURE – II.**

**PARA-II: CENTRES FOR THE WRITTEN EXAMINATION:**

- 1) The Written Examination (Objective Type) will be held at the following centers or as may be decided by the Commission.
  - i) **HYDERABAD (including HMDA Jurisdiction)**
  - ii) **KARIMNAGAR**
  - iii) **KHAMMAM**
  - iv) **HANUMAKONDA**
  - v) **NIZAMABAD**
- 2) However, the Commission reserves the right to allot candidates to any centre other than the centre chosen by the applicant or to remove / create a new centre for administrative reasons. Request for change of the centre will not be entertained.

**PARA-III: HOW TO APPLY:****HOW TO SUBMIT THE ONLINE APPLICATION FORM:**

- (i) The Applicant has to read the **User Guide** (<https://www.tspsc.gov.in>) for Online Submission of Applications and then proceed further.
- Step I:** Before applying, the Applicant has to visit the website (<https://www.tspsc.gov.in>) and fill the OTR application if not registered earlier to obtain TSPSC ID. The candidates are advised to upload all the required certificates (However, original certificates have to be produced for verification at the time of scrutiny before finalizing the selection list). While filling the OTR, the applicant has to ensure that there are no mistakes in it. The Commission will not be held responsible for the mistakes, if any, made by the applicants. If already registered in the OTR the applicant can directly access the application form. The applicant is instructed to fill his/her application form himself/herself with utmost care instead of delegating to others.
- Step II:-a)** In order to fill the application form, the Applicant has to visit the website (<https://www.tspsc.gov.in>) and Click on the online Application Link provided on the Website, then enter TSPSC ID and Date of Birth and login with OTP received to proceed further.
- b) Applicant has to verify the details fetched from OTR database pertaining to Name, Date of Birth, requisite Educational Qualifications, Community, Gender, Ex-Servicemen & Sports etc., displayed on the screen.
  - c) In addition to the details obtained from OTR database, specific details of Notification such as Examination Centre opted, required qualification and declarations etc., should be filled by the applicant.
  - d) Preview and Edit facility is available to make changes and then click on SAVE & PAY button for proceeding to next step of making online payment of fee through payment gateway.
- Step III:-** The applicant should pay the prescribed fee as specified through any of the three modes of payment online i.e., Net Banking, Debit Card and Credit Card duly following the instructions appearing on the screen.
- Step IV:-** After payment of fee, the PDF application will be generated which contains the particulars furnished by the applicant. The applicant must download a copy of his/her submitted form (PDF). The Reference ID Number in the PDF application form has to be quoted for future reference/correspondence.
- 1) Applicant shall note that, the details available in OTR database at the time of submitting the application will only be considered for the purpose of this notification. Hence, the candidate is advised to update / edit the details in OTR form before submitting online application form. The Time and Date of submission of the application will be printed on

the application PDF form. Changes made by the applicant in OTR details after submission of application form will not be considered for the purpose of this Notification.

- 2) The Commission is not responsible for any discrepancy in Bio-data particulars submitted in the application form. The applicant is therefore advised to strictly follow the instructions and User guide in his/her own interest before submitting the application.
- 3) Applicant must compulsorily fill-up all relevant columns of the application form. The eligibility of the applicant will be decided based on the particulars given in the online application form in terms of notification and it is validated by the software and it will be taken as final. For eg: If an applicant fails to update the OTR regarding his/her Sports status before applying, the applicant will not be considered for Sports vacancies. Applicant should therefore be very careful, while entering the data and uploading / submitting the application form online.
- 4) Incomplete / incorrect application form will be rejected. The information if any furnished by the applicant subsequently in any form will not be entertained by the Commission under any circumstances unless specifically called for. Applicant should be careful in filling-up the application form and submission. If any lapse is detected during the scrutiny/verification of certificates, the candidature will be rejected even though he/she comes through the final stage of recruitment process or even at a later stage.
- 5) Before uploading/submission of application form, the applicant should carefully ensure his/her eligibility for this examination. No relevant column of the application form should be left blank, otherwise application form will not be accepted.
- 6) The Commission will not make any corrections in the application form submitted by the applicant.
- 7) Applicant must click on Save & Pay Button after filling and preview of the application. Otherwise the application particulars will not be saved in the database.
- 8) Hand written/ Typed/ Photostat copies/ outside printed Application Form will not be entertained. The Commission will not be held responsible for the applications submitted in any other mode.
- 9) For any Technical problems related to Online submission and downloading of Hall-Tickets please contact 040-23542185 or 040-23542187 (Call Time: 10.30 A.M to 1.00 P.M & 1.30 P.M to 5.00 P.M on working days) or mail to [helpdesk@tspsc.gov.in](mailto:helpdesk@tspsc.gov.in).

#### **PARA- IV GENERAL PROVISIONS**

- 1) The applications received online in the prescribed proforma within the time shall only be considered.
- 2) Applicant must upload his/her scanned recent pass port size photo and signature in .jpeg format.
- 3) The applicant should not furnish any particulars that are false, tampered, fabricated or suppress any material information while submitting online application.
- 4) All the essential certificates issued by the competent authority of Telangana State shall be kept with the applicants at the time of submitting the application.
- 5) The required original certificates should be submitted at the time of verification of certificates or whenever called for. Failure to produce the required certificates will lead to disqualification.
- 6) **Important:** –The claim of the applicants with regard to the date of birth, educational qualifications and community etc., are accepted provisionally on the information furnished by them in their application form and is subject to verification and satisfaction of the Commission. Mere admission to any test or inclusion of the name of an applicant in a Merit List will not confer on the applicant any right for appointment. The candidature is therefore, provisional at all stages and the Commission reserves the right to reject candidature at any stage of the selection even after declaration of results, if any mistake/wrong information is noticed at a later date.
- 7) The applicants should be willing to serve anywhere in Telangana State.
- 8) **NOTE ON UTILISING EDIT OPTION BY CANDIDATES:**

The applicant should follow the TSPSC website regularly to utilize the edit option if given by the Commission at any point of time. No separate advertisement / notification will be issued in any news paper. No separate individual intimation shall be given.

9) **Invalidation of OMR Answer Sheet: -**

- a) If any applicant fails to bubble or wrongly bubble the Booklet Series, Hall Ticket Number in the OMR Answer Sheet, such Answer Sheets are invariably invalidated as the answer sheets are valued by Optical Mark Reader. This stipulation is to avoid any sort of human interface in evaluation of the Scripts.
- b) Tampering of OMR answer sheet by using whitener, eraser, blade and chalk powder etc., and also tampering of barcode by any means leads to invalidation.
- c) No request for reconsideration of such rejected/invalidated cases will be entertained.

10) A) **The following certificates / documents must be submitted by the candidates at the time of verification of certificates.**

- i) PDF Application form
- ii) Hall Ticket.
- iii) Aadhar Card /Voter ID / Pass Port / Driving License / Service ID Cards with (Photograph issued by Central/State/PSU/Public Limited Companies) / Passbook with (photograph by Bank / Post Office) / PAN Card.
- iv) Proof of Educational Qualifications.
- v) S.S.C / CBSE / ICSE (For Date of Birth)
- vi) School Study Certificate (1<sup>st</sup> to 7<sup>th</sup> Class)
- vii) Certificate of Residence (where the Candidate has not studied in Educational Institution) (1<sup>st</sup> to 7<sup>th</sup> Class period) obtained from competent authority of Telangana Government.
- viii) Declaration by the Unemployed (For claiming exemption from payment of exam fee).
- ix) No Objection Certificate from Employer (even if employed at any later stage of recruitment).
- x) Service Certificate (If any employee claimed Age relaxation).
- xi) Certificate claiming sports reservation.
- xii) Certificate claiming Ex-servicemen for age relaxation.
- xiii) Community Certificate for BCs, SCs & STs (Issued in the name of candidate with Father Name is only acceptable.) obtained from competent authority of Telangana Government.
- xiv) Non-Creamy Layer Certificate for BCs as per Form- VIIB vide G.O. Ms. No. 34 BC Welfare (OP) Department Dt.08/10/2015 and G.O. Ms. No. 20 BC Welfare (OP) Department Dt.31/10/2017 (Certificate issued in the name of candidate as S/o OR D/o is only acceptable.) obtained from competent authority of Telangana Government.
- xv) Income certificate for the Financial Year prior to the year of application issued by the competent authority of Telangana government for claiming EWS reservation.
- xvi) In case of PH Candidates, Visually Handicapped / Hearing Disability & Hearing Impairment / Orthopedically Handicapped / Multiple disabilities, certificates should be obtained from Competent Medical Authority in SADAREM format relevant to them.
- xvii) Any other certificate required.

B) **Guidelines for evaluation of various disabilities and procedure for certification** are mentioned in G.O.Ms.No.31, WD, CW & (DW) Dept, Dt:01-12-2009.

1. Physically Challenged candidates who are claiming reservations under Disability quota must note that they will be referred to State Medical Board (Appellate Medical Authority) after completion of certificate verification. The report of Medical Board is final.
2. Request for re-medical-examination by the State Medical Board (Appellate Medical Authority) for assessment of disability will not be entertained.

**Note:-**The Certificate formats are available on Commission's website <https://www.tspsc.gov.in/certificateformats.jsp>.

**PARA-V :- IMPORTANT LEGAL PROVISIONS GOVERNING THE RECRUITMENT PROCESS:**

1. **Vacancies:** The recruitment will be made to the vacancies notified before the examination only. There shall be no waiting list as per G.O. Ms. No. 81 General Administration (Ser.A) Department, Dated 22/02/1997 and as per Rule 6 of TSPSC Rules of Procedure.
2. Unfilled and Non-Joining vacancies will be Carried Forward to next recruitment.
3. This Recruitment is entrusted to TSPSC along with Finance Clearance vide G.O.Ms.No.117 Finance (HRM.VII) Department, Dt. 22/07/2022 amended with G.O.Ms.No.184 Finance (HRM.VII) Department, Dt. 08/12/2022
4. **Recruitment:** - The Recruitment will be processed as per this Notification and also as per the Rules and Instructions issued by the Government and also as decided by the Commission from time to time in terms of respective Special Rules/Adhoc Rules governing

the Recruitment vide G.O.Ms. No. 223 Higher Education (IE./A1) Department, dated: 18/09/2008, Govt.Memo.No.1358-A/IE.A1/2022, Higher Education (IE) Department, dated: 09/12/2022 and as per Government Orders issued from time to time, and other related G.Os, Rules etc., applicable in this regard.

5. **Rules:** All are informed that the various conditions and criterion prescribed herein are governed by the General Rules of existing State and Subordinate Service Rules, read with the relevant Special Rules applicable to any particular service in the departments. Any guidelines or clarification is based on the said Rules, and, in case of any necessity, any matter will be processed as per the relevant General and Special Rules in force.
6. **Constitutional Provisions:-** The Commission is empowered under the provisions of Article 315 and 320 of the Constitution of India read with relevant laws, rules, regulations and executive instructions and all other enabling legal provisions in this regard to conduct examination for appointment to the posts notified herein, duly following the principle of order of merit as per **Rule 3** of the TSPSC Rules of Procedure read with reference to relevant statutory provisions and ensuring that the whole recruitment and selection process is carried out with utmost regard to maintain secrecy and confidentiality so as to ensure that the principle of merit is followed.
7. **Multi Zonal Post:-** These posts are classified into Multi Zonal posts and the local reservation is applicable as per G.O.Ms.No.124, General Administration (SPF-MC), Department, Dated 30-08-2018.
8. **Local:-**The Local Reservations shall be followed as per the Telangana Public Employment (Organization of Local Cadres and Regulation of Direct Recruitment) Order, 2018, G.O.Ms.No.124, General Administration (SPF-MC), Department, Dated 30-08-2018 as amended vide G.O.Ms. No. 128, G.A. (SPF-I) Dept., Dated: 30/06/2021 and other orders issued by the Government of Telangana from time to time and other related G.Os, Rules etc., applicable.
9. **Employee Details:-** The persons already in Government Service/ Autonomous bodies/ Government aided institutions etc., whether in permanent or temporary capacity or as work charged employees are required to inform in writing to the Head of Office / Department, that they have applied for this recruitment, as the case may be and required to submit the "No Objection Certificate" from the Head of Office / Department concerned to the Commission as and when required to do so.

The persons who are employed after submission of application or at any later stage for this recruitment should also submit "No Objection Certificate" from the Head of Office / Department concerned to the Commission as and when required to do so.

10. **A) Penal Action:-** The Commission is also empowered to invoke the penal provisions of the T.S. Public Examinations (Prevention of Malpractices and Unfair means) Act, 1997 (Act No.25/1997) for matters connected therewith or incidental thereto and as per the Rules of Procedure of TSPSC published in Telangana Gazette No: 60 dated 28/12/2015 in respect of this Notification.

**B) Disqualification for appointment:** A candidate shall be disqualified at any stage as per Rule-12(4) of Telangana State and Subordinate Service Rules.

- 11) **Community:** (a) The candidates belonging to SC & ST are required to produce Community Certificate issued by the competent authority (obtained from Government of Telangana State) in terms of G.O.Ms No. 58, SW (J) Dept., dt: 12/5/97 read with G.O. Ms. No. 5 Scheduled Castes Development (POA.A2) Dept., dt. 08/08/2014, G.O. Ms. No. 11 Scheduled Castes Development (POA.A2) Dept., dt. 17/09/2014 and G.O. Ms. No. 2 Scheduled Castes Development (POA.A2) Dept., dt. 22/01/2015. As per Rule-2(29) of T.S. State and Subordinate Service Rules. Explanation: No person who professes a religion different from Hinduism, the Sikh or Buddhism shall be deemed to be as member of a Scheduled Caste. (b)The candidates belonging to Backward Classes are required to produce Community Certificate (BC-A, BC-B, BC-C, BC-D & BC-E) issued by the Competent Authority in the State of Telangana obtained through Mee-Seva vide G.O. Ms. No. 16 BCW (OP) Dept., Dt. 11/03/2015. (c) Income Certificate for claiming EWS Reservation issued by the Tahsildar (Government of Telangana) vide G.O. Ms. No. 244 General Administration (Ser.D) Department, Dt. 24/08/2021 and orders and instructions issued by the Government from time to time.

12) **Reservation:** -

- (i) The Rule of Reservation will be applicable in terms of General Rule 22 & 22 (A) of Telangana State and Subordinate Service Rules, the Government Orders / Instructions and the Court orders, if any, in that regard, before completion of selection process.

- (ii) Reservation to Disabled persons is subject to the Special Rules/Adhoc Rules governing the posts. The extent of Disability will be decided by the State Appellate Medical Authorities.
- (iii) If eligible disabled women candidates of VH(W) / HH(W) / OH(W) / MH(W) category are not available in the initial recruitment, the same shall be filled up by the eligible Male candidates with same category of disability respectively as per G.O.MS. No. 96 General Administration (Ser.D) Department, Dt. 22/07/2019. Hence, eligible male candidates of VH/ HH/ OH/ MH disabled category can also apply for the posts meant for Women categories.
- (iv) For Carry Forward PH vacancies, if eligible disabled candidates of that particular category are not available, the same shall be filled up by the method of interchanging as per G.O.MS. No. 96 General Administration (Ser.D) Department, Dt. 22/07/2019. Hence, candidates of all the disabled categories can apply.
- (v) Reservation to BC-E group as per G.O. Ms. No. 23 Backward Classes Welfare (C.2) Department, Dt. 07/07/2007, will be subject to the adjudication of the litigation before the Honorable Courts including final orders in Civil Appeal No: (a) 2628-2637 of 2010 in SLP. No. 7388-97 of 2010, dated. 25/03/2010 and orders from the Government.
- (vi) The reservation to Meritorious Sports Person is applicable as per the amendments made to State and Subordinate Service Rules as per G.O.Ms.No.107, General Administration (Ser.D) Dept., Dt. 27-07-2018 that is in Rule-2, for sub-Rule (20) and in Rule-22 (i) in sub-Rule (2), for Class-D. In implementing the reservation to Meritorious Sports Person as per G.O. Ms. No.05 YAT&C(Sports) Department, Dt. 14/05/2018, or as may be revised by the Government from time to time shall be followed.
- (vii) **Economically Weaker Sections:-** The EWS reservation is applicable as per G.O. Ms. No. 243 & 244 GA (SER.D) Dept., Dt. 24/08/2021.
- (viii) As per G.O.Ms.No.130, General Administration (Ser.D) Department, Dt.09.11.2022, enhancing the reservations for Scheduled Tribes from 6% to 10% read with G.O.Ms.No.135, General Administration (Ser.D) Department, Dt.23.11.2022.

**Note:- Candidates producing Certificates issued by the Competent Authorities in Telangana State alone are eligible to claim various reservations like SC/ST/BC/ EWS/PH etc.**

#### **PARA-VI:**

(1) Local Reservation (95%) is applicable as per Para-8 of G.O.Ms.No.124 General Administration (SPF-MC) Department, dated :30.08.2018).

#### **(2) Local Candidate as per Para-7 of G.O.Ms.No.124 General Administration (SPF-MC) Department, Dated :30.08.2018:-**

“(1) A candidate for direct recruitment to any post shall be regarded as a local candidate in relation to a local area,-

(a) in cases where a minimum educational qualification has been prescribed for recruitment to the posts,-

(i) if he has studied in an educational institution or educational institutions in such local area for a period of not less than four consecutive academic years ending with the academic year in which he appeared or, as the case may be, first appeared for the relevant qualifying examination; or

(ii) where during the whole or any part of the four consecutive academic years ending with the academic year in which he appeared or as the case may be first appeared for the relevant qualifying examination he has not studied in any educational institution, if he has resided in that local area for a period of not less than four years immediately preceding the date of commencement of the qualifying examination in which he appeared, or as the case may be, first appeared.

(b) In cases where no minimum educational qualifications has been prescribed for recruitment to the post, if he has resided in that local area for a period of not less than four years immediately preceding the date on which the post is notified for recruitment. Explanations:- For the purpose of this paragraph,-

(i) ‘educational institution’ means a University or any educational institution recognized by the State Government, a University or other competent authority;

(ii) relevant qualifying examination in relation to a post means,-

(a) the examination, a pass in which is the minimum educational qualification prescribed for the post;

(b) the Seventh Class examination or an examination declared by the State Government to be equivalent to the Seventh Class examination; whichever is lower;

(iii) in reckoning the consecutive academic years during which a candidate has studied, any period of interruption of his study by reason of his failure to pass any examination shall be disregarded;

(iv) the question, whether any candidate for direct recruitment to any post has resided in any local area shall be determined with reference to the places where the candidate actually resided and not with reference to the residence of his parents or other guardian.

(2) A candidate for direct recruitment to any post who is not regarded as a local candidate under sub-paragraph (1) in relation to any local area shall,-

(a) in cases where a minimum educational qualification has been prescribed for recruitment to the post,-

(i) If he has studied in educational institutions in the State for a period of not less than seven consecutive academic years ending with the academic year in which he appeared or as the case may be, first appeared for the relevant qualifying examination be regarded as a local candidate in relation to,-

(A) Such local area where he has studied for the maximum period out of the said period of seven years; or

(B) Where the periods of his study in two or more local areas are equal, such local areas where he has studied last in such equal periods;

(ii) If during the whole or any part of the seven consecutive academic years ending with the academic year in which he appeared or as the case may be first appeared for the relevant qualifying examination, he has not studied in the educational institutions in any local area, but has resided in the State during the whole of the said period of seven years, be regarded as a local candidate in relation to,-

A) Such local area where he has resided for the maximum period out of the said period of seven years; or

(B) Where the periods of his residence in two or more local areas are equal, such local area where he has resided last in such equal periods;

(b) In cases where no minimum educational qualification has been prescribed for recruitment to the post, if he has resided in the State for a period of not less than seven years immediately preceding the date on which the post is notified for recruitment, be regarded as a local candidate in relation to,-

(i) such local area where he has resided for the maximum period out of the said period of seven years; or

(ii) where the periods of his residence in two or more local areas are equal such local area where he has resided last in such equal periods.

(c) In cases where Visually Handicapped and Hearing Handicapped persons studied in the special schools meant for them, the native place of the parents of such Visually Handicapped and Hearing Handicapped persons."

