



HARYANA PUBLIC SERVICE COMMISSION

BAYS NO. 1-10, BLOCK-B, SECTOR - 4, PANCHKULA

Advertisement No. 23 / 2026

Date of Publication: 05.02.2026

The Commission invites online applications from eligible candidates for the **posts of Post Graduate Teachers (PGTs) in the subject of Computer Science for Rest of Haryana Cadre and Mewat Cadre.**

For filling the application form, the candidates are required to follow the four stage process i.e. (i) Registration of the candidate, (ii) Filling up particulars in the application form, (iii) Payment of fee and (iv) Final submission of the signed application form. The steps to be followed by the candidate are summarized as under:-

1. Candidates will have to compulsorily register online by visiting <http://hpsc.gov.in>, for submitting their online application form. Detailed instructions for filling up online applications are available on the above mentioned website. No other means / mode of submission of application will be accepted.
2. Candidates can register online by using their Mobile Number & Aadhar Number. In case the data in Aadhar Card is not updated the candidate should apply through Mobile Number.
3. After registration, a login ID would be created.
4. The candidates can apply against the advertisement, as per their qualifications, by using their login ID.
5. In case the candidates are applying using their Aadhar Number, their data would be verified from the relevant site. Hence the candidates should ensure that the data of their Aadhar Card is updated.
6. Aadhar Number/Virtual ID (VID) is required for Aadhar authentication during Biometric attendance.
7. After filling up the application form, the candidates would have to submit the same by making payment of requisite fee.

8. After making payment, the candidate must take a printout of his/her application form and upload the same online after duly checking & signing it.
9. In case a candidate does not upload a signed copy of downloaded application form **online**, his/her application would be considered incomplete, and candidature of such candidate would be automatically rejected.
10. The candidate should carefully enter his/her particulars and details in the online application form because after submission of the online application form, no change in any particular/detail would be allowed.

For more information, log on to <http://hpse.gov.in>

Dated: 05.02.2026

Malhotra 5/2/2026
Secretary
Haryana Public Service Commission
Panchkula



HARYANA PUBLIC SERVICE COMMISSION

BAYS NO. 1-10, BLOCK-B, SECTOR - 4, PANCHKULA

Advertisement No. 23 / 2026

Date of Publication: 05.02.2026

1. NAME OF POST AND CATEGORY WISE BIFURCATION OF THE POSTS:

The Commission invites online applications from eligible candidates for the posts of Post Graduate Teachers (PGTs) in the subject of Computer Science for Rest of Haryana Cadre and Mewat Cadre.

Category wise break-up of the posts is as under:-

PGT - Computer Science								33% Horizontal Reservation for Female Candidates					ESM				PwBD			
Sl. No.	Cadre	Total Posts	Gen	SC	BC-A	BC-B	EWS	Gen	SC	BC-A	BC-B	GEN	SC	BCA	BCB	VH	OII	III	IDU/MD	
1.	ROII	1594	859	327	163	82	163	371	108	54	27	45	16	08	04	17	17	16	09	
2.	Mewat	78	43	15	08	04	08	14	05	03	01	02	01	00	00	01	01	01	00	

Note: The bifurcation of the posts of SC category into DSC / OSC will be announced later on.

- a) Opening date for submission of online applications: 16.02.2026
- b) Closing date for the submission of online applications: 09.03.2026 upto 05:00 PM
- c) Closing date for deposit of Fee: 09.03.2026 upto 05:00 PM.

For more information, log on to <http://hpse.gov.in>

Date: 05.02.2026

Umesh 5/2/2026
Secretary
Haryana Public Service Commission,
Panchkula

Advertisement No. 23 / 2026

PART - A

Name of the posts: **Post Graduate Teachers (PGTs) in the subject of Computer Science for Rest of Haryana Cadre and Mewat Cadre.**

Item (s)	Timeline
Date of publication	05.02.2026
Opening date for submission of online applications (Opening Date)	16.02.2026
Closing date for submission of online applications (Closing Date)	09.03.2026 (upto 05:00 PM)

(The Commission's website: <http://hpse.gov.in>)

IMPORTANT**1. NAME OF POST AND CATEGORY WISE BIFURCATION OF THE POSTS:-**

Haryana Public Service Commission invites online application forms for recruitment for the posts of Post Graduate Teachers (PGTs) in the subject of Computer Science for Rest of Haryana Cadre and Mewat Cadre.

Category wise break-up of the posts are as under:-

PGT - Computer Science							33% Horizontal Reservation for Female Candidate					ESM				PwBD			
Sr. No.	Cadre	Total Posts	Gen	SC	BC-A	BC-B	EWS	Gen	SC	BCA	BC-B	GEN	SC	BCA	BCB	VH	OH	EH	ID/ MD
1.	ROH	1594	859	327	163	82	163	237	108	54	27	45	16	08	04	17	17	16	09
2.	Mewat	78	43	15	08	04	08	14	05	03	01	02	01	00	00	01	01	01	00

Note 1. Abbreviations used:-

Gen/ UR - General/Unreserved,
 DSC of Hry. - Deprived Scheduled Castes of Haryana,
 OSC of Hry. - Other Scheduled Castes of Haryana,
 BC(A) of Hry. - Backward Classes (A) of Haryana,
 BC(B) of Hry. - Backward Classes (B) of Haryana,
 EWS of Hry. - Economically Weaker Sections of Haryana,
 ESM of Hry. - Ex-servicemen of Haryana,
 PwBD of Hry. - Persons with Benchmark Disabilities of Haryana.
 VH - Visual Impairment

OH	- Ortho
HH	- Hard of Hearing
ID/MD	- Intellectual Disability/Multiple Disability

Note 2. The number of posts given above against each category are liable to variation to any extent and the same will be notified on the HPSC website.

Note 3. As per Service Rules [Haryana State Education School Cadre (Group-B) Service Rules 2012 and Mewat District School Education (Group-B) Service Rules 2012] dated 11.04.2012, alongwith amendment dated 06.06.2012, minimum thirty three percent posts in each category i.e. General/Open Competition (OC), Scheduled Caste (SC), Backward Class (BC), Ex-service man (ESM) and differently abled shall be reserved for women and this reservation shall be horizontal.

Note 4. In case of subjects where posts are advertised both in Rest of Haryana Cadre and Mewat Cadre, the candidates are required to give their preference in respect of Cadre i.e. Rest of Haryana / Mewat.

Note 5. In case a candidate fails to give her / his Cadre option then Rest of Haryana Cadre will be treated as her / his 1st preference and Mewat Cadre as her / his 2nd preference.

Note 6. The decision of the Commission with regard to the eligibility or otherwise of a candidate for admission to the examination shall be final.

2. ESSENTIAL QUALIFICATIONS:

The essential qualification is as per Service Rules [Haryana State Education School Cadre (Group-B) Service Rules 2012 and Mewat District School Education (Group-B) Service Rules 2012] dated 11.04.2012 as amended from time to time.

PGT Computer Science:-

- (i) M.Sc. Computer Science (Regular two year course) / MCA (Regular three year course) / BE/B.Tech. Computer Science / Computer Engg. / IT (Regular course) with 55% aggregate marks from a recognized university;
- (ii) Matric with Hindi / Sanskrit or 10+2/B.A./M.A. with Hindi as one of the subject.
- (iii) Certificate of having qualified Haryana teachers Eligibility Test (HTET) /School Teachers Eligibility Test (STET).
- (iv) Consistent good academic record.

NOTE:

- (i) As per Service Rules [Haryana State Education School Cadre (Group-B) Service Rules 2012 and Mewat District School Education (Group-B) Service Rules 2012] dated 11.04.2012 and amendment dated 22.03.2018, consistent good academic record means the candidate having 50% marks after taking average of



any three examination from 10th / 12th / Graduation / Post Graduation as the case may be. However, the candidate must have atleast 55% marks in Post-Graduation / Graduation as the case may be.

- (ii) As per Service Rules [Haryana State Education School Cadre (Group-B) Service Rules 2012 and Mewat District School Education (Group-B) Service Rules 2012] dated 11.04.2012, Professional Training Diploma or Certificate awarded by any State, Board or University other than Haryana Education Department will be recognized only if this Degree or Diploma or Certificate has been recognized by the Haryana Government.
- (iii) As per Service Rules [Haryana State Education School Cadre (Group-B) Service Rules 2012 and Mewat District School Education (Group-B) Service Rules 2012] dated 11.04.2012, Relaxation upto 5% in the qualifying marks shall be allowed to the candidates belonging to Scheduled Caste (SC) and differently abled candidates (Persons with Benchmark Disability) i.e. they will have to score a minimum of 52.25% in Post-Graduation / Graduation as the case may be.