**3) The following are the Present Zones in the Telangana State vide G.O.Ms. No. 124, G.A. (SPF-MC) Dept., Dated: 30/08/2018 and amended vide G.O.Ms. No. 128, G.A. (SPF-I) Dept., Dated: 30/06/2021 read with G.O.Rt.No.74, Revenue (DA-CMRF) Dept., dt:12/08/2021:**

<b>Multi Zone- I</b>	Asifabad-Kumrambheem, Mancherial, Peddapalli, Jayashankar-Bhupalapalli-, Mulugu Districts
	Adilabad, Nirmal, Nizamabad, Jagityal Districts
	Karimnagar, Sircilla-Rajanna, Siddipet, Medak, Kamareddy Districts
	Kothagudem- Bhadradi, Khammam, Mahabubabad, Hanumakonda (Warangal Urban), Warangal (Warangal Rural) Districts
<b>Multi Zone- II</b>	Suryapet, Nalgonda, Bhongir-Yadadri, Jangaon Districts
	Medchal-Malkajiri, Hyderabad, Ranga Reddy, Sanga Reddy, Vikarabad Districts
	Mahaboobnagar, Narayanpet, Jogulamba-Gadwal, Wanaparthy, Nagarkurnool Districts

**PARA-VII: SCHEME OF EXAMINATION:-** The Scheme & Syllabus for the examination has been shown in ANNEXURE-III.

**PARA-VIII: RESOLVING OBJECTIONS RELATED TO QUESTIONS, KEY AND OTHER MATTERS OF OBJECTIVE TEST:**

i) The Commission publishes the **key** on its website after conduct of the objective test. Any objections with regard to the questions / Key shall be filed within the stipulated period through the link provided in the TSPSC website, after publication of the key. The objections received physically in the form of representations or through emails are not entertained in

any circumstances. Any objection(s) received after the last date for receipt of objections on key would not be entertained.

- ii) However, for each objection raised by the candidate he/she required to pay Rs.500/- (Rupees Five Hundred only) online through payment gateway duly following online instructions. The list of Banks providing service for the purpose of online remittance of payment is given in Annexure–II.
- iii) The objections received in the prescribed proforma within due date will be referred to Expert Committee for opinion to take appropriate decision thereon by the Commission. Final key will be hosted as per decision of the Commission.
- iv) Objections on final key shall not be entertained.
- v) The marks for the deleted questions, if any, will be awarded to each candidate proportionately based on his performance on the remaining questions and the marks would be considered upto 3<sup>rd</sup> decimal figure, to determine the merit of the candidates.
- vi) After completion of Examination, the Images of OMR Sheets will be hosted on the Commission's Website (<https://www.tspsc.gov.in>) for reference. Candidates by entering the required Login credentials can download the Images of OMR Sheets. Candidates are advised to retain their Images of OMR Sheets for future purpose until completion of the recruitment process. Duplicate Images of OMR Sheets will not be issued under any circumstances.

#### **PARA-IX: PROCEDURE OF SELECTION:**

- 1) **Pattern of Examination** will be as per G.O. Ms. No. 55 General Administration (Ser.A) Department, Dt. 25/04/2022.
- 2) The Selection of Candidates for appointment to the posts will be made by Written Examination (Objective Type) by CBRT/ OMR Based and the Selection for the posts will be based on marks secured in the written examination.
- 3) Those candidates who qualify in the Written Examination in order of merit will be called for verification of Certificates, Community and Category wise for the vacancies available as required. The qualifying marks for selection of the candidates belonging to: OC, Ex-Service men, Sports men & EWS – not less than 40%, BCs - not less than 35% SCs, STs and PH – not less than 30%.

N.B.: Mere securing minimum qualifying marks does not vest any right in a candidate for being considered for selection

- 4) In the event of SC and ST candidates not coming up for selection with the minimum marks prescribed above for selection, their selection shall be considered on the basis of marks with reference to their performance in the written examination irrespective of the marks secured.
- 5) The appearance in all the paper/papers at the Written Examination is compulsory. Absence in any of the paper/papers will automatically render his/her candidature for disqualification.
- 6) Candidates have to produce Original documents and other particulars on the day of verification itself. If candidate fails to produce any of the required **original** certificates and if the particulars furnished by him / her in the Application do not tally with the Original documents produced him / her, then his / her candidature will be rejected/disqualified without any further correspondence. Those candidates who are called for verification of certificates should furnish their order of preference of Multi-Zones, Subjects by exercising Web-Options and submit at the time of verification of certificates, which are final, failing which his/her candidature shall not be considered for further selection process. The selections will be confined only to the web options exercised by the candidates. Under no circumstances he/she will be considered for the posts /places where preference was not indicated.
- 7) The candidates will be selected and allotted to Multi-Zone as per their merit and order of Preference (**web-options**) against the vacancies available.
- 8) The appointment of selected candidates will be subject to their being found medically fit in the appropriate Medical Examination, and if he/she is of sound health, active habits free from any bodily defect or infirmity.

#### **PARA-X: DEBARMENT:**

- a) Candidates should make sure of their eligibility to the posts applied for and that the declaration made by them in the format of application regarding their eligibility is correct in all respects. Any candidate furnishing incorrect information or making false declaration regarding his/her eligibility at any stage or suppressing any information is liable to be

debarred from appearing for any of the examinations conducted by the Commission, and for summarily rejection of candidature for this recruitment.

- b) The Commission is vested with the constitutional duty of conducting recruitment and selection as per rules duly maintaining utmost secrecy and confidentiality in this process and any attempt by anyone causing or likely to cause breach of this constitutional duty in such manner or by such action as to violate or likely to violate the fair practices followed and ensured by the Commission will be sufficient cause for rendering such questionable means as ground for debarment and penal consequences as per law and rules and as may be decided by the Commission.
- c) Any candidate is or has been found impersonating or resorting to any other irregular or improper means in connection with his / her candidature for selection or obtaining support of candidature by any means, such a candidate may in addition to rendering himself/ herself liable to criminal prosecution, will be debarred permanently from any exam or selection held by any Public Service Commission in the country.
- d) If he/she himself/herself or through relations or friends or any others has canvassed or endeavored to enlist for his candidature extraneous support, whether from official or non-official sources for appointment to any State Service or Subordinate Service shall be disqualified.
- e) The applicants are not allowed to bring any Electronic devices or Gadgets such as Smart / Mobile Phones, Calculators, Tablets, iPad, Bluetooth, Pagers, Programmable Devices or Storage Media like Pen-drive, Smart Watches, Camera etc., or any other equipment or related accessories either in working or switched off mode capable of being used as a communication device during the examination. Loaning and interchanging of articles among the applicants is not permitted in the examination hall and any form of malpractice will not be permitted in the exam hall and applicants are advised not to bring any of the banned items including mobile phones to the venue of the examination, as arrangement for safe – keeping cannot be assured.
- f) Any infringement / unfair means of the above instructions as per Act No. 25/1997 shall entail disciplinary action published in State Gazette No. 35, Part–IV-B Extraordinary Dt. 21/08/1997 (as adapted by the Telangana Adaptation of Laws Order, 2016) if noticed, at any stage of the Recruitment shall be punishable with imprisonment for a term which shall not be less than three years but which may extend upto seven years and with fine which shall not be less than Rupees Five Thousand, but which may extend upto Rupees One Lakh.

**PARA-XI:- (A)** Please read the following Annexures appended to the Notification before filling the application form.

Annexure-I	Breakup of Vacancies
Annexure-II	Payment gateway
Annexure-III	Scheme and Syllabus
Annexure-IV	Instruction to the Candidates
Annexure-V	List of Communities
Annexure-VI	List of the recognized sports

**(B) MEMORANDUM OF MARKS:-** After Publication of results, the marks list (total marks) of the successful candidates will be displayed on the Commission's Website. However, Memorandum of Marks can be obtained after one month from the date of declaration of selection list in TSPSC website on payment of Rs.200/- (Rupees Two Hundred Only) through IPO/DD in favour of the Secretary, T.S. Public Service Commission, Hyderabad, for a period of Three Months only. Rejected, Invalid, disqualified, ineligible candidates will not be issued any Memorandum of Marks and fees paid by such candidates, if any, will be forfeited to Government account, without any correspondence in this regard. Requests for memorandum of marks, will not be entertained until the recruitment process is finalized.

**PARA XII: SPECIAL INSTRUCTIONS TO CANDIDATES:**

Candidates are directed to follow the Commission's Website (<https://www.tspsc.gov.in>) regularly to know the latest developments of this Recruitment and any changes/ Modifications/ Addendum/ Corrigendum, dates of Examination, calling of candidates for verification of Certificates/ Results etc. Candidates may note that individual communication is not possible. Hence, they must regularly visit the TSPSC website for updates such as Edit option, Schedule of Examination and Hall Tickets, Merit List, List of candidates shortlisted for Certificate Verification, schedule of certificate verification / Medical board, etc.

**Candidates are advised to go through the Instructions to Candidates enclosed to this Notification at Annexure-IV.**

**PARA-XIII: COMMISSION'S DECISION TO BE FINAL:**

The decision of the Commission in all aspects and all respects pertaining to the application and its acceptance or rejection as the case may be, conduct of examination and at all consequent stages culminating in the selection or otherwise of any candidate shall be final in all respects and binding on all concerned, under the powers vested with it under Article 315 and 320 of the Constitution of India. Commission also reserves its right to alter and modify time and conditions laid down in the notification for conducting the various stages up to selection or withdraw the Notification at any time, duly intimating details thereof to all concerned, as warranted by any unforeseen circumstances arising during the course of this process, or as deemed necessary by the Commission at any stage.

**HYDERABAD**  
**DATE: 09/12/2022**

**Sd/-**  
**SECRETARY**

**ANNEXURE – I**

**BREAK-UP OF VACANCY POSITION FOR THE POST OF JUNIOR LECTURERS UNDER THE CONTROL OF COMMISSIONER OF INTERMEDIATE EDUCATION**

**POST CODE - 01 JUNIOR LECTURER IN ARABIC**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR COLLEGE LECTURERS (ARABIC)	MZ-I	-	01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01	01
	MZ-II	-	01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	01
TOTAL		-	02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	02	02

**POST CODE - 02 JUNIOR LECTURER IN BOTANY**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR COLLEGE LECTURERS (BOTANY)	MZ-I	12	06	03	02	02	02	02	02	01	-	02	01	01	01	05	03	03	02	1 HH + 1 VH (CF)	1HH (CF) + 1 VH	01	-	34	21	55
	MZ-II	12	07	04	02	03	02	02	02	01	-	02	01	01	01	05	03	04	02	1 HH + 1 OH	1 VH	01	-	37	21	58
TOTAL		24	13	07	04	05	04	04	04	02	-	04	02	02	02	10	06	07	04	04	03	02	-	71	42	113

**POST CODE - 03 JUNIOR LECTURER IN BOTANY (URDU MEDIUM)**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR COLLEGE LECTURERS (BOTANY) URDU MEDIUM	MZ-I	02	01	01	-	-	01	-	-	-	-	-	-	-	-	01	01	-	01	-	01 VH	-	-	04	05	09
	MZ-II	02	01	-	-	-	01	-	-	-	-	-	-	-	-	-	01	-	-	-	01 VH	-	-	02	04	06
TOTAL		04	02	01	-	-	02	-	-	-	-	-	-	-	-	01	02	-	01	-	02	-	-	06	09	15

**POST CODE - 04 JUNIOR LECTURER IN CHEMISTRY**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR COLLEGE LECTURER (CHEMISTRY)	MZ-I	14	08	04	03	03	02	03	02	01	-	02	02	01	01	06	03	04	02	01 HH + 01 OH	01 VH	01	-	41	24	65
	MZ-II	10	06	03	01	02	02	02	01	01	-	02	01	01	01	04	03	03	02	01 HH	01 VH	01	-	30	18	48
TOTAL		24	14	07	04	05	04	05	03	02	-	04	03	02	02	10	06	07	04	03	02	02	-	71	42	113

**POST CODE - 05 JUNIOR LECTURER IN CHEMISTRY (URDU MEDIUM)**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR COLLEGE LECTURERS CHEMISTRY (URDU MEDIUM)	MZ-I	02	01	-	-	-	01	-	-	-	-	-	-	-	-	-	01	-	-	-	01 VH	-	-	02	04	06
	MZ-II	04	02	01	-	-	01	-	01	-	-	-	-	-	-	01	01	-	01	-	01 VH	-	-	06	07	13
TOTAL		06	03	01	-	-	02	-	01	-	-	-	-	-	-	01	02	-	01	-	02	-	-	08	11	19

**POST CODE - 06 JUNIOR LECTURER IN CIVICS**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR COLLEGE LECTURERS (CIVICS)	MZ-I	07	05	02	01	02	01	02	01	01	-	-	01	-	01	03	02	02	02	01 (HH)	01 (VH)	-	-	20	15	35
	MZ-II	05	02	01	01	01	01	-	01	01	-	-	01	-	01	02	01	01	01	-	01 (VH)	-	-	11	10	21
TOTAL		12	07	03	02	03	02	02	02	02	-	-	02	-	02	05	03	03	03	01	02	-	-	31	25	56



**POST CODE - 09 JUNIOR LECTURER IN COMMERCE**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR COLLEGE LECTURERS (Commerce)	MZ-I	04	02	01	01	-	01	-	01	01	-	-	-	-	-	02	01	01	01	-	01 VH	-	-	09	08	17
	MZ-II	07	04	02	01	02	01	01	01	01	-	-	01	-	01	03	02	02	02	01 HH	01 VH	-	-	19	14	33
TOTAL		11	06	03	02	02	02	01	02	02	-	-	01	-	01	05	03	03	03	01	02	-	-	28	22	50

**POST CODE - 10 JUNIOR LECTURER IN COMMERCE (URDU MEDIUM)**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR COLLEGE LECTURER IN COMMERCE (URDU MEDIUM)	MZ-I	01	01	-	-	-	-	-	-	-	-	-	-	-	-	01	-	-	-	-	-	-	-	01	02	03
	MZ-II	01	01	-	-	-	01	-	-	-	-	-	-	-	-	01	-	-	-	-	-	-	-	01	03	04
TOTAL		02	02	-	-	-	01	-	-	-	-	-	-	-	-	02	-	-	-	-	-	-	-	02	05	07

**POST CODE - 11 JUNIOR LECTURER IN ECONOMICS**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR LECTURERS IN ECONOMICS	MZ-I	7	4	2	1	2	1	1	1	1	-	-	1	-	1	3	2	2	2	1	1	-	-	19	14	33
	MZ-II	10	6	3	1	2	2	2	1	1	-	2	1	1	1	4	3	3	2	1	1	1	-	30	18	48
TOTAL		17	10	5	2	4	3	3	2	2	-	2	2	1	2	7	5	5	4	2	2	1	-	49	32	81

**POST CODE - 12 JUNIOR LECTURER IN ECONOMICS (URDU MEDIUM)**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR LECTURERS IN ECONOMICS (Urdu Medim)	MZ-I	02	01	1	-	-	01	-	01	-	-	-	-	-	-	01	01	-	01	-	01	-	-	04	06	10
	MZ-II	02	01	-	-	-	01	-	-	-	-	-	-	-	-	-	01	-	-	-	-	-	-	02	03	05
TOTAL		04	02	01	-	-	02	-	01	-	-	-	-	-	-	01	02	-	01	-	01	-	-	06	09	15

**POST CODE - 13 JUNIOR LECTURER IN ENGLISH**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR COLLEGE LECTURERS (English)	MZ-I	16	11	05	03	05	02	04	03	01	-	03	02	02	01	08	04	06	03	01 MH + 01HH + 01OH	01 VH	01	-	54	30	84
	MZ-II	14	08	04	03	03	02	03	02	01	-	03	02	01	01	06	04	05	02	01HH + 01OH	01VH + 01HH (CF)	01	-	43	26	69
<b>TOTAL</b>		<b>30</b>	<b>19</b>	<b>09</b>	<b>06</b>	<b>08</b>	<b>04</b>	<b>07</b>	<b>05</b>	<b>02</b>	<b>-</b>	<b>06</b>	<b>04</b>	<b>03</b>	<b>02</b>	<b>14</b>	<b>08</b>	<b>11</b>	<b>05</b>	<b>05</b>	<b>03</b>	<b>02</b>	<b>-</b>	<b>97</b>	<b>56</b>	<b>153</b>

**POST CODE - 14 JUNIOR LECTURER IN FRENCH**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR LECTURERS IN FRENCH	MZ-I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MZ-II	-	01	-	-	-	-	-	-	-	-	-	-	-	-	-	01	-	-	-	-	-	-	-	02	02
<b>TOTAL</b>		<b>-</b>	<b>01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>02</b>	<b>02</b>

**POST CODE - 15 JUNIOR LECTURER IN HINDI**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL	
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W		
JUNIOR LECTURERS IN HINDI	MZ-I	14	08	04	03	03	02	03	02	01	-	02	02	01	01	06	04	04	02	02	01	01	01	-	41	25	66
	MZ-II	11	06	03	02	02	02	02	02	01	-	02	01	01	01	04	03	03	02	01	01	01	-	31	20	51	
TOTAL		25	14	07	05	05	04	05	04	02	-	04	03	02	02	10	07	07	04	03	02	02	-	72	45	117	

**POST CODE - 16 JUNIOR LECTURER IN HISTORY**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR LECTURER IN HISTORY	MZ-I	08	06	03	01	02	01	02	01	01	-	-	01	-	01	03	02	02	02	01	01	-	-	22	16	38
	MZ-II	08	06	03	01	02	01	02	01	01	-	01	01	-	01	03	02	02	02	01	01	-	-	23	16	39
TOTAL		16	12	06	02	04	02	04	02	02	-	01	02	-	02	06	04	04	04	02	02	-	-	45	32	77



**POST CODE - 19 JUNIOR LECTURER IN MATHS**

NAME OF THE POST	MULTI ZONE	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR LECTURER IN MATHS	MZ - I	16	11	5	3	5	2	5	3	1	-	3	2	2	1	8	4	6	3	1-HH 1-OH 1-MH	1-VH	1	-	55	30	85
	MZ - II	14	8	4	3	3	2	3	2	1	-	3	2	2	1	6	4	5	2	1-HH 1-OH	1-VH	1	-	44	25	69
TOTAL		30	19	9	6	8	4	8	5	2	-	6	4	4	2	14	8	11	5	5	2	2	-	99	55	154

**POST CODE - 20 JUNIOR LECTURER IN MATHS (URDU MEDIUM)**

NAME OF THE POST	MULTI ZONE	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR LECTURER IN MATHS (URDU MEDIUM)	MZ - I	2	1	-	-	-	1	-	-	-	-	-	-	-	-	1	1	-	1	-	01 VH	-	-	3	5	8
	MZ - II	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
TOTAL		2	2	-	-	-	1	-	-	-	-	-	-	-	-	1	1	-	1	-	1	-	-	3	6	9

**POST CODE - 21 JUNIOR LECTURER IN PHYSICS**

NAME OF THE POST	MULTI ZONE	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL	
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W		
JUNIOR LECTURER IN PHYSICS	MZ - I	12	07	04	02	03	02	02	02	01	-	02	01	01	01	05	03	04	02	02	01	01	01	-	37	21	58
	MZ - II	12	06	03	02	03	02	02	02	01	-	02	01	01	01	05	03	03	02	02	01	01	01	-	34	20	54
<b>TOTAL</b>		<b>24</b>	<b>13</b>	<b>07</b>	<b>04</b>	<b>06</b>	<b>04</b>	<b>04</b>	<b>04</b>	<b>02</b>	<b>-</b>	<b>04</b>	<b>02</b>	<b>02</b>	<b>02</b>	<b>10</b>	<b>06</b>	<b>07</b>	<b>04</b>	<b>03</b>	<b>02</b>	<b>02</b>	<b>-</b>	<b>71</b>	<b>41</b>	<b>112</b>	

**POST CODE - 22 JUNIOR LECTURER IN PHYSICS (URDU MEDIUM)**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL	
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W		
JUNIOR LECTURERS IN PHYSICS (URDU MEDIUM)	MZ-I	02	01	-	-	-	01	-	-	-	-	-	-	-	-	01	-	-	-	-	-	-	-	02	03	05	
	MZ-II	04	02	01	-	-	01	-	01	-	-	-	-	-	-	01	01	-	01	-	01	VH	-	-	06	07	13
<b>TOTAL</b>		<b>06</b>	<b>03</b>	<b>01</b>	<b>-</b>	<b>-</b>	<b>02</b>	<b>-</b>	<b>01</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>01</b>	<b>02</b>	<b>-</b>	<b>01</b>	<b>-</b>	<b>01</b>	<b>VH</b>	<b>-</b>	<b>-</b>	<b>08</b>	<b>10</b>	<b>18</b>

**POST CODE - 23 JUNIOR LECTURER IN SANSKRIT**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR COLLEGE LECTURERS (SANSKRIT)	MZ-I	02	01	-	-	-	01	-	-	-	-	-	-	-	-	01	01	-	01		01 (VH)	-	-	03	05	08
	MZ-II	-	01	-	-	-	-	-	-	-	-	-	-	-	-	-	01	-	-	-	-	-	-	-	02	02
TOTAL		02	02	-	-	-	01	-	-	-	-	-	-	-	-	01	02	-	01		01	-	-	03	07	10

**POST CODE - 24 JUNIOR LECTURER IN TELUGU**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR COLLEGE LECTURERS (Telugu)	MZ-I	04	02	01	01	-	01	01 (CF)	01	01	-	-	01	-	01	02	01	01	01	-	01 VH + 01 (HH) (CF)	-	-	10	11	21
	MZ-II	08	06	03	01	02	01	02	01	01	-	-	01	-	01+01 (CF)	03	02	02	02	01 (HH)	01 (VH)	-	-	22	17	39
TOTAL		12	08	04	02	02	02	03	02	02	-	-	02	-	03	05	03	03	03	01	03	-	-	32	28	60

**POST CODE - 25 JUNIOR LECTURER IN URDU**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR COLLEGE LECTURERS (URDU)	MZ-I	04	02	01	-	-	01	-	01	01	-	-	-	-	-	01	01	01	01	-	01 (VH)	-	-	08	07	15
	MZ-II	04	02	01	-	-	01	-	01	-	-	-	-	-	-	01	01	-	01	-	01 (VH)	-	-	06	07	13
TOTAL		08	04	02	-	-	02	-	02	01		-	-	-	-	02	02	01	02	-	02	-	-	14	14	28

**POST CODE - 26 JUNIOR LECTURER IN ZOOLOGY**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR COLLEGE LECTURERS (ZOOLOGY)	MZ-I	14	8	4	3	4	2	3	2	1	-	3	2	2	1	6	4	5	2	1 (HH) + 1(OH)	1(VH) +1(HH) CF)	1	-	45	26	71
	MZ-II	12	7	4	2	3	2	2	2	1	-	2	1	1	1	5	3	3	2	1 (HH) + 1(OH)	1 (VH)	1	-	36	21	57
TOTAL		26	15	8	5	7	4	5	4	2	-	5	3	3	2	11	7	8	4	4	3	2	-	81	47	128

**POST CODE - 27 JUNIOR LECTURER IN ZOOLOGY (URDU MEDIUM)**

NAME OF THE POST	MZ	OC		EWS		BC-A		BC-B		BC-C		BC-D		BC-E		SC		ST		PH		SPORTS		TOTAL		GRAND TOTAL
		G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	G	W	
JUNIOR COLLEGE LECTURERS (ZOOLOGY) URDU MEDIUM	MZ-I	2	1	-	-	-	1	-	-	-	-	-	-	-	-	1	1	-	-	-	1 VH	-	-	3	4	7
	MZ-II	3	1	1	-	-	1	-	1	-	-	-	-	-	-	1	1	-	1	-	1 VH	-	-	5	6	11
TOTAL		5	2	1	-	-	2	-	1	-	-	-	-	-	-	2	2	-	1	-	2	-	-	8	10	18

**ANNEXURE-II**

**LIST OF BANKS FOR MAKING ONLINE PAYMENT**

<b>Sl. No.</b>	<b>Name of the Bank</b>
1	Andhra Pragathi Grameena Bank
2	A U Small Finance Bank
3	Bandhan Bank
4	Bank of Bahrain and Kuwait
5	Bank of Baroda
6	Bank of India
7	Bank of Maharashtra
8	Bassien Catholic Coop Bank
9	Canara Bank
10	Capital Small Finance Bank
11	Catholic Syrian Bank
12	Central Bank of India
13	City Union Bank
14	Cosmos Bank
15	DCB Bank
16	Deutsche Bank
17	Dhanlakshmi Bank
18	Digibank by DBS
19	Equitas Small Finance Bank
20	ESAF Small Finance Bank
21	Federal Bank
22	Fincare Bank
23	Gujarat State Co-operative Bank Limited
24	HDFC Bank
25	HSBC Retail Net Banking
26	ICICI Bank
27	IDBI Bank
28	IDFC FIRST Bank
29	Indian Bank
30	Indian Overseas Bank
31	Indus-Ind Bank
32	Jammu & Kashmir Bank
33	Jana Small Finance Bank
34	Janata Sahakari Bank Ltd Pune

<b>Sl. No.</b>	<b>Name of the Bank</b>
35	Kalyan Janata Sahakari Bank
36	Karnataka Bank Ltd
37	Karnataka Gramin Bank
38	Karnataka Vikas Grameena Bank
39	Karur Vysya Bank
40	Kotak Bank
41	Laxmi Vilas Bank
42	Maharashtra Gramin Bank
43	Mehsana urban Co-op Bank
44	NKGSB Co-op Bank
45	North East Small Finance Bank Ltd
46	Nutan Nagarik Sahakari Bank Limited
47	Punjab & Sind Bank
48	Punjab National Bank
49	RBL Bank Limited
50	Saraswat Bank
51	SBM Bank India
52	Shivalik Mercantile Cooperative Bank Ltd
53	South Indian Bank
54	State Bank of India
55	SVC Co-operative Bank Ltd
56	Tamil Nadu State Co-operative Bank
57	Tamilnad Mercantile Bank Ltd.
58	The Kalupur Commercial Co-Operative Bank
59	The Surat People's Co-operative Bank Limited
60	The Sutex Co-op Bank Ltd
61	T J S B Bank
62	UCO Bank
63	Union Bank of India
64	Utkarsh Small Finance Bank
65	Varachha Co-operative Bank Limited
66	YES Bank Ltd
67	Zoroastrian Co-Operative Bank Ltd

**ANNEXURE-III****SCHEME AND SYLLABUS FOR THE POST OF JUNIOR LECTURERS UNDER THE CONTROL OF COMMISSIONER INTERMEDIATE EDUCATION****SCHEME OF EXAMINATION**

<b>Written Examination (Objective Type)</b>		<b>No. of Questions</b>	<b>Duration (Minutes)</b>	<b>Marks</b>
Paper – I	General Studies and General Abilities	150	150	150
Paper – II	Concerned Subject (P.G. Level)	150	150	300
<b>TOTAL MARKS</b>				<b>450</b>

<b>Name of the Papers</b>	<b>Language of Examination</b>
Paper-I: General Studies and General Abilities	Bilingual i.e., English and Telugu
Paper-II: Concerned Subject (P.G. Level)	English Only for all Subjects except Languages *

\* Except Languages all Other Concerned Subjects mentioned below will be in English Only.

<b>LIST OF CONCERNED SUBJECTS</b>	
1. Arabic	9. Hindi
2. Botany	10. History
3. Chemistry	11. Mathematics
4. Civics	12. Physics
5. Commerce	13. Sanskrit
6. Economics	14. Telugu
7. English	15. Urdu
8. French	16. Zoology

## **SYLLABUS**

### **PAPER – I: GENERAL STUDIES AND GENERAL ABILITIES**

1. Current affairs – Regional, National and International.
2. International Relations and Events.
3. General Science; India's Achievements in Science and Technology.
4. Environmental issues; Disaster Management- Prevention and Mitigation Strategies.
5. Economic and Social Development of India and Telangana.
6. Physical, Social and Economic Geography of India.
7. Physical, Social and Economic Geography and Demography of Telangana.
8. Socio-economic, Political and Cultural History of Modern India with special emphasis on Indian National Movement.
9. Socio-economic, Political and Cultural History of Telangana with special emphasis on Telangana Statehood Movement and formation of Telangana state.
10. Indian Constitution; Indian Political System; Governance and Public Policy.
11. Social Exclusion; Rights issues such as Gender, Caste, Tribe, Disability etc. and inclusive policies.
12. Society, Culture, Heritage, Arts and Literature of Telangana.
13. Policies of Telangana State.
14. Logical Reasoning; Analytical Ability and Data Interpretation.
15. Basic English (10<sup>th</sup> class Standard).

**PAPER – II: CONCERNED SUBJECTS**  
**1. ARABIC (P.G. LEVEL)**

**I. Grammar**

i. Syntax

- a) مواضع تقديم الخبر
- b) أنواع الإعراب
- c) المعرب والمبني وأقسامهما
- d) مواضع الإعراب حرفاً
- e) المفاعيل الخمسة
- f) الممنوع من الصرف وإعرابه
- g) الحال وأنواعها
- h) التمييز وأنواعه
- i) العدد وأنواعه
- j) التوابع
- k) المستثنى
- l) النواسخ
- m) الأسماء الخمسة

ii. Morphology

- a) أبواب الثلاثي المجرد
- b) أبواب الثلاثي المزيد فيه
- c) أنواع الفعل (الصحيح، المعتل، المضاعف، المعلوم والمجهول، المهموز، الليف)
- d) المشتقات
- e) أسلوب التعجب
- f) أفعال المدح والذم

**II. History of Arabic Literature**

i. History of Classical Arabic Literature

- a) خصائص الشعر الجاهلي
- b) أنواع الشعر الجاهلي
- c) المعلقات السبع وأصحابها
- d) النثر الجاهلي وأنواعه
- e) تدوين القرآن الكريم ومراحلته
- f) الخطابة في عصر صدر الإسلام
- g) خصائص الشعر الإسلامي
- h) تطور النثر في العصر الأموي  
(زياد ابن أبيه، الحجاج بن يوسف، عبد الحميد الكاتب)
- i) النقائض وأصحابها
- j) أنواع الشعر الأموي
- k) النثر في العصر العباسي وأنواعه  
(ابن المقفع، الجاحظ، بديع الزمان، ابن العميد)
- l) الشعر في العصر العباسي وأنواعه  
(بشار بن برد، أبو نواس، المتنبي، أبو العتاهية، أبو العلاء المعري، أبو تمام)
- m) تدوين الحديث الشريف ومراحلته  
(أصحاب الصحاح الستة)

ii. History of Modern Arabic Literature

- a) بداية النهضة
- b) عوامل النهضة
- c) المدارس الأدبية  
(مدرسة الديوان، حركة أبولو، الرابطة القلمية، العصبة الأندلسية)
- d) أنواع الأدب الحديث  
(القصة القصيرة، الرواية، المسرحية، المقالة)
- e) تطور الصحافة
- f) تطور الترجمة

**III. Eminent Personalities of India**

- i. Shaik Abdul Haq Muhaddis Dehelvi
- ii. Shaik Shah Waliullah Muhaddis Dehelvi
- iii. Shaik Allama Anwar Ullah Farooqui
- iv. Shaik Fazlul Haq Khairabadi
- v. Shaik Ghulam Ali Azaad Bilgrami

**IV. Translation (unseen passages):**

- i. From English to Arabic
- ii. From Arabic to English

**2. BOTANY (P.G. LEVEL)**

**I Phycology, Mycology, Bacteria and Viruses**

Phycology : Thallus organization ; cell ultra structure ; reproduction (vegetative, sexual, asexual) ; criteria for classification of algae : pigments, reserve food, flagella ; classification, salient features of Chlorophyta, Charophyta, Xanthophyta, Bacillariophyta, Phaeophyta and Rhodophyta ; algal blooms and toxic algae, algal biofertilizers ; algae as food and feed and role of algae in industry.

Mycology : General characters of fungi ; substrate relationship in fungi ; cell ultrastructure ; unicellular and multicellular organization ; cell wall composition ; nutrition (saprobic, biotrophic, symbiotic) ; reproduction (vegetative, asexual, sexual) ; heterothallism ; heterokaryosis parasexuality ; Molecular aspects in classification.

General account of Mastigomycotina, Zygomycotina, Ascomycotina, Basidiomycotina, Deuteromycotina ; fungi in industry, medicine and as food ; fungal diseases in plants and humans ; Mycorrhizae ; fungi as biocontrol agents.

Bacteria- ultrastructure and biochemistry of cell wall, nutritional types, reproduction, Plasmids.

Viruses- Characters and ultrastructure of virions and symptomatology and transmission of plant viruses. Mollicuties general characters of spiroplasmas and phytoplasmas Importance of micro organisms: Microbes in medicine, agriculture and environment.

**II Bryophyta, Pteridophyta and Gymnosperms**

Bryophyta : Morphology, structure, reproduction and life history ; distribution ; classification., of Marchantiales, Junger maniales, Anthoceratales, Sphagnales, Funariales and Polytrcales ; economic and ecological importance.

Pteridophyta : Morphology, anatomy and reproduction ; classification of Psilopsida, Lycopsida, Sphenopsida and Pteropsida; evolution of stele ; heterospory and origin of seed habit; general account of fossil pteridophytes.

Gymnosperms- Introduction and classification, Structure and reproduction of Cycadales, Ginkgoales, Coniferales, Ephedrales, Welwitschiales and Gnetales.

### III Taxonomy of Angiosperms

The species concept: Taxonomic hierarchy, species, genus, family and other categories; principles used in assessing relationship, delimitation of taxa and attribution of rank.

Salient features of the International Code of Botanical nomenclature.

Taxonomic tools: Herbarium; floras; histological, cytological, phytochemical, serological, biochemical and molecular techniques ; computers and GIS.

Systems of angiosperm classification : Phenetic versus phylogenetic systems ; cladistics in taxonomy ; relative merits and demerits of major systems of classification.

Study of the following families- Magnoliaceae, Malvaceae, Rutaceae, Apocynaceae, Asclepiadaceae, Lamiaceae, Amaranthaceae and Poaceae.

### IV Plant Anatomy and Embryology

Shoot development: Organization of the shoot apical meristem (SAM); control of cell division and cell to cell communication; control of tissue differentiation especially xylem and phloem ; secretory ducts and laticifers.

Phyllotaxy and leaf differentiation

Root development : Organization of root apical meristem (RAM); vascular tissue differentiation; homeotic mutants in Arabidopsis and Antirrhinum,

Male gametophyte: Structure of anthers; microsporogenesis, role of tapetum; pollen development and gene expression; male sterility; sperm dimorphism and hybrid seed production; pollen germination, pollen tube growth and guidance ; pollen storage ; pollen allergy, pollen embryos.

Female gametophyte: Ovule development; megasporogenesis; organization of the embryo sac, structure of the embryo sac cells.

Pollination, pollen – pistil interaction and fertilization : Floral characteristics, pollination mechanisms and vectors; self-incompatibility; double fertilization.

Seed development and fruit growth: Endosperm development during early, maturation and desiccation stages; embryogenesis, cell lineages during late embryo development; storage proteins of endosperm and embryo; polyembryony; apomixes; embryo culture; fruit maturation.

Dormancy: Seed dormancy; overcoming seed dormancy; bud dormancy.

### V Plant Resource Utilisation and Conservation

Origin, evolution, botany, cultivation and uses of (i) Food forage and fodder crops (ii) fibre crops (iii) medicinal and aromatic plants and (iv) vegetable oil-yielding crops. Ethnobotany – Scope and objectives of ethnobotany.

Important fire-wood and timber – yielding plants and non-wood forest products (NWFPs) such as bamboos, rattans, raw materials for paper-making, gums, tannins, dyes, resins and fruits.

Role of plants in Medicine- morphology, active principles and medicinal value of the following plants-Andrographis, Asparagus, Phyllanthus, Gymnema..

Strategies for conservation – in situ conservation : International efforts and Indian initiatives ; protected areas in India – sanctuaries, national parks, biosphere reserves, wetlands, mangroves and coral reefs for conservation of wild biodiversity.

Strategies for conservation – ex situ conservation : Principles and practices; botanical gardens, field gene banks, seed banks, in vitro repositories, cryobanks; general account of the activities of Botanical Survey of India (BSI), National Bureau of Plant Genetic Resources (NBPGR), Indian Council of Agricultural Research (ICAR), Council of Scientific and Industrial Research (CSIR) and the Department of Biotechnology (DBT) for conservation, non-formal conservation efforts.

## VI Plant Ecology

Climate, soil and vegetation patterns of the world: Life zones; major biomes and major vegetation and soil types of the world.

Vegetation organization: Concepts of community; analytical and synthetic characters of community.

Population characters, interactions of species- positive and negative interactions of species.

Ecological succession: types, changes involved in succession, concept of climax

Biotic and abiotic interactions, habitat and niche, allopatric and sympatric speciation.

Ecosystem organization: Structure and functions; primary production methods of measurement of primary production, ; energy dynamics (trophic organization, energy flow Pathways, ecological efficiencies); food chains, food web and ecological pyramids, global biogeochemical cycles of C,N, in terrestrial and aquatic ecosystems.

Biological diversity: Concept and levels; speciation and extinction; IUCN categories of threat; distribution and global patterns, hot spots; endemism, inventory.

Air, water and soil pollution: Kinds, sources, effects on plants and ecosystems.

Climate change: Green house gases (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, CFCs: sources, trends and role); ozone layer and ozone depletion ; consequences of climate change (CO<sub>2</sub> fertilization, global warming, sea level rise, UV radiation).

Biogeographical zones of India, Flora of Telangana – vegetational types.

## VII Cell Biology

Ultrastructure and functions of cell organelles. Cell wall, Plasma membrane Plasmodesmata, Chloroplast, Mitochondria, Plant Vacuoles, Nucleus, Ribosomes,

Cell cycle and apoptosis : Control mechanisms; role of cyclins and cyclin dependent kinases; retinoblastoma and E2F proteins; cytokinesis and cell plate formation; mechanisms of programmed cell death. Mitosis and meiosis its significance

Other cellular organelles: Structure and functions of microbodies, Golgi apparatus, lysosomes, endoplasmic reticulum.

## VIII Cytogenetics

Chromatin organization : Chromosome structure and Packaging of DNA, molecular organization of centromere and telomere; nucleolus and ribosomal RNA genes ; euchromatin and heterochromatin ; karyotype analysis ; banding patterns ; specialized types of chromosomes ; polytene, lampbrush, B chromosomes and sex chromosomes ; molecular basis of chromosome pairing.

Structural and numerical alterations in chromosomes : Duplication, deficiency, inversion and translocation ; autopolyploids ; allopolyploids ; evolution of major crop plants.

Genetics of prokaryotes and eukaryotic organelles : genetic recombination in phage ; genetic transformation, conjugation and transduction in bacteria ; genetics of mitochondria and chloroplasts cytoplasmic male sterility.

Gene structure and expression : Genetic fine structure ; cis – trans test ; Benzer's experiment; introns and their significance ; RNA splicing ; regulation of gene expression in prokaryotes and eukaryotes.

Mutations : Spontaneous and induced mutations ; physical and chemical mutagens ; molecular basis of gene mutations ; transposable elements in prokaryotes and eukaryotes ; mutations induced transposons; site-directed mutagenesis ; DNA damage and repair mechanisms.

Plant Breeding : Principles and methods of plant breeding ; Marker assisted breeding.

## **IX Plant Physiology**

Fundamentals of enzymology : General aspects, allosteric mechanism, regulatory and active sites, isoenzymes, kinetics of enzymatic catalysis, Michaelis – Menton equation and its significance.

Membrane transport and translocation of water and solutes : Plant water relations, mechanism of water transport through xylem, passive and active solute transport, membrane transport proteins.

Photochemistry and photosynthesis : Photosynthetic pigments and light harvesting complexes, photo oxidation of water, mechanisms of electron and proton transport, carbon assimilation – the Calvin cycle, photorespiration and its significance, the C4 cycle, the CAM pathway, biosynthesis of starch and sucrose.

Respiration and lipid metabolism : Glycolysis, the TCA cycle, electron transport and ATP synthesis, pentose phosphate pathway, glyoxylate cycle, alternative oxidase system, structure and function of lipids, fatty acid biosynthesis, synthesis of membrane lipids, structural lipids and storage lipids and their catabolism.

Nitrogen fixation and metabolism : Biological nitrogen fixation, nodule formation and nod factors, mechanism of nitrate uptake and reduction, ammonium assimilation.

Photobiology : Photochromes and cryptochromes, photophysiology of light – induce responses, cellular localization.

Plant growth regulators and elicitors : Physiological effects and mechanism of action of auxins, gibberellins, cytokinins, ethylene, abscisic acid, brassinosteroids, polymines, jasmonic acid and salicylic acid.

The flowering process : Photoperiodism, endogenous clock and its regulation, floral induction and development – genetic and molecular analysis, role of vernalization.

## **X Biotechnology and Genetic Engineering**

Plant Biotechnology – Principles, scope and applications.

Plant cell and tissue culture : General introduction, scope, cellular differentiation, and totipotency.

Organogenesis and adventives embryogenesis : Morphogenesis; somatic embryogenesis. Somatic hybridization : Protoplast isolation, fusion and culture.

Applications of plant tissue culture : Clonal propagation, artificial seed, production of hybrids and soma clones, production of secondary metabolites / natural products, cryopreservation and germplasm storage.

Recombinant DNA technology : Gene cloning principles and techniques, genomic / c DNA libraries, vectors, DNA synthesis and sequencing, polymerase chain reaction, DNA fingerprinting and DNA markers.