3. CLOSING DATE:-

- (i) The online Applications can be submitted up to the **Closing Date** i.e. **09.03.2026** till 05:00 PM.
- (ii) The eligibility of the candidate with regard to Educational qualifications etc. shall be determined on the **Closing Date** fixed for submission of online application forms.
- (iii) All applicants must fulfil the essential requirements of the posts and other conditions stipulated in the advertisement on the **Closing Date**. They are advised to ensure before applying that they possess the essential qualification required for the posts for which they are applying. They should also possess all relevant certificates and documents in support of their claim regarding educational qualification, experience, domicile, caste, category etc. on or before the closing date.
- (iv) **No certificate or document issued after the Closing Date will be accepted by the Commission at any stage of the selection process.**
- (v) The **improvement in marks** done by a candidate after the **Closing Date** shall not be considered for any purpose in this recruitment.



4. APPLICATION FEE:

The category wise application fee payable through online mode i.e. Net Banking, Debit Card and Credit Card upto 05:00 PM of the **Closing Date** is as under:-

Sr. No.	Categories of candidates	Fee (Rs.)
1.	For all Persons of Haryana with Benchmark Disabilities (PwBD) (with at least 40% disability).	NIL
2.	Candidates belonging to DSC, OSC, BC-A (Non Creamy Layer), BC-B (Non Creamy Layer), ESM, EWS and women candidates of Haryana	250/-
3.	DESM Candidates of Haryana belonging to their vertical category i.e. DSC, OSC, BC-A (Non Creamy Layer), BC-B (Non Creamy Layer), ESM, EWS of Haryana	250/-
4.	DESM Candidates of Haryana belonging to UR Category	1000/-
5.	All remaining candidates	1000/-

Note 1: Fees once paid will not be refunded.

Note 2: Applications without the prescribed fee (unless remission of fee is claimed) shall be summarily rejected.

Note 3: Fee once paid shall not be refunded under any circumstances nor can the fee be held in reserve for any other examination or selection.

5. ISSUANCE OF E-ADMIT CARDS:-

- The candidates will be issued an e-Admit Card, on the basis of information filled by them in their online application form, well before the commencement of the written test/Exam, if any.
- The e-Admit Card will be made available on the website <http://hpse.gov.in/en-us/> for downloading by the candidates. No Admit Card will be sent by post separately.
- Mere issuance of an e-Admit Card does not mean that the candidate has been found eligible in all respects for the advertised post.
- The admit cards would be issued on the basis of particulars filled by the

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candidates in their online application form and the candidature of candidates would be considered in the category mentioned by them in their online application form. No change of category will be allowed at a later stage.

6. AGE LIMITS:

- a) The candidate should not be less than 18 years and not more than 42 years of age, on or before the closing date i.e. 09.03.2026.
- b) However, relaxation in maximum age as per Government Instructions dated 25.03.2022, for various categories is available as under: -

Sr. No.	Categories where relaxation is admissible	No. of years for age relaxation
(i)	Schedules Castes of Haryana	5 years
(ii)	Backward Classes of Haryana	5 years
(iii)	Disabled persons who are covered under the Rights of Persons with Disabilities Act, 2016.	5 year's relaxation in age (+5 years if PwBD applicant belongs to S/Castes, S/Tribe, B/Classes, EWS category (subject to maximum of 52 years) for Group A & B posts where recruitment is made through open competitive examination. Note:- Relaxation in age limit shall be applicable irrespective of the fact whether the post is reserved for PwBD or not, provided the post is identified suitable for person with disabilities.
(iv)	Wife of military personnel who are disabled while in military service;	5 years
(v)	Widowed or legally divorced woman;	5 years
(vi)	Judicially separated woman residing separately for more than two years from the date as prescribed for the purpose of age for applicants of other categories.	5 years
(vii)	Unmarried woman.	5 years
(viii)	Ex-serviceman including Short Service Commissioned Officers and Emergency Commissioned Officers.	Relaxation in age to the extent of his military service added by three years provided – (a) he has rendered continuous

		<p>military service for a period of not less than six months before his release; and</p> <p>(b) he was released otherwise than by way of dismissal or discharge on account of misconduct or inefficiency.</p>
(ix)	Persons who have already worked or presently working on adhoc/contract/work-charged/ daily wages basis in any Department / Board / Corporation of Haryana Government including Government-aided Institutions under Haryana Government.	Relaxation in age equal to the number of completed years only on equivalent post on adhoc/contract/ work-charged/ daily wages basis excluding the period of break, if any, including any other age relaxation admissible, if any, subject to maximum age of 52 years and also subject to the condition that if once a person has been appointed on regular basis in any Department / Board / Corporation etc. of Haryana Government with the benefit of relaxation in age he will not be entitled to avail the same again for any subsequent appointment.