Genetic engineering of plants : Transgenic plants, Methods of gene transfer – Agrobacterium – medicated and microprojectile, chloroplast transformation, intellectual property rights, ecological risks and ethical concerns.

### 3. CHEMISTRY (P.G. LEVEL)

#### INORGANIC CHEMISTRY:

1. Atomic structure and chemical bonding – structure and bonding in homo and hetero nuclear molecules. Application of VSEPR, Valence Bond and Molecular orbital theories in explaining the structures of simple molecules.
2. Chemistry of main group (I to VII & Nobel gases) elements.
3. Chemistry of transition elements and inner transition elements.
4. General principles of metallurgy: Occurrence of metals, Concentration of ores - levigation, magnetic separation, froth floatation, leaching, Extraction of crude metal from concentrated ore-conversion to oxide, reduction of oxide to the metal, Thermodynamic principles of metallurgy-Ellingham diagram limitations, applications. Extraction of iron, copper and zinc from their oxides, Electrochemical principles of metallurgy, Oxidation and reduction, Refining of crude metal-distillation, liquation poling, electrolysis, zone refining and vapour phase refining, Uses of aluminium, copper, zinc and iron. Alloys: Inter-metallic compounds
5. Coordination Chemistry –IUPAC nomenclature, bonding theories – Werner's theory, EAN rule, VBT, Crystal Field Theory – Crystal Field splitting patterns in various geometries, Factors affecting on CFT. Calculation of CFSE – John Teller effect – Isomerism in complexes. Spectral and magnetic properties of Coordination complexes – Russell Sanders coupling – term symbols - charge transfer spectra of complexes.
6. Stability of metal complexes – Stepwise and overall stability constants – Factors affecting the stability of metal complexes - Chelate effect. Pearson's theory of hard and soft acids and bases (HSAB).
7. Reaction mechanism of metal complexes–Inert and labile complexes – Ligand substitution reaction of octahedral complexes – Acid hydrolysis, Base hydrolysis – Conjugate base mechanism – Anation reactions – Substitution reactions of square planar complexes – Trans effect – Electron transfer reactions – Inner and outer sphere mechanisms.
8. Metal carbonyls, Nitrosyls and Metallocenes - Structure and bonding.
9. Bio-inorganic chemistry- Metal complexes as oxygen carriers-Hemoglobin and myoglobin-Oxygen transport – Non heme proteins – Hemerythrin and hemocyanin.
10. Analytical chemistry- Chromatography – General principles involved in separations by Paper, Thin layer, Column Chromatography, GC and HPLC.

#### PHYSICAL CHEMISTRY:

1. Solutions and colligative properties: Types of solutions, Expressing concentration of solutions mass percentage, volume percentage, mass by volume percentage, parts per million, mole fraction, molarity and molality, Solubility: Solubility of a solid in a liquid, solubility of a gas in a liquid, Henry's law, Vapour pressure of liquid solutions: vapour pressure of liquid- liquid solutions. Raoult's law as a special case of Henry's law -vapour pressure of solutions of solids in liquids, Ideal and non-ideal solutions, Colligative properties and determination of molar mass - Relative lowering of vapour pressure, elevation of boiling point, Depression of freezing point, Osmosis and osmotic pressure-reverse osmosis and water purification. Abnormal molar masses - van't Hoff factor. Phase equilibria– Phase rule and its application to one component and two component systems
2. Acids and bases: Acids, bases and salts- Arrhenius, Bronsted-Lowry and Lewis concepts of acids and bases. Ionisation of Acids and Bases –Ionisation constant of water and it's ionic product- pH scale ionisation constant of weak acids and weak bases-relation between  $K_a$  and  $K_b$ . Di and poly basic acids and di and poly acidic Bases-Factors affecting acid strength-Common ion effect in the ionization of acids and bases-Hydrolysis of salts and pH of their solutions. Buffer solutions.
3. Thermodynamics: Brief review of concepts of I and II laws of thermodynamics. Concept of entropy. Entropy as a state function. Calculation of entropy changes in various processes. Entropy changes in an ideal gas. Entropy changes on mixing of ideal gases. Entropy as a function of V and T. Entropy as a function of P and T. Entropy change in isolated systems- Clausius inequality. Entropy

change as criterion for spontaneity and equilibrium. Third law of thermodynamics. Evaluation of absolute entropies from heat capacity data for solids, liquids and gases. Standard entropies and entropy changes of chemical reactions. Helmholtz and Gibbs free energies ( $A$  and  $G$ ).  $A$  and  $G$  as criteria for equilibrium and spontaneity. Physical significance of  $A$  and  $G$ . Driving force for chemical reactions- relative signs of  $\Delta H$  and  $\Delta S$ . Thermodynamic relations. Gibbs equations. Maxwell relations. Temperature dependence of  $G$ . Gibbs- Helmholtz equation. Pressure dependence of  $G$ . Chemical potential: Gibbs equations for non-equilibrium systems. Material equilibrium. Phase equilibrium. Clapeyron equation and Clausius-Clapeyron equation. Conditions for equilibrium in a closed system. Chemical potential of ideal gases. Ideal-gas reaction equilibrium-derivation of equilibrium constant. Temperature dependence of equilibrium constant - The Van't Hoff equation.

4. Electrochemistry: Conductance and its applications, Derivation of Nernst equation. Chemical and concentration cells (with and without transference). Liquid junction potential – derivation of the expression for  $L J P$  – its determination and elimination. Applications of EMF measurements: Solubility product, potentiometric titrations, determination of transport numbers, equilibrium constant measurements. Decomposition potential and its significance. Electrode polarization – its causes and elimination. Concentration over potential. Concept of activity and activity coefficients in electrolytic solutions. The mean ionic activity coefficient. Debye-Huckel theory of electrolytic solutions. Debye-Huckel limiting law. Calculation of mean ionic activity coefficient. Limitations of Debye-Huckel theory. Extended Debye-Huckel law. Theory of electrolytic conductance. Derivation of Debye-Huckel-Onsager equation – its validity and limitations. Concept of ion association – Bjerrum theory of ion association (elementary treatment) - ion association constant – Debye-Huckel-Bjerrum equation.
5. Quantum chemistry: Black body radiation-Planck's concept of quantization-Planck's equation, average energy of an oscillator. Wave particle duality and uncertainty principle - significance for microscopic entities. Emergence of quantum mechanics. Wave mechanics and Schrödinger wave equation. Operators - operator algebra: Commutation of operators, linear operators, Complex functions, Hermitian operators. Operators and Eigen functions and Eigen values. Degeneracy. Linear combination of Eigen functions of an operator. Well behaved functions. Normalized and orthogonal functions. Postulates of quantum mechanics. Physical interpretation of wave function. Observables and operators. Measurability of operators. Average values of observables. The time dependent Schrodinger equation. Separation of variables and the time-independent Schrodinger equation.
6. Chemical kinetics: Theories of reaction rates - Collision theory, Transition state theory, Reaction coordinate, activated complex and the transition state. Thermodynamic formulation of transition state theory. Unimolecular reactions and Lindeman's theory.
7. Photochemistry: Electronic transitions in molecules - The Franck Condon principle. Electronically excited molecules- singlet and triplet states. Radiative life times of excited states-theoretical treatment. Measured lifetimes. Quantum yield and its determination. Actinometry - ferrioxalate and uranyl oxalate actinometers. Derivation of fluorescence and phosphorescence quantum yields. E-type delayed fluorescence- evaluation of triplet energy splitting ( $\Delta E_{ST}$ ). Laws of photo chemistry, Photo physical processes, photo physical kinetics of unimolecular reactions. Calculation of rate constants of various photo physical processes, State diagrams, photochemical primary processes. Types of photochemical reactions- electron transfer, photo dissociation, addition, abstraction, oxidation and isomerisation reactions with examples. Effect of light intensity on the rates of photochemical reactions. Photosensitization. Quenching-Stern Volmer equation. Experimental set up of a photochemical reaction. Introduction to fast reactions- Principles of flash photolysis.
8. Solid state chemistry: General characteristics of solid state. Classification of crystalline solids based on different binding forces, probing the structure of solids: X-ray crystallography, Crystal lattices and unit cells. Bravais lattices-primitive and centred unit cells, Number of atoms in a unit cell (primitive, body

centred and face centred cubic unit cell), Close packed structures: Close packing in one dimension, in two dimensions and in three dimensions- tetrahedral and octahedral voids- formula of a compound and number of voids filled- locating tetrahedral and octahedral voids, Packing efficiency in simple cubic, bcc and in hcp, ccp lattice. Calculations involving unit cell dimensions density of the unit cell. Imperfections in solids-types of point defects-stoichiometric and non-stoichiometric defects. Magnetic properties of solids- classification of magnetic materials, Magnetic susceptibility, Langevin diamagnetism, Weiss theory of para magnetism. Magnetic properties of solids - classification of magnetic materials, Magnetic susceptibility, Langevin diamagnetism, Weiss theory of para magnetism Electronic properties of metals, insulators and semi conductors: Electronic structure of solids, Band theory, band structure of metals, insulators and semiconductors. Electrons holes and excitons. The temperature dependence of conductivity of extrinsic semi conductors. Photo conductivity and photovoltaic effect.

### ORGANIC CHEMISTRY:

1. IUPAC nomenclature of organic molecules. Isomerism – classification of isomers.
2. Classification, preparations and properties of alkane, alkenes, alkynes, cyclo alkanes, aromatic hydrocarbons, halogen compounds, hydroxy compounds, carbonyl compounds, carboxylic acids and its derivatives.
3. Stereo chemistry: Molecular representations (Wedge, Fisher, Newman and Sawhorse projection formula) their description and interconversions. Stereoisomers – classification- configuration- R,S- Nomenclature, criteria for chirality, Axial chirality of allenes, spiranes, alkylidenes, Cycloalkanes, chiral biaryls - Atropisomerism. Planar chirality of ansa compounds and trans- cyclooctene. Helical chiral compounds. Determination of absolute configuration by chemical correlation methods. Determination of configuration in E,Z- nomenclature. Spectral and chemical methods for determination of E, Z configuration, including aldoxime and ketoximes.
4. Introduction to conformational isomerism, Klyne - Prelog terminology for conformers and torsion angles, dihedral angle, Steric strain and the concept of dynamic stereoisomerism. Study of conformations of acyclic compounds like ethane, butane, dihalobutanes, halohydrin, ethylene glycol, butane-2, 3-diol, amino alcohols and 1,1,2,2-tetrahalobutanes.
5. Nature of bonding in organic molecules and aromaticity, delocalized chemical bonding, conjugation, cross conjugation, resonance, hyperconjugation, tautomerism, Huckel's Rule and the concept of aromaticity-Aromaticity, non-aromaticity and anti aromaticity.
6. Reactive intermediate: Generation, detection, structure, stability and reactivity of carbocation, carbanion, free radical, carbene and nitrene. Molecular rearrangements: definition and classification, molecular rearrangements involving 1). Electron deficient carbon: Wagner - Meerwein, Pinacol-Pinacolone, allylic and Wolf rearrangement. 2). Electron deficient Nitrogen: Hofmann, Lossen, Curtius, Schmidt and Beckmann rearrangements. 3) Electron deficient Oxygen: Baeyer-Villiger oxidation. 4). Base catalysed rearrangements: Benzylic acid, Favourski, Tran annular, Sommlert-Hauser and Smile rearrangement.
7. Organic reaction mechanism: Mechanism, stereochemistry and energy profile diagram of Addition reactions to polar and non polar double bonds. Substitution reactions: Mechanism, rate law, stereochemistry and factors affecting on aliphatic and aromatic reactions. Elimination reactions- mechanism, rate law, stereochemistry, orientation and factors affecting on E1, E2, E1CB, pyrolytic syn elimination and a-elimination, elimination vs substitution. Detection of reaction mechanism by product isolation, isotopic labelling, chemical trapping and crossover experiments.
8. Oxidation- Swern, Cr (VI) oxidants, Oxidative cleavage of 1,2-diols - Periodic acid and Lead tetra acetate.

9. Reductions - Wilkinson's catalytic hydrogenation,  $\text{LiAlH}_4$ ,  $\text{NaBH}_4$ ,  $\text{BH}_3$ ,  $\text{AlH}_3$  and DIBAL.
10. Heterocyclic chemistry: importance as drugs, nomenclature, classification based on size of the ring, number and nature of hetero atoms. Synthesis and reactivity of Pyrrole, furan, Thiophene, pyridine, Indole, Benzothiophene, Quinoline, Isoquinolines.
11. Alkaloids and Terpenoids- importance as drugs, isolation of natural products by steam distillation, solvent extraction and chemical methods. Structure determination and synthesis of papverine, nicotine and quinine. General methods in the structure determination of Terpenes, isoprene rule, special isoprene rule, structure determination of  $\alpha$ -Terpeniol and camphor.
12. Organic photochemistry: photochemical energy, Frank-Condon principle, Jablonski diagram, Electronic transitions, photosensitization, quenching, quantum efficiency, quantum yield, photochemistry of carbonyl compounds  $n \rightarrow \pi^*$  and  $\pi \rightarrow \pi^*$  transitions. Norrish type-I and Norrish type-II cleavages. Paterno-Buchi reactions, Photoreduction, photochemistry of enones-hydrogen abstraction, rearrangements of  $\alpha, \beta$ -unsaturated ketones and cyclohexadienones, photochemistry of pbenzoquinones, Dienes - photochemistry of 1,3-butadiene, (2+2) additions, Di- $\pi$ -methane rearrangement, photochemistry of aromatic compounds, excited states of benzene and its 1,2-, 1,4- additions.
13. Pericyclic reactions: Classification, Stereochemistry of pericyclic reactions, Molecular Orbitals and Symmetry of ethylene, 1,3-butadiene, 1,3,5-hexatriene, allylic, 1,3-pentadienyl and 1,3,5-heptatrienyl  $\pi$ - systems. Analysis of pericyclic reactions by PMO, FMO and orbital correlation methods.
14. Basic principles, concepts of UV, IR,  $^1\text{H NMR}$ ,  $^{13}\text{C NMR}$  and Mass spectroscopic methods – structure determination of organic compounds by UV, IR,  $^1\text{H NMR}$ ,  $^{13}\text{C NMR}$  and Mass spectroscopic methods.
15. Green chemistry: Principles of Green chemistry, and its approaches.

#### 4. CIVICS (P.G. LEVEL)

- I. State and Nation States: State and its elements; State and its relationship with other institutions; Sovereignty – Characteristics and Aspects; Nation, Nationality, Nationalism, National self-determination and Nation States.
- II. Concepts and Ideologies: Law; Liberty; Equality; Justice: Rights; Duties; Citizenship; Power: Authority; Bureaucracy; Liberalism; Socialism; Communism; Gandhism; Secularism.
- III. Democracy – Features and Types; Constitution – Classification and Types; Government – Separation of Powers (Legislature, Executive and Judiciary); Forms of Government – Unitary, Federal, Parliamentary and Presidential.
- IV. Indian Constitution – Historical Background, Constituent Assembly and Framing of the Constitution, Philosophy and Basic Features; Fundamental Rights; Directive Principles; Fundamental Duties.
- V. Union Government – President and Vice President, Prime Minister and Council of Ministers, Prime Minister's Office (PMO); Lok Sabha and Rajya Sabha; State Government – Governor, Chief Minister and Council of Ministers, Legislature and Legislative Council; Union – State relations; NITI Aayog.
- VI. Constitutional and Other Bodies: Finance Commission; Comptroller & Auditor General of India (CAG); National Commission for Schedule Castes; National Commission for Schedule Tribes; National Commission for Backward Classes; National Commission for Women; National Commission for Minorities; National Human Rights Commission.

- VII. Local Bodies – Urban and Rural Governments with special reference to Telangana; 73<sup>rd</sup> and 74<sup>th</sup> Constitutional Amendments; Office of the District Collector.
- VIII. Judiciary – Supreme Court and High Courts, Powers, Functions and Jurisdictions, Judicial Review and Judicial Activism.
- IX. Electoral System and Election Commission in India; Contemporary Issues – Corruption, Lokpal, Lokayukta, Governance Issues – Good Governance; e-Governance.
- X. India and the World – Features of India's Foreign policy, Non-Aligned Movement; UNO.

### **5. COMMERCE (P.G. LEVEL)**

- I. Financial Management: Meaning, Nature, Objectives and Scope of Financial Management – Capital Budgeting, Process, Techniques – Sources of Finance, Cost of Capital – Cost of various sources of finance –  
Leverages: Operating and Financial leverages - Capital Structure Theories – Dividend decisions – Working Capital Management – Cash, Receivables and Inventory Management.
- II. Financial and Management Accounting: Accounting concepts and conventions – GAAP – Indian Accounting Standards - Accounting process- Final Accounts (Sole Trade, Partnership and Company) – Depreciation Accounting – Accounts from Incomplete Records – Accounts of Non-Trading Organisations - Analysis of Financial Statements – Techniques: Comparative and Common Size statements, Trend analysis, Ratio analysis, Funds Flow and Cash Flow analysis – Marginal Costing and Decision Making.
- III. Cost Accounting and Control: Cost concepts and Classification – Installation of costing system – Elements of Cost: Material, Labour and Overheads – Methods of Costing – Techniques of costing: CVP, Standard Costing and Budgetary control – Uniform costing, Inter-firm comparisons and Activity Based costing – Cost Control, Cost Reduction and Cost Audit.
- IV. Managerial Economics: Meaning, Nature and Scope of Managerial Economics – Demand Analysis, Production and Cost Analysis- Market Structure: Perfect and Imperfect Markets.
- V. Organisation Theory and Behaviour: Organisation concept and theories – Individual vs. Group Behaviour –Motivation and Morale – Communication: Types and Barriers – Leadership: Styles and Theories.
- VI. Marketing Management: Meaning, Concepts, Nature and Scope – Marketing Environment – Consumer Behaviour and Market Segmentation – Product, Price, Promotion and Channel management.
- VII. Quantitative Techniques: Measures of Central Tendency – Measurers of Variation – Measurers of Skewness - Correlation and Regression Analysis – Time Series Analysis – Index Numbers - Sampling and Sampling methods.

## **6. ECONOMICS (P.G. LEVEL)**

### **I. Micro Economics**

#### **1. Demand Analysis**

Definitions, Nature and Scope of Economics – Micro and Macro Economic Analyses – Concepts of Demand and Law of Demand – Determinants and Types of Demand – Demand Function – Concepts of Supply and Law of Supply – Market Equilibrium – Elasticity of Demand : Concept and Types – Measurement Methods of Price Elasticity of Demand

#### **2. Utility Analysis**

Cardinal and Ordinal Utility Approaches – Law of Diminishing Marginal Utility – Law of Equi-Marginal Utility – Consumer Surplus – Indifference Curve Analysis: Consumer's Equilibrium – Derivation of Demand Curve with the help of Indifference Curves – Price, Income and Substitution Effects – Revealed Preference Theory.

#### **3. Production Analysis**

Production, Production Function and Factors of Production – Law of Variable Proportions – Isoquant, Isocost Curves and Producer's Equilibrium – Laws of Returns to Scale – Economies of Scale – Cost Analysis: Cost Curves in Short Run and Long Run – Revenue Analysis – Relationship among Average Revenue, Marginal Revenue and Elasticity of Demand

#### **4. Market Structure Analysis**

Concepts of Firm, Industry and Market – Classification of Markets – Objectives of the Firm – Equilibrium of a Firm – Shut-Down Point – Perfect Competition: Concept, Characteristics, Equilibrium of Firm and Industry – Optimum Firm – Monopoly: Concept, Types, Characteristics and Equilibrium of the Firm – Price Discrimination – Monopolistic Competition: Concept, Characteristics and Equilibrium of the Firm

#### **5. Oligopoly, Duopoly and Factor Pricing Analysis**

Oligopoly: Concept, Characteristics and Price Rigidity – Kinky Demand Curve – Duopoly: Concept and Characteristics – Cournot Model – Marginal Productivity Theory of Distribution – Distribution Theories of Rent, Wages, Profit and Interest

### **II. Macro Economics**

#### **1. National Income Analysis**

Concept, Nature & Scope and Importance of Macro Economics – Concept of Circular Flow of Incomes – National Income Analysis: Concepts and Components – Methods of Measurement of National Income – Importance of and Difficulties in the Estimation of National Income – Limitations of National Income as a Measure of Welfare

#### **2. Theories of Income and Employment**

Classical Theory of Employment: Say's Law of Markets and Pigou's Wage Cut Policy – Keynesian Theory of Income and Employment: Effective Demand, Aggregate Demand Function and Aggregate Supply Function – Consumption Function – Factors Determining Consumption Function – Savings Function – Concepts of Multiplier, Accelerator and Super-Multiplier

#### **3. Theories of Investment and Interest Rate**

Capital and Investment – Types and Determinants of Investment – Marginal Efficiency of Capital – Classical, Neo-Classical and Keynesian Theories of Interest – Simultaneous Determination of Interest and Real Income through IS-LM Framework

#### **4. Supply of Money and Demand for Money**

Meaning, Functions and Classification of Money – Meaning and Measures of Money Supply – Demand for Money – Classical Theories of Money: Fisher's and

Cambridge Versions of Quantity Theory of Money – Keynesian and Milton Friedman Approaches to Demand for Money

#### 5. Inflation and Trade Cycles

Inflation: Concept, Types, Causes and Measurements – Effects of Inflation – Measures to Control Inflation – Phillips Curve, Deflation and Stagflation – Trade Cycles: Concept, Nature and Causes – Phases and Remedial Measures of Trade Cycles.

### III. Public Finance

#### 1. Introduction to Public Finance

Role of State in Economic Activities, Planning and Development – Nature, Scope and Evolution of Public Finance – Public, Private and Merit Goods – Multiple Theory of Public Household – Principle of Maximum Social Advantage

#### 2. Public Revenue and Taxation

Public Revenue: Sources and Classification – Direct and Indirect Taxes – Progressive, Proportional and Regressive Taxes – Canons of Taxation – Characteristics of a Good Tax System – Impact and Incidence of Taxation – Effects of Taxation

#### 3. Public Expenditure and Public Debt

Public Expenditure: Classification and Principles – Determinants of Public Expenditure – Theories of Public Expenditure: Wagner and Peacock-Wiseman – Effects of Public Expenditure – Public Debt: Nature, Sources and Classification – Effects and Redemption of Public Debt – Debt Trap

#### 4. Fiscal Policy and Federal Finance

Fiscal Policy: Concept, Objectives and Tools – Fiscal Policy and Monetary Policy – Federal Finance: Concept and Features – Centre-State Financial Relations – Transfer of Resources from Centre to State and Local Bodies – Functions of Finance Commission – Current Finance Commission's Recommendations

#### 5. Budget

Budget: Concepts, Classification and Types – Revenue Account and Capital Account – Budget Deficits: Concepts, Types and Implications – Fiscal Responsibility and Budget Management (FRBM) – Budgeting in India

### IV. International Economics

#### 1. Theories of International Trade

International Trade, Inter-Regional Trade and Inter-Industry Trade – Gains from Trade – Trade as an Engine of Economic Growth – Role of International Trade in Economic Development – Classical and Neo-Classical Theories of International Trade – Heckscher-Ohlin Theory of International Trade

#### 2. Terms of Trade and Barriers to Trade

Concepts of Terms of Trade – Factors Affecting Terms of Trade – Uses and Limitations of Terms of Trade – Secular Deterioration Hypothesis of Terms of Trade: Singer and Prebisch – Tariffs, Quotas and Subsidies: Their Effects – Impact of Tariffs on Partial and General Equilibrium Analyses – Political Economy of Non-Tariff Barriers and Their Implications

#### 3. Balance of Payments

Concepts of Balance of Trade and Balance of Payments – Factors Affecting Balance of Trade – Differences Between Balance of Trade and Balance of Payments – Components of Balance of Payments – Equilibrium and Disequilibrium in Balance of Payments – Types of Disequilibrium – Causes and Consequences of Disequilibrium in Balance of Payments – Remedial Measures for Correcting Disequilibrium in Balance of Payments – Recent Trends in India's Balance of Payments

#### 4. Exchange Rates

Foreign Exchange Market – Exchange Rates: Concept and Types – Relative Merits and Demerits of Fixed and Flexible Exchange Rates – Theories of Exchange Rates Determination: Mint Parity and Purchasing Power Parity (PPP) – An Overview of Different Methods of Exchange Rate Determination in India

#### 5. International Monetary System and International Finance

Lending Operations of International Financial Institutions: IMF, World Bank (IBRD), IDA, IFC, ADB and BRICS – Euro-Dollar and Euro-Currency Markets –

International Trade Institutions: GATT and WTO – Impact of WTO on Indian Economy

## **V. Economics of Development and Growth**

### 1. Socio-Economic and Institutional Aspects of Economic Development

Concepts of Economic Growth, Development and Underdevelopment – Distinction Between Growth and Development – Objectives of Economic Development – Sustainable Development and Inclusive Growth – Indicators of Economic Development

### 2. Factors of Economic Development

Factors Hindering Economic Development – Factors Promoting Economic Development – Population and Economic Development – Population Explosion – Theories of Demographic Transition – Malthusian Population Theory – Optimum Theory of Population – Natural Resources and Economic Development

### 3. Theories of Growth and Development

Classical Theories of Economic Growth: Adam Smith, Ricardo and J. S. Mill – Karl Marx Theory of Economic Development – Schumpeter's Theory of Economic Development – Rostow's Theory of Economic Growth

### 4. Strategies of Economic Development and Growth

Big Push Theory – Balanced Growth Strategies of Rodan, Nurkse and Lewis – Unbalanced Growth Strategy of Hirschman – Critical Minimum Effort Thesis – Low Level Equilibrium Trap – Theories of Social and Technological Dualism

6. Growth Models Harrod-Domar Growth Model – Kaldor's Growth Model – Joan Robinson's Growth Model – Gunnar Myrdal's Model – Choice of Techniques: AK Sen – Technical Progress: Hick and Harrod

## **VI. Indian Economy**

### 1. Basic Structure and Demographic Features of Indian Economy

Basic Features of Indian Economy: Growth, Trends and Structural Changes in Indian Economy – Demographic Features of Indian Population – Size, Growth and Composition of Population and Their Implications on Indian Economy – Sectoral and Occupational Distribution of Population in India – Population Policy of India – Human Resource Development: Education and Health – Human Development Index

### 2. National Income, Income Inequalities, Poverty and Unemployment

Estimation of National Income in India – Trends and Composition of National Income in India – Income Inequalities in India: Magnitude, Causes, Consequences and Remedial Measures – Poverty in India: Concept, Types, Trends, Causes and Consequences – Unemployment in India: Concept, Types, Trends, Causes and Consequences – Poverty Alleviation and Employment Generation Programmes in India

### 3. Planning and Public Policy

Concept, Types and Importance of Planning – Major Objectives of Five Year Plans in India – Review of Five Year Plans : Achievements and Failures – Current Five Year Plan – NITI Aayog – Economic Reforms: Liberalisation, Privatisation and Globalisation – A Critical Evaluation of Economic Reforms – Regional Imbalances – Rural-Urban Disparities: Migration

### 4. Agricultural Sector

Nature and Importance of Agriculture in Indian Economic Development – Trends in Agricultural Production and Productivity – Agricultural System in India and Land Reforms – Green Revolution – Cropping Pattern – Agricultural Finance and Rural Indebtedness – Agricultural Marketing – Agricultural Pricing – Food Security in India

### 5. Industrial and Service Sectors

Structure, Growth, Trends and Importance of Indian Industry – Problems of Indian Industry – Medium, Small Scale and Micro Enterprises (MSME) : Growth, Role and Problems (Including Sickness Problem) – Industrial Policies of 1948 and 1991 – FEMA and Competition Commission of India – Disinvestment Policy

– Foreign Direct Investment – Concept and Components of Service Sector – Infrastructural Development: Transport, Energy, Communication and Information and Technology

## **VII. Telangana Economy**

### 1. Telangana Economy: Human Resources

Economic History of Telangana – Economic Features of Telangana – Demographic Features of Telangana – Occupational Distribution of Population in Telangana – Sectoral Distribution of Population – Human Resource Development: Education and Health

### 2. Gross State Domestic Product, Poverty and Unemployment

Growth and Trends in Gross State Domestic Product and Per Capita Income in Telangana: District wise Analysis – Sectoral Contribution to Gross State Domestic Product – Inequalities in the Distribution of Income and Wealth – Poverty in Telangana: Trends, Causes and Consequences – Unemployment in Telangana: Trends, Causes and Consequences – Poverty Alleviation and Employment Generation Programmes in Telangana – Other Welfare Programmes in Telangana State

### 3. Agricultural Sector

Growth of Agriculture in Telangana Economy – Trends in Agricultural Production and Productivity – Determinants of Agricultural Productivity – Cropping Pattern – Agrarian Structure and Land Reforms – Irrigation: Sources and Trends – Mission Kakatiya – Agricultural Credit and Rural Indebtedness – Agricultural Marketing

### 4. Industrial Sector

Structure of Telangana Industry – Growth and Pattern of Industrial Development in Telangana – Industrial Policy of Telangana State – Special Economic Zones (SEZ) – Role of Small Scale Industries in Telangana Economy – Problems & Remedial Measures of Small Scale Industries: Issue of Sickness – Industrial Finance in Telangana

### 5. Service and Infrastructural Sectors

Growth and Trends in Tertiary Sector in Telangana – Growth and Pattern of Development of Service Sector in Telangana – Infrastructural Development in Telangana: Transport, Energy, Communications, Information Technology and Tourism

## **VIII. Quantitative Methods for Economic Analysis**

### 1. Mathematical Foundations of Economic Analysis

Need and Importance of Quantitative Methods in Economics – Meaning and Basic Concepts of Mathematics: Constants and Variables – Functions: Linear, Non-Linear Functions – Equations and Graphs of Linear, Quadratic and Cubic Functions – Concept of Derivative – Rules of Differentiation with respect to Cost, Revenue, Price and Demand Functions – Application of Maxima and Minima in Economic Analysis

### 2. Introduction to Statistics

Meaning, Basic Concepts and Uses of Statistics – Population and Sample – Frequency Distribution, Cumulative Frequency – Graphic and Diagrammatic Representation of Data – Types of Data: Primary and Secondary Data – Methods of Data Collection: Census and Sampling Methods (Random and Non-Random Sampling Methods)

### 3. Measures of Central Tendency and Dispersion

Measures of Central Tendency: Mean, Median, Mode, Geometric Mean and Harmonic Mean – Properties of Good Average – Comparison of Different Averages – Measures of Dispersion – Absolute and Relative Measures of Dispersion: Range, Quartile Deviation, Mean Deviation, Standard Deviation, Coefficient of Variation and Variance

### 4. Correlation and Regression

Correlation: Meaning and Types – Karl Pearson's Correlation Co-efficient – Spearman's Rank Correlation – Regression: Meaning and Uses of Regression – Estimation and Interpretation of Regression Line

## 5. Index Numbers and Time Series Analysis

Index Numbers: Meaning and Uses – Types of Index Numbers – Methods of Index Numbers: Laspeyres, Paasche and Fisher – Analysis of Time-Series: Meaning and Uses – Components of Time Series Analysis: Secular, Seasonal, Cyclical and Irregular Variations – Methods of Measurement of Secular Trends: Graphic, Semi-Averages, Moving Averages and Least Squares Methods

## IX. Banking and Economics of Infrastructure

### 1. Commercial and Central Banking

Commercial Banks: Concept and Types – Functions and Principles of Commercial Banks – Balance Sheet of Commercial Banks – Process of Credit Creation – Social Responsibility, Importance and Growth of Commercial Banks in India – Central Banking – Functions of Reserve Bank of India – Concept and Objectives of the Monetary Policy – Instruments of Monetary Policy – Financial Sector Reforms in India

### 2. Financial and Investment Banking

Concept, Types, Functions and Growth of Non-Banking Financial Intermediaries – Their Impact on Indian Economy – Measures Taken to Control Their Operations – Development Bank: Concept, Functions and Importance – Functioning of Different Development Banks – Investment Banking – Merchant Banking

### 3. Money Market and Capital Market (Financial Markets)

Money Market: Concept and Characteristics – Components and Sub-Markets of Money Market – Functions of Money Market – Recent Trends and Importance of Money Market in India – Capital Market: Concept, Functions and Importance – Components of Capital Market: Primary and Secondary Markets – Stock Exchange: Concept and Functions – SEBI and Its Functions

### 4. Infrastructure and Economic Development

Concept of Infrastructure – Infrastructure as a Public Good – Special Characteristics of Public Utilities – Importance of Infrastructure in Economic Development – Trends in the Growth of Infrastructure in India – Classification of Infrastructure: Social and Physical Infrastructure – Social Infrastructure: Education, Health and Hygiene – Human Resource Development: Concept, Scope and Importance – Education in India: Planning, Policies and Financing – Trends in the Growth of Education in India – Health in India: Planning, Programmes and Importance

### 5. Physical Infrastructure

Types of Physical Infrastructure – Concept of Energy – Sources of Energy: Renewable & Non-Renewable and Conventional & Non-Conventional Energy – Sources of Commercial Energy: Coal, Oil & Gas and Electric Power – Transport – Modes / Categories of Transport: Roadways, Railways, Airways and Waterways – Role of Transportation in Economic Development – Information and Communication Technology (ICT): Concept, Growth, Trends and Importance

## X. Economics of Environment

### 1. Introduction to Environmental Economics

Concepts of Ecology and Environment – Interaction Among Ecology, Environment and Economy – Micro Economic Theory of Environment – The Pricing of the Environmental Variables – Pareto Optimality and Market Failure in the Presence of Externalities – Bio-Diversity: Meaning, Uses, Effects and Conservation

### 2. Resource Allocation

Natural Resources: Meaning, Features, Classification and Importance – Economics of Exhaustible, Non-Exhaustible Resources – Problems of Resource Allocation – Natural Resources Depletion: Optimal Rate of Depletion – Common Property Resources: Problems – Conservation of Resources – Implications of Ecological Imbalances

### 3. Environmental Valuation

Valuation of Non-Market Goods and Services: Measurement Methods – Environmental Degradation: Concept and Causes – Valuation of Environmental Degradation – Direct and Indirect Methods – Degradation of Land (Soil), Forest and Natural Resources: Causes and Effects – Cost-Benefit Analysis of Environmental Policies and Regulations

### 4. Sustainable Development

Impact of Environment on GNP – Limits to Growth – Sustainable Development: Concept and Rules – Modern and Neo-Classical Views on Sustainable Development – Peoples Movement for Sustainable Development – Development vs Sustainable Development

### 5. Environmental Pollution and Policies

Environment and Economy Interaction – Industrial and Agricultural Technology: Its Impact on Environment – Different Types of Pollution: Their Causes and Effects – Environmental Policy and Conservation and Protection of Eco-System – Implementation of Environmental Policies in India – Global Environmental Issues.

## 7. ENGLISH (P.G. LEVEL)

### I. Genres, Movements, Schools, Concepts.

- Renaissance-Reformation, Metaphysical poetry, Neo-classicism, Puritanism, Restoration, Romanticism,Victorian Age, Realism-Naturalism, Expressionism, Symbolism, Modernism, Postmodernism.
- Structuralism, Poststructuralism, Feminism, Postcolonialism, Diaspora, Race Gender and Caste.
- English Literary Criticism from Philip Sydney to Matthew Arnold
- New Criticism, Formalism, Archetypal criticism, New Historicism, Psychoanalytical criticism,Reader response criticism.
- Literary Genres: Poetry, Fiction, Prose, Drama (origins and development, elements, forms, types)

### II. Writers and Texts

i. Christopher Marlowe	Doctor Faustus
ii. William Shakespeare	Hamlet
iii. John Milton	Paradise Lost-Book 1
iv. William Wordsworth	“Immortality Ode”, Tintern Abbey
v. Robert Browning	“My Last Duchess”, “Andrea del Sarto”
vi. Thomas Hardy	Tess of the d’ Urbervilles
vii. TS Eliot	The Waste Land
viii. G.B. Shaw	Saint Joan
ix. Virginia Woolf	“A Room of One’s Own”
x. William Golding	Lord of the Flies
xi. Walt Whitman	“When Lilacs Last in the Dooryard Bloomd”, “Crossing Brooklyn Ferry”
xii. Arthur Miller	Death of a Salesman

xiii. Toni Morrison	Beloved
xiv. Mulk Raj Anand	Untouchable
xv. Kamala Das	“An Introduction”, “The Old Playhouse”
xvi. Girish Karnad	Hayavadana
xvii. Salman Rushdie	Midnight’s Children
xviii. Chinua Achebe	Things Fall Apart
xix. Margaret Atwood	Edible Woman
xx. Derek Walcott	Dream on Monkey Mountain

### III. English Language Teaching

1. ELT in India : (History and status of English in India; English as Second Language, English as Foreign Language, and English as Global Language).
2. Methods and Approaches: (Grammar Translation method, Direct method, Audio-Lingual method; Structural approach, Communicative language teaching)
3. Teaching of Language Skills : (Teaching of Listening, Speaking, Reading, and Writing Skills; Teaching of Grammar and Functional English; Teaching of Vocabulary; Classroom techniques; Use of authentic materials) Teaching literature.
4. Testing and Evaluation: (Principles, Types, Objectives of testing and evaluation)
5. Phonetics and Phonology; Syntax and Structure.

### IV. Literary comprehension-(Excerpts from poetry and prose for comprehension)

#### 8. FRENCH (P.G. LEVEL)

**French Literature and literary movements:** From Medieval period to early 21<sup>st</sup> century

**Francophone Literatures:** Major Francophone writers from Canada, Africa, Asian Countries, French literature from European Francophone countries like Switzerland, Belgium etc

**French and Francophone Cultures and Civilizations:** History, Art, Cinema, Paintings, Geography, Gastronomy, Politics, Economy, Media, Music, Fashion, Sports, Education System, Francophonie.

**Translation:** Translation theories and Practice, History of Translation, Pragmatic and Literary Texts, Translation of Indian Works into French and vice versa, Cultural and linguistic problems of Translation (From French into English/Indian Languages and vice versa)

**Linguistics:** Linguistics as a scientific study of language, History of Linguistics, Basic linguistic concepts such as Language, Langue and Parole, Code and Message, Synchrony and Diachrony, Sign, Signifiant and Signifié, Syntagmatic and Paradigmatic relation, Linguistic Competence and Performance

Specific characteristics of human language

Nature of the linguistic sign

Language and communication,

Different models of linguistic analysis like structural, transformational Generative, functional etc,

Different areas of linguistics like phonology, phonetics, morphology, syntax, semantics, pragmatics, psycholinguistics, and sociolinguistics

Different functions of language

Language varieties and Registers

Immediate constituent analysis

Double articulation of language

Definition of the phoneme and its role and function in speech

Study of speech organs

Classification of speech sounds into consonants, vowels and semi-vowels: a study of distinctive feature, mode and place of articulation

Syllable and Rythme groups

**Didactics:** Evolution of methodology in FLT from traditional methodology to present day approaches (with special reference to French),

“Méthode” “ méthodologie”,” manuel” “didactique”

Use of authentic documents in language teaching

Problems and perspectives in teaching/ learning of French in the Indian context

Principles of material production

Interculture in language teaching/learning

Types of Evaluation (formative, summative etc.)

CECR (*Cadre Européen Commun de Référence pour les Langues*)

French for specific purposes (FOS)

Information and Communication Technology in FLE

Critical analysis of different French textbooks

**French Language: Grammatical and Written Competence**

## 9. HINDI (P.G. LEVEL)

I. Study of the following ten authors and poets:

1. Kabir
2. Tulsidas
3. Bihari
4. Surdas
5. Acharya Ramachandra Shukla
6. Premchand
7. Prasad
8. Pant
9. Nirala
10. Dinakar

II. Appreciation of the popular couplets of Tulsi, Kabir, Rahim, Vrinda etc., and a few lines from modern poets of Prasad, Pant etc.

III.

1. Details Study of “Hindi Sahitya ka Itihas”

(1. Adikaal, 2. Bhaktikaal, 3. Ritikaal, 4. Aadhunikkaal)

2. Origin and development of prominent literary genres in modern Hindi, e.g. Novel, Short Story, Drama, Criticism.
- IV. The study of the following eight trends of the history of Hindi Literature.
1. Gyan Margi Shakha
  2. Prem Margi Shakha
  3. Ram Bhakti Shakha
  4. Krishna Bhakti Shakha
  5. Riti kavya
  6. Chayavada
  7. Pragativada
  8. Nai Kavita
- V. History of various aspects of Hindi Language, e.g.:
1. Grammatical and lexical features of Apabhramsa, Avahatta and early Hindi.
  2. Evolution of Khari Boli Hindi as literary language during 19<sup>th</sup> Century.
  3. Development of Hindi as Rastra Bhasha during freedom struggle and as official language of Indian Union since Independence.
  4. Major Dialects of Hindi and their inter-relationship
  5. Functional and significant grammatical features of standard Hindi
  6. Origin and development of Devanagari script and its role in standardization of Hindi language.

## **10. HISTORY (P.G. LEVEL)**

### **I. Ancient India:**

1. Definition of History, Scope, Nature, Sources.
2. Pre and Proto History – Stone ages and Chalcolithic Cultures.
3. Harappan Civilization – Characteristic features, Major cities – Socio-Economic conditions, Harappan Script, Religious practices – Decline.
4. Iron Age – Aryan Migrations – Second Urbanization.
5. India in 6th Century BC; Early States, Sixteen Mahajanapadas, Rise and Growth of Magadha – Society, Economy – Jainism, Buddhism, Ajivikas and Lokayatas.
6. Mouryan Age: Chandragupta Mourya and Ashoka, Mouryan Polity, Administration, Dhamma, Socio-Economic conditions – Decline.
7. Satavahana Age; Political History, Administration, Society, Economy and Culture.
8. Gupta Age: Political History, Administration, Socio-Economic conditions, Growth of Culture, Arts and Architecture, Literature – Decline.
9. India in the Seventh Century A.D.; Pushyabhutis (Harsha), Pallavas, Chalukyas and Rashtrakutas – Political History, Society, Economy and Culture.

### **II. Medieval India:**

1. India between 650 A.D. to 1200 A.D.- Rajputs, Arab and Turkish Invasions - Later Pallavas, Chalukya, Chola Art, Architecture and Chola Administration – Society, Economy and Culture.
2. Age of Delhi Sultanate 1206 A.D. -1526 A.D. – Political History, Administration, Changes in Society and Economy- Bhakti and Sufi Movements.
3. Age of Vijayanagara - Origin, Political History, Krishnadevaraya, Socio-Economic Conditions, Culture, Art, Architecture, Decline – Bahamanis.
4. Moghul Age (1526-1707) – Political History, Shershah, Akbar, Administration, Society, Economy, Culture- Decline – Marathas, Shivaji.

### III. Modern India

1. Establishment of British Power in India –Early Resistance – Hyder Ali, Tippu Sultan.
2. British paramountcy in India-Policies of Governor Generals, Impact of British Policy on Indian Agriculture and Economy.
3. Socio – Religious Reforms Movements –Brahmo Samaj –Arya Samaj, Satyashodhak Samaj and others.
4. 1857 Revolt; causes, results and significance.
5. Rise and Growth of Indian National Movement –Nationalist Movement I Phase from 1885 A.D. -1905 A.D. – Indian National Congress; Moderates, Extremists and Early Revolutionaries II phase at 1905-1920 – Vande Mataram Movement Home Rule - Role of Tilak and Anie Beasant- Later phase of Revolutionary Movement. III Phase 1920-1947 -Non Co-operation Movement, Emergence of Gandhi, Civil Disobedience, Salt Satyagraha, Quit India Movement- Subhash Chandra Bose – Constitutional Reforms- Dr.B.R.Ambedkar - Declaration of Independence – Role of Women in Indian National Movement.

### IV. Modern World:

1. Industrial Revolution- Significance and Results.
2. American War of Independence – Causes, Results, Significance.
3. French Revolution – Causes, Effects, Significance
4. National Liberation Movements in Italy and Germany in the 19th Century – Mazzini, Cavour, Garibaldi, Bismarck.
5. World War-I – Causes and Effects – League of Nations.
6. The Russian Revolution of 1917 – Causes, Results and Significance.
7. The world between the Two World Wars – Nazism in Germany, Fascism in Italy, Turkey under Mustafa Kamal Pasha.
8. Developments in China 1911-1949 – Nationalist Revolution of 1911 – Communist Revolution of 1948.
9. World War-II – Causes and Effects – United Nations Organisation.

### V. History of Telangana

1. Pre History
2. Pre-Satavahana, Satavahana, Post-Satavahana - Ikshvakus, Vakatakas, Abiras and Vishnukundis.
3. Telangana from 7th Century to 11th Century- Chalukyas of Badami, Vemulavada, Mudigonda and Kalyana.
4. Age of Kakatiya's; Origin, Political History, Administration, Socio Economic, Religious conditions, Art and Architecture and Literature and their Subordinates.
5. Padma Nayaka's and Musunoori.
6. Qutubshahis – Administration, Religion, Art, Architecture and Literature.
7. Asafjahis – Administration, Economy, Culture and Society, British Paramountcy on Hyderabad State. Freedom Movement in Telangana, Telangana Armed Struggle.

## 11. MATHEMATICS (P.G. LEVEL)

### I. Real Analysis

Finite, Countable and Uncountable sets – Real Number system  $\mathbb{R}$  – Infimum and Supremum of a subset of  $\mathbb{R}$  – Bolzano- Weierstrass Theorem- Sequences- Convergence- Limit Superior and Limit Inferior of a Sequence- Sub sequences- Heine- Borel Theorem- Infinite Series – Tests of Convergence- Continuity and Uniform continuity of a real valued function of a real variable- Monotonic Functions - Functions of Bounded Variation- Differentiability and Mean Value Theorems- Riemann Integrability- Sequences and Series of Functions

### II. Metric Spaces

Metric spaces – Completeness- Compactness- Connectedness – Continuity and Uniform continuity of a function from one metric space into another-Topological Spaces – Bases and Subbases – Continuous functions

### III. Elementary Number Theory

Primes and Composite numbers – Fundamental Theorem of Arithmetic – Divisibility – Congruences – Fermat's theorem – Wilson's Theorem – Euler's Phi - Function

### IV. Group Theory

Groups- Subgroups- Normal Subgroups- Quotient groups- Homomorphisms- Isomorphism Theorems- Permutation groups- Cyclic groups- Cayley's theorem. Sylow's theorems -Their applications

### V. Ring Theory

Rings- Integral domain- Fields- Subrings - Ideals – Quotient rings – Homomorphisms – Prime ideals- Maximal ideals – Polynomial rings – Irreducibility of polynomials – Euclidean domains- Principal ideal domains

### VI. Vector Spaces

Vector Spaces, Subspaces – Linear dependence and independence of vectors – basis and dimension – Quotient spaces – Inner product spaces – Orthonormal basis – Gram- Schmidt process

### VII. Theory of Matrices

Linear Transformations – Rank and nullity – Change of bases- Matrix of a Linear Transformation – Singular and Non-singular matrices – Inverse of a matrix – Eigenvalues and Eigenvectors of a matrix and of a Linear Transformation – Cayley- Hamilton's theorem- Quadratic forms- Signature

and Index

### VIII. Complex Analysis

Algebra of Complex Numbers – The Complex Plane – Complex Functions and Their Analyticity – Cauchy-Riemann equations – Mobius transformations- Power Series-Complex Integration – Cauchy's Theorem – Morera's Theorem – Cauchy's Integral Formula – Liouville's Theorem – Maximum Modulus Principle – Schwarz's Lemma – Taylor's Series – Laurent's Series-Calculus of Residues – Evaluation of Integrals

### IX. Ordinary Differential Equations

Ordinary Differential Equations (ODE) of First order and First degree – Different methods of solving them – Exact Differential equations and Integrating factors- ODE of First order and Higher degree – Equations solvable for  $p$ ,  $x$  and  $y$  – Clairaut's equations – Singular Solutions- Linear Differential Equations with Constant Coefficients and Variable Coefficients – Variation of Parameters

### X. Partial Differential Equations

Formation of Partial Differential Equations (PDE) – Lagrange and Charpit's methods for Solving first order PDEs – Cauchy problem for first order PDEs- Classification of Second Order PDE's – General Solution of Higher Order PDEs with Constant Coefficients

### XI. Solid Geometry

The Plane- Right line- Sphere- Cones and Cylinders

## 12. PHYSICS (P.G. LEVEL)

### I. Mathematical Methods of Physics

Dimensional analysis, vector algebra and vector calculus. Linear algebra, matrices, Cayley-Hamilton Theorem. Eigen values and eigenvectors. Linear ordinary differential equations of first & second order, special functions ( Hermite, Bessel, Laguerre and Legendre functions). Fourier series, Fourier and Laplace transforms. Elements of complex analysis, analytic functions; Taylor & Laurent series: poles, residues and evaluation of integrals. Elementary probability theory, random variables, binomial, Poisson and normal distributions. Central limit theorem.

### II. Classical Mechanics

Newton's laws. Dynamical systems, Phase space dynamics, stability analysis. Central force motions. Two body collisions-scattering in laboratory and centre of mass frames. Rigid body dynamics-moment of inertia tensor. Non-inertial frames and pseudo forces. Variational principle. Generalized coordinates. Lagrangian and Hamiltonian formalisms and equations of motion. Conservation laws and cyclic coordinates. Periodic motion: small oscillations, normal modes. Special theory of relativity-Lorentz transformations, relativistic kinematics and mass-energy equivalence.

### III. Electromagnetic Theory

Electrostatics: Gauss's law and its applications, Laplace and Poisson equations, boundary value problems. Magnetostatics: Biot-savart law, Ampere's theorem. Electromagnetic induction. Maxwell's equations in free space and linear isotropic media; boundary conditions on the fields at interfaces. Scalar and vector potentials, gauge invariance. Electromagnetic waves in free space. Dielectrics and conductors. Reflection and refraction, polarization, Fresnel's law, interference, coherence and diffraction. Dynamics of charged particles in static and uniform electromagnetic fields. Charges particles in inhomogeneous fields.

### IV. Quantum mechanics

Wave-particle duality. Schrodinger equation (time-dependent and time-independent). Eigen value problems (particle in a box, harmonic oscillator, etc.). Tunnelling through a barrier. Wave function in coordinate and momentum representations. Commutators and Heisenberg uncertainty principle. Dirac notation for state vectors. Motion in a central potential: Orbital angular momentum, angular momentum algebra, spin, addition of angular momenta; Hydrogen atom. Stern-Gerlach experiment. Time independent perturbation theory and applications. Variational method. Time dependent perturbation theory and Fermi's golden rule. Selection rules. Identical particles. Pauli exclusion principle. Spin-statistics connection.

### V. Thermodynamics and statistical Physics

Laws of thermodynamics and their significance. Thermodynamic potentials, Maxwell relations, chemical potential, Phase equilibrium. Phase space. Micro and macro- states. Micro-canonical, canonical and grand-canonical ensembles and partition functions. Free energy and its connection with thermodynamic quantities. Classical and quantum statistics. Bose and Fermi gases. Principle of detailed balance. Black body radiation and Planck's distribution law

### VI. Electronics

Semiconductor devices (diodes, junctions, transistors, field effect devices, homo- and hetero junction devices), device structure, device characteristics, frequency dependence and applications. Opto-electronic devices (solar cells, photo detectors, LEDs). Rectifiers and power supplies. Feedback amplifiers and their frequency response. Oscillators, Multivibrators. Operational amplifiers and their applications, Digital techniques and applications (Logic circuits, registers, counters and Comparators). A/D and D/A converters. Microprocessors, micro

controller basics. Fundamentals of AM communication, FM communication and Fibre optic communication and their techniques.

### **VII. Atomic & Molecular Physics**

Quantum States of an electron in an atom. Electron spin. Spectrum of Helium and alkali atom. Relativistic corrections for energy levels of hydrogen atom, hyper fine structure and isotopic shift, width of spectrum lines, LS & JJ couplings. Zeeman, Paschen-Bach & Stark effects. Frank-condon principle. Electronic rotational, vibrational and Raman spectra of diatomic molecules. Selection rules. Lasers: spontaneous and stimulated emission, Einstein A & B coefficients. Optical pumping, Population inversion, rate equation. Modes of resonators and coherence length.

### **VIII. Condensed Matter Physics**

Bravais lattice. Reciprocal lattice. Diffraction and the structure factor. Bonding of solids. Elastic properties, Phonons, lattice specific heat. Free electron theory and electronic specific heat. Response and Relaxation phenomena. Drude model of electrical and thermal conductivity. Hall Effect and thermoelectric power. Electron motion in a periodic potential, band theory of solids; metals, insulators and semiconductors. Super conductivity: Type-I and type-II super conductors. Josephson junctions. Superfluidity. Defects and dislocations. Ordered phases of matter: translational and orientation order, kinds of liquid crystalline order. Quasi crystals.

### **IX. Nuclear and Particle Physics**

Basics of radio activity. Basic nuclear properties; size, shape and charge distribution, spin and parity. Binding energy, Semi-empirical mass formula, liquid drop model. Nature of the nuclear force, form of nucleon-nucleon potential, charge –independence and charge symmetry of nuclear forces. Deuteron problem. Evidence of shell structure, single-particle shell model, its validity and limitations. Elementary ideas of alpha, beta and gamma decays and their selection rules. Fission and fusion. Nuclear reactions. Reaction mechanism, compound nuclei and direct reactions.

## **13. SANSKRIT (P.G. LEVEL)**

### **I. Vedic Literature**

Dieties: Agni, Indra, Varuna, Usas, Aksha, Vak, Sarama – Pani, Visvamitra – Nadi.

Subject matter of Samhitas, Brachmanas, Aranyakas, Upanisads.

#### **History of Vedic Literature**

Main theories regarding the age of Rigveda – Maxmuller, A Weber, Jacobi,

Balagangadara Tilak, M. Winternitz, Indian traditional views.

#### **Vedangas**

Siksa, Kalpa, Vyakarana, Niruktam, Chandas, Jyotisa.

### **II. Darasana**

i) Samkhyakarika of Isvarakrishna, Satkaryavada, Purusa-svarupa, Prakriti Svarupa, Sristikrama, Pratyayasarga, Kaivalya.

ii) Vedantasara of Sadananda. Anubandha, Catustaya, Ajnana, Adhyaropa – Apavada, Lingasarirotpatti, Pancikarana, Vivarata, Jivanmukti.

iii) Tarkabhasa of Kesavamisra / Tarkasamgraha of Annambhatta: Padartha, Karana, Pramana, Pratyksa, Anumana, Upamana, Sabda.

iv) Sarvadarsanasamgraha: Jainism, Buddhism, Charvak

v) Yogasutra – Vyasabhasya

Cittabhumi, Cittavrittis, Concept of Isvara, Yogangas, Samadhi, Kaivalya.

❖ Grammar, Linguistics, Prosody:

**1) Grammar:**

❖ Siddhantakanmudi

Definition – Samhita, Guna, Vriddhi, Pratipadika, Nadi, Ghi, Upadha, Aprikta, Gati, Pada, Vibhasa, Savarna,

Karaka

Samasa

Tinamta (Bhu and Edha only)

Kridanta (Kriyaprakriya only)

Taddhita (Matvarthiya)

Stripratyaya

❖ Mahabhasya (Paspasahnika)

Definition of Sabda

Relation between Sabda and Artha

Purposes of the Study of Grammar

Definition of Vyakarana.

Result of the proper use of Sabda

Method of Grammar

**2) Linguistics:**

i. Paniniyasiksa

ii. Definition and types of languages, Genealogical and Morphological classification of languages, Speech mechanism and classification of sounds: Stops, Fricatives, Semi-Vowels and Vowels, Phonetic Laws, (Grimm, Grassmann and Verner)

Characteristics of the three types of Indo Aryan

Causes of Phonetic – change.

Directions of semantic change and reasons

Definition of Vakya and its types.

Discourse Analysis (Mahavakyavicara)

Difference between Bhasa and Vak

Difference between Language and Dialect.

iii. Niruktam, (Chapter 1 and 2 only)

Four fold division of Padas,

Concept of Nama,

Concept of Akhyata,

Meaning of upasarga,

categories of Nipatas,

Six states of action (Sadbhavikaras)

Purposes of study of Niruktam,

Principles of Etymology.

Etymology of following words, Acarya, Vira, Hrada, Go, Samudra, Vritra,

Aditya, Usas, Megha,

Vak, Udaka, Nadi, Asva, Agni, Jatavedas, Vaisravana, Nighantu.

## iv. Purana and Itihasa.

Definition of Purana, Mahapuranas and Upapuranas.

## ❖ Ramayana

Arrangement of Ramayana

Legends in Ramayana

Society in the Ramayana

Ramayana as a source of later Sanskrit works

Literary value of the Ramayana

## ❖ Mahabharata

Arrangement of Mahabharata

Legends in Mahabharata

Society in the Mahabharata

Mahabharata as a source of later Sanskrit works

Literary value of the Mahabharata

## v. Kavyasastra

## ❖ Kavyaprakasha

Kavyalakshana, kavyaprayojana, Kavyahetu, kavyabheda, Sabdasakti, Abhihanavayavada, Anvitanvidanavada, Concept of Rasa and discussion of Rasasutra

Alankaras, Anuprasa, Slesa, Vakrokti, Upama, Rupaka, Utpreksha, Samasokty, Apahnuti, Nidarshana, Arthantaranyasa, Dristanta, Vibhavana, Visesokti, Kavyalinga.

## ❖ Dhwanyaloka (I Udyota)

## ❖ Dasarupaka (3rd Chapter only)

## vi. Poetry, Prose, Dramas and History of Sanskrit Literature

## a. Poetry

Raghuvamsa (I and XIV cantos)

Kumarasambhava (V canto)

Kiratarjuniya (I canto)

Sisupalavadha (II canto)

Naisadhiyacarita (I canto)

## b. Prose

Dasakumaracaritam (VIII chapter)

Harshacharitam (V Chapter)

Kadambari (Shudrakavarnanam & Shukanasopadesha)

## c. Dramas

Svapnavasavadatta.

Abhijnanasakuntalam

Mrichakatikam

Uttrararamacharitam

Mudrarakshasam

Ratnavali

Pratimanatakam

d. History of Sanskrit Literature

Mahakavyas

Lagukavyas

Historicalkavyas

Lyric Poetry

Campukavyas

Gadyakavyas

Didactic Poetry

vii. (i) Kautilya's Arthasastra (First ten Adikaras)

(ii) Manusmriti (I, II, and VII Adhyayas)

(iii) Yajnavalkyasmriti (Vyavaharakanda only)

(iv) Susritasamhita (Sutrasthana and Ojah Kshayah)

viii. General Translation

(Sanskrit to English and English to Sanskrit )

## 14. TELUGU (P.G. LEVEL)

(ఎ) సంప్రదాయ సాహిత్యకవుల అధ్యయనం - కాలం - రచనలు

నన్నయ, తిక్కన, ఎర్రన, శివకవులు (నన్నెచోడుడు, మల్లికార్జున పండితారాధ్యుడు, పాల్కురికి సోమనాథుడు), నాచనసోమన - భాస్కర రామాయణ కావులు, రంగనాథ రామాయణ కవి - శ్రీనాథుడు - పోతన - పిల్లలమర్రి పినవీరభద్రుడు - గౌరన - అనంతామాత్యుడు - కొరవి గోపరాజు - నంది మల్లన, ఘంట సింగన - అష్టదిగ్గజ కవులు - తాళ్ళపాక కవులు - పొన్నగంటి తెలగన్న - చేమకూర వెంకటకవి - తంజావూరు రాజకవులు కవయిత్రులు - కందుకూరి రుద్రకవి, మడికి సింగన

(బి) వేమన తాత్త్వికత - సమకాలిక పరిశీలన, దృక్పథం - సమాజంపై వేమన కవిత్వ ప్రభావం.

సాహిత్య ధోరణుల అధ్యయనం - యుగప్రభావం - రూపాలు - మొదలైనవి. ఇతిహాసం - పురాణం ప్రబంధం - శతకం - సంకీర్తన సాహిత్యం - చారిత్రక కావ్యం - సంప్రదాయ, ఆధునిక గద్య రచనలు - నవల - కథానిక - వ్యాసం - ఏకాంకిక మొదలైనవి - వాదాలు (దళిత, హేతు, స్త్రీ, మైనారిటీ , బి.సి. ప్రాంతీయ)

జానపద విజ్ఞానం - గేయాలు - కతాగేయాలు - గద్యాభ్యాసాలు - (పురాణగాథలు - ఐతిహ్యాలు - కథలు), సామెతలు - పొడుపుకథలు - జానపద కళలు - (వీధి నాటకాలు, యక్షగానాలు, బొమ్మలాటలు,, పగటి వేషాలు, చిండు, ఒగ్గు, జాతర కళారూపాలు.

ఆధునిక కవులు అధ్యయనం - ఆధునిక ధోరణులు వారి రచనలు - గురజాడ - రాయప్రోలు - వీరేశలింగం - విశ్వనాథ - దేవులపల్లి - బసవరాజు - పింగళి - కాటూరి - దువ్వూరి - పుట్టపర్తి - శ్రీశ్రీ - కాళోజి, దాశరథి, సి. నారాయణ రెడ్డి , ఎన్. గోపి - ప్రసిద్ధ ఆధునిక కవులు - భావ, అభ్యుదయ, విప్లవ, - దిగంబర, చేతనావర్తన కవులు.

**తెలుగు వ్యాకరణ, ఛందస్సు అధ్యయనం:**

వ్యాకరణం - బాల వ్యాకరణం (సంజ్ఞ, సంధి, క్రియా, తత్సమ, ఆచ్ఛిక ప్రకరణాలు ఛందస్సు - వృత్తాలు, జాతులు, ఉపజాతులు (ఉత్పలమాల, చంపకమాల, శార్దూలం, మత్తేభం, ద్విపద, తరువోజు , సీసం, కందం, స్రగ్ధర , పంచచామరం) అలంకారాలు - అర్థాలంకారాలు, శబ్దాలంకారాలు తెలుగు భాషా చరిత్ర పరిణామం - (ప్రాజ్ఞన్నయ యుగం నుండి నేటి వరకు) - ద్రావిడ భాషా కుటుంబాలలో తెలుగు స్థానం - భౌగోళిక విభజన - మాండలికాలు.

భాషా విజ్ఞాన అధ్యయనం - భాషా శాస్త్రం, అర్థ విపరిణామం - ఆధునిక కాలం, శాసన భాష నుండి సాహిత్య భాష వరకు (వ్యావహారిక భాష ఉద్యమం వంటివి

తెలుగు సాహిత్య పరిణామం (ప్రాజ్ఞన్నయ యుగం నుండి నేటి వరకు) సాందర్య, సాహిత్య విమర్శ అధ్యయనం (ఫ్రాక్, పల్లీమ) ఆధునిక తెలుగు సాహిత్య విమర్శ. సంస్కృత వ్యాకరణం - కావ్యాలు - సంస్కృత వ్యాకరణం ప్రాథమిక విజ్ఞానం, సామాన్య ప్రామాణిక గద్య, పద్య పాఠ్యాంశాలు - హితోపదేశం, కాళిదాసుని కృతులు, సంస్కృత పంచకావ్యాల పరిచయం.

## 15. URDU (P.G. LEVEL)

### I. ORIGIN & DEVELOPMENT OF URDU LANGUAGE

1. Three different periods of Indo-Aryan Language. Maghribi Hindi Aur Uski Boliyan, Khadi.
2. Boli Ka Irteqa. Urdu ke Aaghaz Ke Barey Mein Mukhtalif Nazariyat.

### II. DECCANIYAT :

- a) Bahmani Daur : Fakhruddin Nizami (Kadamrao Padamrao).
- b) Adilshahi Daur : Nusrati (Gulshan-e-Ishq)

- c) Qutubshahi Daur : Mohammaed Quli Qutub Shah (Deewas-e- Mohammed Quli QutubShah), Mulla Wajhi (Sabras & Qutub Mushtari), Ghawwasi (Saiful Mulook- o- Badeeuj Jamaal), Ibne Nishati (Phool Ban).

### III. DEVELOPMENT OF DIFFERENT FORMS OF LITERATURE :

#### a. POETRY :

- i. GHAZAL : (Tareef, Tareekh aur Tanqeed) The following Poets: Mir, Dard, Atish, Ghalib, Momin, Iqbal, Hasrat, Fani, Jigar, Firaq, Nasir Kazmi.
- ii. QASEEDA: (Tareef, Tareekh aur Tanqeed). The following poets: Sauda and Zauq.
- iii. MARSIIYA: (Tareef, Tareekh aur Tanqeed). The following poets: Mir Anees and Mirza Dabir.
- iv. RUBAYEE: (Tareef, Tareekh aur Tanqeed). The following Poets: Anees, Akbar, Amjad and Josh.
- v. MASNAVI: (Tareef, Tareekh aur Tanqeed) Masnavi Sehrul Bayaan (Mir Hasan), Gulzar-e-Naseem (Daya Shanker Naseem), Zehr-e-Ishq (Nawab Mirza Shauq).
- vi. NAZM : (Tareef, Tareekh aur Tanqeed) (Paband Nazm, Nazm-e-Murra, Azad Nazm, Sonnet, Triolet, Haiku and Mahiya) ; Nazeer, Hali, Akbar, Chakbast, Iqbal, Josh, Akhtarul Imaan, Sardar Jafari, Noon Meem Rashid, Meeraji, Farhat Kaifi and Aziz Tamannayee.

#### b. PROSE :

- i. **DASTAN** : (Tareef, Tareekh aur Tanqeed) : Bagh-o-Bahar, Fasana-e-Ajayeb.
- ii. **NOVEL** : (Tareef, Tareekh aur Tanqeed) Fasana-e-Azad (Ratan Nath Sharshar) Taubatun NusooH (Deputy Nazeer Ahamed) Umrao Jan Ada (Mirza Hadi Ruswa) Gowdan (Prem Chand) Ek Chadar Maili si (Rajender Singh Bedi), Tedhi Lakeer (Ismath Chughtayee), Aiwane Ghazal (Jeelani Bano).
- iii. **AFSANA** : (Tareef, Tareekh aur Tanqeed) Premchand (Najaat), Manto (Tobatek Singh), Krishen Chander (Mahalakshmi ka Pul), Quratul Ayeen Hyder (Nazaara Darmiyan Hai).
- iv. **DRAMA** : (Tareef, Tareekh aur Tanqeed) : Amaanat (Indra Sabha). Agha Hashr Kashmiri (Said-e-Hawas), Imtiyaz Ali Taj (Anarkali), Habeeb Tanweer (Agra Bazaar), Mohammed Hasan (Zahaak).
- v. **INSHAIYA** : (Tareef, Tareekh aur Tanqeed) Khaja Hasan Nizami (Sipara-e-Dil), Rasheed Ahmed Siddiqui (Ashufta Bayani Meri) Patras Bukhari (Mazameen-e-Patras).
- vi. **KHUTOOT** : (Tareef, Tareekh aur Tanqeed) Ghalib (Urdu-e-Mualla), Moulana Azad (Ghubar- e-Khatir).
- vii. **SAWANEH NIGARI** : (Tareef, Tareekh aur Tanqeed) : Yadgaar-e-Ghalib, Nazeer Ahmed Ki Kahani Kuch Unki Kuch Meri Zabani.

### IV. LITERARY CRITICISM : (Tareef aur Tareekh)

- i. Tazkeron Mein Tanqeedi Nuqoosh : Nikatush-Shoara, Gulshan-e-Bekhar, Aab-e-Hayat.
- ii. Hali ke Tanqeedi Nazariyat : Muqaddama-e-Sher-o-Shairi.

- iii. Mukhtalif Tanqeedi Dabistaan (Unki Tareef aur Tareekh) : Taassurati Tanqeed, Jamaliyati Tanqeed, Nafsiyati Tanqeed, Marxi Tanqeed aur Saakhtiyati Tanqeed.
- iv. Mumtaz Naqideen : Hali, Shibli, Niyaz Fatehpuri, Waheeduddin Salim, Firaq, Ehtesham Hussain, Kalimuddin Ahmed, Aale-Ahmed Suroor, Mughni Tabassum.

**V. DIFFERENT LITERARY MOVEMENTS : (Their Contribution)**

Fort William College, Delhi College, St. George College, Dabistane Dilli Dabistane Lucknow, Aligarh Tahreek, Jamia Osmania and Darut Tarjuma, Taraqqi Pasand Tahreek, Halqa-e-Arbaab-e-Zauq, Jadeediyat.

**VI. URDU JOURNALISM, TRANSLATION & MASS – MEDIA, Print and Electronic.**

**16. ZOOLOGY (P.G. LEVEL)**

**I. General Concepts:**

1. Levels of structural organization: Unicellular, Multi cellular and Colonial forms, Prokaryotic and Eukaryotic cells, Levels of organization of Tissues, Organs & Systems.
2. Acoelomata, Pseudocoelomata, Coelomata, Proterostomia and Deuterostomia.
3. Concepts of species and Hierarchical taxa, Biological nomenclature, Classical methods of taxonomy of animals.

**II. Non-Chordata:**

1. General characters and classification of invertebrates up to class level.
2. Protozoa - Locomotion, Nutrition and Reproduction in Protozoa, Protozoan diseases of man – Amoebiasis, Malaria, Trypanosomiasis.
3. Porifera - Canal system in Porifera, Skeleton in Porifera, Reproduction in sponges.
4. Coelenterata - Polymorphism, Metagenesis, Coral formation, Obelia.
5. Helminthes - Common Helminthic parasites of Man –Fasciola hepatica, Schistosoma, Taenia solium, Echinococcus granulosus, Ascaris, Ancylostoma, Trichinella – their life cycles, Pathogenescity and clinical significance. Parasitic adaptations in Helminths.
6. Annelida - Excretory system in Annelida, Coelom formation. Coelom and coelomoducts, Metamerism.
7. Arthropoda - Mouthparts of insects, Ommatidium, Useful and harmful insects, Metamorphosis in insects, Apicultur and Sericulture in India, Crustacean larvae, Peripatus.
8. Mollusca - Torsion and Detorsion, Pearl formation.
9. Echinodermata - Echinoderm larvae, Water vascular system.

**III. Chordata:**

1. General characters and classification of chordates up to class level, Origin of chordates, Phylogeny and Affinities of Hemichordata, Retrogressive metamorphosis.
2. Vertebrate integument and its derivatives, Comparative account of Digestive, Respiratory, Circulatory, Excretory and Reproductive systems of vertebrates.

3. Pisciculture in India, Common edible fishes.
4. Origin and evolution of Amphibia, Neoteny or Paedogenesis.
5. Important snakes of India, Identification of Poisonous and non- Poisonous Snakes, Poisonous Apparatus, Dinosaurs.
6. Flight adaptations and Migration in birds. Archeopteryx, Poultry.
7. Adaptive radiation in Mammals, Dentition in Mammals.

#### **IV. Cell Biology:**

1. Prokaryotic and Eukaryotic cell, Plasma membrane-Ultra structure & function.
2. Structure and function of intracellular organelles- Mitochondria, Golgi bodies, Lysosomes, Endoplasmic reticulum, Peroxisomes, Vacuoles, Nucleus.
3. Chromosomes structure & function; Heterochromatin, Euchromatin.
4. Cell division – Mitosis and meiosis, Cell cycle & its regulation.
5. Recombinant DNA technology, Transgenesis & Cloning.
6. Protein synthesis – Genetic code, Initiation, Elongation and Termination.
7. Regulation of gene expression – Lac operon.

#### **V. Genetics:**

1. Mendel's law of inheritance.
2. Gene mapping methods - Linkage-complete and Incomplete linkage, Linkage maps, Recombination, Mapping with molecular markers, somatic cell hybrids.
3. Crossing over - Types (Somatic or Mitotic crossing over and Germinal or Meiotic crossing over).
4. Mutations - Types (Spontaneous and Induced), Causes and detection.
5. Chromosomal aberrations (Deletion, Duplication, Inversion and Translocation, Ploidy and their genetic implications); Autosomal abnormalities (Down's syndrome, Trisomy-13, 18); Sex anomalies (Turner's syndrome, Klinefelter's syndrome, Hermaphroditism).
6. Human genetics - Human karyotyping, Genetic disorders due to mutant genes (Huntington's chorea), Sickle-cell anaemia (SCA), Inborn errors of metabolism- Phenylketonuria, Alkaptonuria.

#### **VI. System and Cell physiology:**

1. Blood and circulation - Blood corpuscles, Haemopoiesis, Plasma function, Blood groups, Haemoglobin, Haemostasis.
2. Cardiovascular system - Neurogenic, Myogenic heart, Cardiac cycle.
3. Respiratory system - Transport of gases, Exchange of gases.
4. Nervous system - Neuron, Conduction of nerve impulse, Synaptic transmission, Neurotransmitters.
5. Muscle - Ultra structure of skeletal muscle, Mechanism of muscle contraction.
6. Sense organs - Eye and Ear.
7. Excretory system - Structure & function of mammalian Kidney and Nephron, Micturition.
8. Osmoregulation - Osmoregulation in Aquatic & Terrestrial animals.
9. Digestive system - Digestion, absorption, assimilation and egestion.

10. Endocrinology and Reproduction - Endocrine glands, Types of hormones & Mechanism of hormonal action, Hormonal regulation of reproduction in mammals.
11. Outline classification of organic compounds (Carbohydrates, Proteins and Lipids).
12. Glycolysis (EMP), Krebs's cycle (TCA CYCLE), Electron transport system (Oxidative phosphorylation), Pentose phosphate pathway, Gluconeogenesis.

**VII. Evolution:**

1. Origin of life - Theories and Evidences of organic evolution, The modern synthetic theory.
2. Population genetics - (Gene pool, Gene frequency), Hardy weinberg's law.
3. Isolation and speciation.
4. Evolution of Man.
5. Zoogeographical realms of the world.

**VIII. Developmental Biology:**

1. Spermatogenesis and Oogenesis.
2. Fertilization, Cleavage, Gastrulation, Formation of germ layers, Parthenogenesis.
3. Formation and Function of Foetal membranes.
4. Types of placenta.
5. Development of Frog and Chick.

**IX. Histology:**

1. Histology of mammalian tissues and organs - Epithelial, connective, blood, bone, cartilage, skin, stomach, intestine, liver, pancreas, kidney, testis and ovary.

**X. Ecology:**

1. Concepts of Ecosystem.
2. Biogeochemical cycles (Carbon, Nitrogen and Phosphorous).
3. Influence of environmental factors on animals, Energy flow in Ecosystem, Food chains, Food web and Tropic levels.
4. Animal Associations (Neutralism, Mutualism, Symbiosis, Commensalism, Parasitism, Predation and Competition).
5. Ecological succession.
6. Environmental pollution- Air, water, land, noise, radioactive, thermal, Effects of pollution on ecosystem, Prevention of pollution.
7. Wildlife in India- Conservation, Chipco movement.
8. Biodiversity- Economic significance, Conservation, Hot spots of India.

**XI. Immunology:**

1. Cells of the immune system- Lymphoid cells, Mono nuclear cells, Granulocytic cells, Mast cells.
2. Organs of the immune system- Primary and Secondary lymphoid organs, Lymphatic system.
3. Antigens- Antigenic determinants or Epitopes, Immunogenicity, Haptens.
4. Humoral immunity - Immunoglobulin (Fine structure of immunoglobulin and Immunoglobulin classes).
5. Innate (Non-specific immunity) – Anatomical barriers, Phagocytosis, Natural killer cells (NK cells), Interferons.
6. Cell mediated immunity – Mechanism of cell mediated immunity.

## ANNEXURE – IV

### INSTRUCTIONS TO CANDIDATES:

#### A) GENERAL INSTRUCTIONS TO CANDIDATES

- 1) Candidates are directed to follow the Commission's Website (<https://www.tspsc.gov.in>) regularly to know the latest developments regarding the Recruitment, dates of Examination, calling of candidates for verification of Certificates/ Medical Boards, Results etc.
- 2) The Hall Ticket must be presented for entry into the examination hall alongwith one original valid Photo identification card issued by Government i.e., Passport, Pan Card, Voter ID, Aadhaar Card, Government Employee ID or Driving License etc., without fail.
- 3) Candidates are strictly not allowed inside the Examination centre after closing the gate.
- 4) **EDIT OPTION TO THE CANDIDATES:** The applicants should follow the TSPSC website regularly to utilize the edit option to rectify the mistakes viz., Biodata particulars/Data corrections / Omissions etc., in the application, if the facility is given by the Commission. If the edit option facility is not utilized by the candidates, the TSPSC is not responsible and the data already available is treated as final. After the due date, Data corrections through Online/Paper representations or Corrections on the Nominal Rolls in the examination hall will not be accepted under any circumstances. No correspondence will be entertained in this matter.
- 5) There will be a common examination for Paper-I i.e., General Studies as decided by the Commission, whenever required.
- 6) The candidates must note that his/her admission to the examination is strictly provisional. The mere fact that an Admission to the examination does not imply that his/her candidature has been finally cleared by the Commission or that the entries made by the candidate in his/her application have been accepted by the Commission as true and correct. The candidates have to be found suitable after verification of original certificates; and other eligibility criteria. The Applicants have to upload his/her scanned recent colour passport photo and signature to the Application Form. Failure to produce the same photograph, if required, at the time of verification, may lead to disqualification.
- 7) The candidates are not allowed to bring any Electronic devices such as Smart / Mobile phones, Calculators, tablets, iPad, Bluetooth, pagers, watches to examination centre. Loaning and interchanging of articles among the candidates is not permitted in the examination hall and any form of malpractice will not be permitted in the exam hall.
- 8) The candidates are expected to behave in an orderly and disciplined manner while writing the examination. If any candidate takes away Answer Sheet of OMR based examination, the candidature will be rejected. In case of impersonation/ disorder/ rowdy behaviour during Examination, cases shall be booked in the Police Station concerned, apart from disqualifying his /her candidature.
- 9) Candidates trying to use unfair means shall be disqualified from the selection. No correspondence whatsoever will be entertained from the candidates.
- 10) The Commission is also empowered to invoke the penal provisions of the T.S. Public Examinations (Prevention of Malpractices and Unfair means) Act, 1997 (Act No.25/1997) for matters connected therewith or incidental thereto and as per the Rules of Procedure of TSPSC published in Telangana Gazette No: 60 dated 28/12/2015 in respect of this Notification.
- 11) (i) The candidates who are totally blind are allowed to write the examination with the help of scribe provided by TSPSC and 20 minutes extra time is permitted to them per hour.  
 (ii) Scribe will be provided by TSPSC to those candidates who do not have both the upper limbs for Orthopedically Handicapped. However, no extra time will be granted to them.  
 (iii) Scribe will be provided to the above category of candidates who applied for scribe facility in the online application only.  
 (iv) An extra time of 20 minutes per hour is also permitted for the candidates with locomotor disability and CEREBRAL PALSY where dominant (writing) extremity is affected for the extent slowing the performance of function (**Minimum of 40% impairment**). Scribe is allowed to such candidates also.  
 (v) The scribe should be from an academic discipline other than that of the candidate and the academic qualification of the scribe should be one grade lower than the stipulated eligibility criteria.  
 (vi) The candidate as well as the scribe will have to give a suitable undertaking confirming the rules applicable.

## **B) INSTRUCTIONS TO CANDIDATES REGARDING OMR BASED EXAMINATION**

- 1) The candidates have to report to the examination venue at least 30 minutes before the commencement of examination, to record their Photo Image/thumb impression on Biometric system.
- 2) The candidate should satisfy the Invigilator of his identity with reference to the Signature and Photograph available on the Nominal Roll and Hall Ticket.
- 3) The candidates should go through the instructions given on the cover page of test booklet and OMR Answer Sheet which will be provided to him/her in the examination hall and carefully write his/her Hall Ticket Number, Subject / Paper Code, Question Booklet Number, Name of the Examination Centre etc., on the OMR Answer Sheet. The candidates have to USE BALL POINT PEN (BLUE/BLACK) ONLY to fill up relevant columns on the Answer Sheet including MARKING OF THE ANSWERS. Bubbling by Pencil / Ink Pen /Gel Pen is not permitted in the examination.
- 4) The candidate must write all the relevant columns in the Answer sheet and also encode (bubble) correctly such as Hall Ticket Number, Question Booklet Series and Paper Code on the OMR Answer Sheet carefully and to Sign in the space provided for on Side-1 of the Answer Sheet and ensure the Signature of the Invigilator, etc., on it, failing which the Answer sheet will be rejected. Use of whitener / eraser / chalk-powder etc., is strictly prohibited on the OMR Answer sheet/ Question Paper.
- 5) Candidate should encode the Hall-Ticket Number and Paper Code first carefully on OMR Answer Sheet. After receiving the Question Paper only, candidate should verify and encode Question Booklet Number on the OMR Answer Sheet.
- 6) OMR Answer sheets cannot be replaced under any circumstances in case of wrong bubbling.
- 7) If there is any defect in the Test Booklet or OMR Answer Sheet, please ask the invigilator for replacement immediately.
- 8) The OMR Answer sheets are to be scanned (valued) with Optical Mark Reader. The Digital copy of OMR Answer Sheets will be made available on the Commission's website immediately after completion of the image scanning.
- 9) No candidate should leave the examination hall till expiry of fulltime. After writing the examination the candidate has to handover the OMR Answer sheet to the invigilator in the examination hall. If any candidate takes away the OMR Answer sheet, his/her candidature will be rejected.
- 10) The Commission would be analyzing the responses of a candidate with other appeared candidates to detect patterns of similarity. If it is suspected that the responses have been shared and the scores obtained are not genuine/ valid, the Commission will invalidate the OMR Answer Sheet and cancel his/ her candidature.

## **C) INSTRUCTIONS FOR CANDIDATES REGARDING CBRT EXAMINATION**

- 1) Candidates shall report at the venue one hour (60 minutes) before the Commencement of Examination as the candidates have to undergo certain procedural formalities required for CBRT examination.
- 2) Date and Time of the Examination are mentioned in the Hall-Ticket
- 3) The examination link with the login screen will already be available on your system. Please inform the invigilator if this is not the case.
- 4) 10 minutes prior to the exam, you'll be prompted to login. Please type the Login ID (H T No.) and the Password (Password for Candidate will be given on exam day) to proceed further.
- 5) Invigilator will announce the password at 09.50 AM and 02.20 PM in cases if Examination is at 10:00 A.M and 2:30 P.M respectively.
- 6) Copying or noting down questions and/or options is not allowed. Severe action will be taken if any candidate is found noting down the questions and/or options.
- 7) After logging in, the following will be displayed on your Computer screen:
  - Profile Information - Check the details & click on "I Confirm" or "I Deny".
  - Detailed exam instructions - Please read and understand thoroughly.
  - Please click on the "I am ready to Begin" button.
- 8) After reading the instructions, you have to use the mouse to answer the multiple-choice type questions having FOUR alternative answer choices.
- 9) To answer any numerical answer type question, you need to use the virtual numeric key pad and the mouse.
- 10) On the online exam question screen, the timer will display the balance time remaining for the completion of exam.
- 11) The question numbers are colour coded and of different shapes based on the process of recording your response:
  - White (Square) - For un-attempted questions.
  - Red (Inverted Pentagon) - For unanswered questions.
  - Green (Pentagon) - For attempted questions.

- Violet (Circle) - Question marked by candidate for review to be answered later.
  - Violet (Circle with a Tick mark) - Question answered but marked by candidate for review.
- 12) After answering a question, click the SAVE & NEXT button to save your response and move onto the next question.
  - 13) Click on Mark for Review & NEXT to mark your question for review, and then go to the next question.
  - 14) To clear any answer chosen for a particular question, please click on the CLEARRESPONSE button.
  - 15) A summary of each section, (i.e. questions answered, not answered, marked for review) is available for each section. You have to place the cursor over the section name for this summary.
  - 16) In case you wish to view a larger font size, please inform the Invigilator. On the Invigilator's confirmation, click on the font size you wish to select. The font size will be visible on the top.
  - 17) You may view INSTRUCTIONS at any point of time during exam, by clicking on the INSTRUCTIONS button on your screen.
  - 18) The SUBMIT button will be activated after 150 Minutes. It will continue for an additional 50 Minutes for PH candidates eligible for compensatory time. Please keep checking the timer on your screen.
  - 19) In case of automatic or emergency log out, all your attempted questions and their responses will be saved. And also, the exam will start from the time where it had stopped.
  - 20) You will be provided a blank sheet for rough work. Do write your Login ID and Password on it. Please ensure that you return it to the invigilator at the end of the exam after tearing ONLY the password from it.
  - 21) Please don't touch the key board as your exam ID will get locked. If your ID gets locked, please inform your invigilator who will help in unlocking your ID and then you can continue with the exam.
  - 22) Please inform the invigilator in case of any technical issues.
  - 23) Please do not talk to or disturb other candidates.
  - 24) In case you are carrying articles other than the admit card, photo identity proof and pen, please leave them outside the exam room.
  - 25) These are model instructions and candidates have to follow latest instructions issued along with Hall tickets.

**ANNEXURE-V****LIST OF SCHEDULED CASTES AND SCHEDULED TRIBES**

(G.O. MS. NO. 5 Scheduled Castes Development (POA.A2) Dept., Dt. 08/08/2015 read with G.O. Ms. No. 11, Scheduled Castes Development (POA.A2) Dept., Dt. 17/09/2014 and G.O. Ms. No. 2 Scheduled Castes Development (POA.A2) Dept., Dt. 22.01.2015)

**LIST OF SCHEDULED CASTES**

1. Adi Andhra
2. Adi Dravida
3. Anamuk
4. Aray Mala
5. Arundhatiya
6. Arwa Mala
7. Bariki
8. Bavuri
9. Beda (Budga) Jangam
10. Bindla
11. Byagara, Byagari
12. Chachati
13. Chalavadi
14. Chamar, Mochi, Muchi, Chamar-Ravidas, Chamar- Rohidas
15. Chambhar
16. Chandala
17. Dakkal, Dokkalwar
18. Dandasi
19. Dhor
20. Dom, Dombara, Paidi, Pano
21. Ellamalawar, Yellammalawandlu
22. Ghasi, Haddi, Relli, Chanchandi
23. Godari
24. Gosangi
25. Holey a
26. Holey a Dasari
27. Jaggali
28. Jambuvulu
29. Kolupulvandlu, Pambada, Pambanda, Pambala
30. Madasi Kuruva, Madari Kuruva
31. Madiga
32. Madiga Dasu, Mashteen
33. Mahar
34. Mala, Mala Ayawaru
35. Mala Dasari
36. Mala Dasu
37. Mala Hannai
38. Malajangam
39. Mala Masti
40. Mala Sale, Nethani
41. Mala Sanyasi
42. Mang
43. Mang Garodi
44. Manne
45. Mashti
46. Matangi
47. Mehtar
48. Mitha Ayyalvar
49. Mundala
50. Paky, Moti, Thoti
51. Pamidi
52. Panchama, Pariah
53. Relli
54. Samagara
55. Samban
56. Sapru
57. Sindhollu, Chindollu
58. Yatala
59. Valluvan

**LIST OF SCHEDULED TRIBES**

1. Andh, Sadhu Andh
2. Bagata
3. Bhil
4. Chenchu
5. Gadabas, Bodo Gadaba, Gutob Gadaba, Kallayi Gadaba, Parangi Gadaba, Kathera Gadaba, Kapu Gadaba
6. Gond, Naikpod, Rajgond, Koitur
7. Goudu (in the Agency tracts)
8. Hill Reddis
9. Jatapus
10. Kammara
11. Kattunayakan
12. Kolam, Kolawar
13. Konda Dhoras, Kubi
14. Konda Kapus
15. Kondareddis
16. Kondhs, Kodi, Kodhu, Desaya Kondhs, Dongria Kondhs, Kuttiya Kondhs, Tikiria Kondhs, Yenity Kondhs, Kuvinga
17. Kotia, Benthoriya, Bartika, Dulia, Holya, Sanrona, Sidhopaiko
18. Koya, Doli Koya, Gutta Koya, Kammara Koya, Musara Koya, Oddi Koya, Pattidi Koya, Rajah, Rasha Koya, Lingadhari Koya (ordinary), Kottu Koya, Bhine Koya, Rajkoya
19. Kulia
20. Manna Dhora
21. Mukha Dhora, Nooka Dhora
22. Nayaks (in the Agency tracts)
23. Pardhan
24. Porja, Parangiperja
25. Reddi Dhoras
26. Rona, Rena
27. Savaras, Kapu Savaras, Maliya Savaras, Khutto Savaras
28. Sugalis, Lambadis, Banjara
29. Thoti (in Adilabad, Hyderabad, Karimnagar, Khammam, Mahbubnagar, Medak, Nalgonda, Nizamabad and Warangal districts)
30. Yenadis, Chella Yenadi, Kappala Yenadi, Manchi Yenadi, Reddi Yenadi
31. Yerukulas, Koracha, Dabba Yerukula, Kunchapuri Yerukula, Uppu Yerukula
32. Nakkala, Kurvikaran.

**LIST OF SOCIALLY AND EDUCATIONALLY BACKWARD CLASSES**

As per G.O. Ms. No. 16 Backward Classes Welfare (OP) Department, Dated: 11.03.2015 and read with G.O. MS.No. 34, Backward Classes Welfare (OP) Department, Dated: 08/10/2015, G.O. Ms. No. 4 Backward Classes Welfare (OP) Department, Dated: 30/01/2016, G.O. Ms. No. 3 Backward Classes Welfare (B) Department, Dated: 09-09-2020

**STATE LIST OF BCs  
(List of Backward Classes of Telangana State)  
GROUP-A**

**(Aboriginal Tribes, Vimuktha Jathis, Nomadic and Semi-Nomadic Tribes etc.)**

- 1 Agnikulakshatriya, Palli, Vadabaliya, Bestha, Jalari, Gangavar, Gangaputra, Goondla, Vanyakulakshatriya (Vannekapu, Vannerreddi, Pallikapu, Pallireddi) Neyyala, Pattapu.
- 2 Balasanthu, Bahurupi
- 3 \*[Bandara]
- 4 Budabukkala
- 5 Rajaka (Chakali, Vannar)
- 6 Dasari (formerly engaged in Bikshatana i.e., Beggary)
- 7 Dommara
- 8 Gangiredlavaru
- 9 Jangam (whose traditional occupation is begging)
- 10 Jogi
- 11 Katipapala
- 12 \*[Korcha]
- 13 Lambada or Banjara in Telangana area (deleted and included in ST list vide. G.O. Ms. No. 149, SW, Dt. 03.05.1978)
- 14 Medari or Mahendra
- 15 Mondivaru, Mondibanda, Banda

- 16 Nayi-Brahmin/Nayee-Brahmin (Mangali), Mangala and Bhajantri
- 17 Nakkala (deleted vide. G.O.Ms.No.21, BCW (C2) Dept., Dt.20.06.2011, since it is included in the list of Scheduled Tribes at Sl.No.34 vide. Scheduled Castes and Scheduled Tribes Order (Amendment) Act, 2002 (Central Act No.10 of 2003)
- 18 Vamsha Raj / Pitchiguntla
- 19 Pamula
- 20 Pardhi (Nirshikari)
- 21 Pambala
- 22 Peddammavandlu, Devaravandlu, Yellammavandlu, Mutyalammavandlu, Dammali / Dammala / Dammula / Damala
- 23 Veeramushti (Nettikotala), Veerabhadreeya
- 24 Valmiki Boya (Boya, Bedar, Kirataka, Nishadi, Yellapi, Pedda Boya), Talayari, Chunduvallu (Yellapi and Yellapu are one and the same as clarified vide. G.O.Ms.No.61, BCW (M1) Dept., Dt.05.12.1996)
- 25 Yerukalas in Telangana area (deleted and included at Sl.No.31 in the list of STs)
- 26 Gudala
- 27 Kanjara – Bhatta
- 28 \*[Kalinga]
- 29 Kepmare or Reddika
- 30 Mondepatta
- 31 Nokkar
- 32 Pariki Muggula
- 33 Yata
- 34 Chopemari
- 35 Kaikadi
- 36 Joshinandiwalas
- 37 Odde (Oddilu, Vaddi, Vaddelu), Vaddera, Vaddabhovi, Vadiyaraj, Waddera
- 38 Mandula
- 39 Mehtar (Muslim)
- 40 Kunapuli
- 41 Patra
- 42 \*[Kurakula]
- 43 \*[Pondara]
- 44 \*[Samanthula /Samantha/ Sountia / Sauntia]
- 45 Pala-Ekari, Ekila, Vyakula, Ekiri, Nayanivaru, Palegaru, Tolagari, Kavali (area confined to Hyderabad and Rangareddy Districts only)
- 46 Rajannala, Rajannalu (area confined to Karimnagar, Warangal, Nizamabad and Adilabad Districts only)
- 47 Bukka Ayyavars
- 48 Gotrala
- 49 Kasikapadi / Kasikapudi (area confined to Hyderabad, Rangareddy, Nizamabad, Mahaboobnagar and Adilabad Districts only)
- 50 Siddula
- 51 Sikligar/ Saikalgar
- 52 Pooala (included vide. G.O.Ms.No.16, BCW(C2) Dept., Dt.19.02.2009 by deleting from Sl.No.24 under Group-D)
- 53 \*[Aasadula / Asadula]
- 54 \*[Keuta / Kevuto / Keviti]
- 55 Orphan and Destitute Children who have lost their parents before reaching the age of ten and are destitute; and who have nobody else to take care of them either by law or custom; and also who are admitted into any of the schools or orphanages run by the Government or recognised by the Government.
- 56 Addapuvaru
- 57 Bagothula/ Bhagavathula
- 58 Bail Kammara/ Ghisadi/ Gadiya Lohar
- 59 Enooti/ Yenativallu
- 60 Ganjikuti/ Ganjikutivaru
- 61 Gouda Jeti
- 62 Kakipadagala
- 63 Patamvaru/ Masaiahlu
- 64 Odd/ Od/ Oad
- 65 Sonnayila/ Sannayila/ Sannayollu
- 66 Sri Kshatriya Ramajogi/ Ramajogi/ Ramajogula
- 67 Theracheerala/ Telsoori/ Baikani
- 68 Tholubommalatavaru/ Boppala

**GROUP-B**  
**(Vocational Groups)**

- 1 \*[Achukatlavandlu]
- 2 Aryakshatriya, Chittari, Giniyar, Chitrakara, Nakhas
- 3 Devanga
- 4 Goud [Ediga, Gouda (Gamalla), Kalalee, Gounda, **[\*Settibalija of Visakhapatnam, East Godavari, West Godavari and Krishna districts]** and Srisayana (Segidi)
- 5 Dudekula, Laddaf, Pinjari or Noorbash
- 6 Gandla, Telikula, Devathilakula
- 7 Jandra
- 8 Kummara or Kulala, Salivahana
- 9 Karikalabhakthulu, Kaikolan or Kaikala (Sengundam or Sengunther)
- 10 Karnabhakthulu
- 11 Kuruba or Kuruma
- 12 \*[Nagavaddilu]
- 13 Neelakanthi
- 14 Patkar (Khatri)
- 15 Perika (Perika Balija, Puragiri kshatriya)
- 16 Nessi or Kurni
- 17 Padmasali (Sali, Salivan, Pattusali, Senapathulu, Thogata Sali)
- 18 Srisayana (Segidi) (deleted vide. G.O.Ms.No.63, BCW (M1) Dept., Dt.11.12.1996 and added to Sl.No.4 of Group-B)
- 19 Swakulasali
- 20 Thogata, Thogati or Thogataveerakshatriya
- 21 Viswabrahmin (Ausula, Kamsali, Kammari, Kanchari, Vadla or Vadra or Vadrangi and Silpis), Viswakarma
- 22 \*[Kunchiti / Vakkaliga / Vakkaligara / Kunchitiga]
- 23 Lodh/ Lodhi/ Lodha (area confined to Hyderabad, Rangareddy, Khammam and Adilabad Districts only)
- 24 Bondili
- 25 Are Marathi, Maratha (Non-Brahmins), Arakalies and Surabhi Natakavallu
- 26 Neeli (included vide. G.O.Ms.No. 43, BCW (C2) Dept., Dt.07.08.2008 by deleting from Group D at Sl.No.22)
- 27 Budubunjala / Bhunjwa / Bhadbhunja (area confined to Hyderabad and Rangareddy Districts only)
- 28 \*[Gudia / Gudiya]

**GROUP-C**

Scheduled Castes converts to Christianity and their progeny

**GROUP-D**  
**(Other Classes)**

- 1 \*[Agaru]
- 2 Arekatika, Katika, Are-Suryavamshi
- 3 \*[Atagara]
- 4 Bhatraju
- 5 Chippolu (Mera)
- 6 \*[Gavara]
- 7 \*[Godaba]
- 8 Hatkar
- 9 \*[Jakkala]
- 10 Jingar
- 11 \*[Kandra]
- 12 Koshti
- 13 Kachi
- 14 Surya Balija (Kalavanthula), Ganika
- 15 Krishnabalija (Dasari, Bukka)
- 16 \*[Koppulavelamas]
- 17 Mathura
- 18 Mali (Bare, Barai, Marar and Tamboli)
- 19 Mudiraj, Mutrasi, Tenugollu
- 20 Munnurukapu
- 21 \*[Nagavasam (Nagavamsa)]
- 22 Nelli (deleted vide. G.O.Ms.No.43, BCW(C2) Dept., Dt.07.08.2008 and added at Sl.No.26 in Group 'B')
- 23 \*[Polinati Velamas of Srikakulam and Visakhapatnam districts]

- 24 Poosala caste (deleted vide. G.O.Ms.No.16, BCW(C2) Dept., Dt.19.02.2009 and included at S.No.52 under Group-A)
- 25 Passi
- 26 Rangarez or Bhavasara Kshatriya
- 27 Sadhuchetty
- 28 Satani (Chattadasrivaishnava)
- 29 Tammali (Non-Brahmins) (Shudra caste) whose traditional occupation is playing musical instruments, vending of flowers and giving assistance in temple service but not Shivarchakars
- 30 \*[Turupukapus or Gajulakapus]
- 31 Uppara or Sagara
- 32 Vanjara (Vanjari)
- 33 Yadava (Golla)
- 34 Are, Arevallu and Arollu
- 35 \*[Sadara / Sadaru]
- 36 \*[Arava]
- 37 Ayyaraka (area confined to Khammam and Warangal Districts only)
- 38 Nagaralu (area confined to Hyderabad and Rangareddy Districts only)
- 39 Aghamudian, Aghamudiar, Agamudivellalar and Agamudimudaliar (including Thuluva Vellalas) (area confined to Hyderabad and Rangareddy Districts only)
- 40 \*[Beri Vysya / Beri Chetty]
- 41 \*[Atirasa]
- 42 Sondi / Sundi
- 43 Varala
- 44 Sistakaranam
- 45 Lakkamarikapu
- 46 Veerashaiva Lingayat / Lingabalija
- 47 Kurmi
- 48 Aheer/ Aheer Yadav
- 49 Govili/Govlii/ Gouli/Gavli
- 50 Kulla Kadagi/ Kulle Kadigi/ Chittepu
- 51 Sarollu/Soma Vamsha Kshatriya

#### **GROUP-E**

#### **(Socially and Educationally Backward Classes of Muslims)**

**(Subject to outcome of Civil Appeal No(s).2628-2637/2010 etc., pending before the Hon'ble Supreme Court of India)**

- 1 Achchukattalavandlu, Singali, Singamvallu, Achchupanivallu, Achchukattuvaru, Achukatlavandlu
- 2 Attar Saibulu, Attarollu
- 3 Dhobi Muslim/ Muslim Dhobi/ Dhobi Musalman, Turka Chakla or Turka Sakala, Turaka Chakali, Tulukka Vannan, Tsakalas, Sakalas or Chakalas, Muslim Rajakas
- 4 Faqir, Fhakhir Budbudki, Ghanti Fhakhir, Ghanta Fhakhiru, Turaka Budbudki, Darvesh, Fakeer
- 5 Garadi Muslim, Garadi Saibulu, Pamulavallu, Kani-Kattuvallu, Garadollu, Garadiga
- 6 Gosangi Muslim, Phakeer Sayebulu
- 7 Guddi Eluguvallu, Elugu Bantuvallu, Musalman Keelu Gurrallavallu
- 8 Hajam, Nai, Nai Muslim, Navid
- 9 Labbi, Labbai, Labbon, Labba
- 10 Pakeerla, Borewale, Deera Phakirlu, Bonthala
- 11 Qureshi, Kureshi/ Khureshi, Khasab, Marati Khasab, Muslim Katika, Khatik Muslim
- 12 Shaik/ Sheikh
- 13 Siddi, Yaba, Habshi, Jasi
- 14 Turaka Kasha, Kakkukotte Zinka Saibulu, Chakkitakanevale, Terugadu Gontalavaru, Thirugatigantla, Rollaku Kakku Kottevaru, Pattar Phodulu, Chakketakare, Thuraka Kasha

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\* omitted vide G.O Ms.No.3, BCW(OP) Dept., Dated:14.08.2014

- N.B.:1) The above list is for information and subject to confirmation with reference to G.O.Ms.No.58, SW(J) Department, dated 12.05.1997 and time to time orders.
- 2) On account of any reason whatsoever in case of any doubt/ dispute arising in the matter of community status (SC/ST/BC/OC) of any candidate, subject to satisfaction with regard to relevant Rules and Regulations in force the decision of the Commission shall be final in all such cases.

**ANNEXURE – VI**

**List of recognized sports disciplines for Two Percent (2%) reservation in Direct Recruitment in Government Departments / Govt. Institutions as per G.O. Ms. No. 74, Youth Advancement, Tourism & Culture (Sports) Department Dated:09-08-2012**

- (1) FOOTBALL
- (2) HOCKEY
- (3) VOLLEYBALL
- (4) HANDBALL
- (5) BASKET BALL
- (6) TENNIS
- (7) TABLE TENNIS
- (8) SHUTTLE BADMINTON
- (9) KABBADI
- (10) ATHLETICS
- (11) SWIMMING
- (12) GYMNASTICS
- (13) WEIGHTLIFTING
- (14) WRESTLING
- (15) BOXING
- (16) CYCLING
- (17) ROWING
- (18) SHOOTING
- (19) FENCING
- (20) ROLLER SKATING
- (21) SAILING / YATCHING
- (22) ARCHERY
- (23) CRICKET
- (24) CHESS
- (25) KHO-KHO
- (26) JUDO
- (27) TEAKWANDO
- (28) SOFTBALL
- (29) BODY BUILDING (Uniform Services like Police, Excise etc).

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