Note 1: Relaxation in the maximum age to the candidates belonging to the DSC/OSC/ BC-A (Non Creamy Layer)/BC-B (Non Creamy Layer)/ESM category candidate of Haryana shall be admissible only where the posts are reserved for this category.

Note 2: The upper age limit for an applicant of any category (except Ex-servicemen) shall not exceed 52 years who is entitled to avail the benefit of relaxation in age of one or more of the categories mentioned above.

Note 3: For the candidates at Sr. No. (ix) above, for getting age relaxation, the experience certificate(s) of equivalent post issued by the Appointing Authority of Respective Department / Board / Corporation / Govt. Aided Institution only shall be valid.

7. EVIDENCE OF AGE:

The Matriculation certificate or equivalent academic certificate thereto is the only acceptable document for evidence of age.



8. FACILITATION COUNTER FOR GUIDANCE OF THE CANDIDATES:

In case of any guidance/information/clarification regarding their applications, candidature etc. candidates can contact over Helpline No. (Technical) – 1800-1800-431, Helpdesk Email ID (Technical Queries) SR4-hpsc@hry.gov.in on any working day, between 10.00 hrs and 16.00 hrs.

9. SERVICE RULES OF THE POST/S:

The Recruitment will be made strictly in accordance with the relevant Service Rules [Haryana State Education School Cadre (Group-B) Service Rules 2012 and Mewat District School Education (Group-B) Service Rules 2012] as amended from time to time and as per existing Govt. instructions issued by the Govt. upto the date of issuance of this Advertisement. The relevant Service Rules are available on the website of www.schooleducationharyana.gov.in/service-rules/page/3/

10. Scheme/Pattern of Exam:-

1. Screening Test

- a) Total number of MCQs: 100
- b) The subject wise syllabus is enclosed at **Annexure-I**.
- c) Time duration of the exam: 02 hours
- d) Total Marks: 100
- e) All questions carry equal marks.
- f) Each question will have five options (A, B, C, D and E). If a candidate is attempting a question, she/he shall have to darken the appropriate circle A, B, C or D and if not attempting a question then, she/he shall have to darken E circle. If none of the five circles is darkened, one fourth (0.25) mark shall be deducted.
- g) Any candidate not darkening any of the five circles in more than 10% questions shall be disqualified.
- h) One-fourth mark will be deducted for each wrong answer.
- i) The examination paper will only be in English language.

- j) Candidates four times the numbers of advertised posts, including bracketed candidates if any, will be called for the next stage of selection process, provided that they have secured the minimum cut-off marks of 25% in the screening test.
- k) The marks obtained by the candidates in the screening test will not be counted for final selection because it is only for short listing of category-wise candidates, for the subject knowledge test.

2. Subject Knowledge Test

- a) Time duration of exam: 03 hours
- b) Total Marks : 150
- c) The subject wise syllabus is enclosed at **Annexure-I**.
- d) The examination paper will only be in English language.
- e) The numbers of the candidates to be called for interview will be two times, including bracketed candidates if any, of the number of advertised posts provided that they have secured the minimum cut-off marks of 35%.
- f) The weightage of the subject knowledge test will be 87.5%.

3. Interview/Viva-Voce

The weightage of the interview will be 12.5%.

The final merit list will be prepared by adding the marks of the subject knowledge test and interview/viva-voce.

Note: The Commission reserves its right to call the candidates directly for the Subject Knowledge Test without conducting a Screening Test.

11. SCALE OF PAY: Rs.47,600-1,51,100/- + usual allowances as applicable time to time.

12. CORRESPONDENCE WITH THE COMMISSION:

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

- i) If a candidate is not able to download his/her e-Admit Card or does not receive any other communication regarding his/her candidature for the examination well before the commencement of the examination, he/she should at once contact the Commission. Information in this regard can also be obtained over Helpline No (Technical) - 1800-1800-431, Helpdesk Email ID (Technical Queries) SR4-hpsc@hrv.gov.in on any working day, between 10:00 hrs and 16:00 hrs. In case no communication is received

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in the Commission's Office from the candidate regarding non-receipt of his/her e-Admit Card well before the examination, he/she himself/herself will be solely responsible for non-receipt of his/her e- Admit Card. No candidate will ordinarily be allowed to take the examination unless he/she holds an e-Admit Card for the examination. On downloading of e-Admit Card, the candidates should check it carefully and discrepancies/errors, if any, should be brought to the notice of the Commission immediately.

- ii) Candidate should note that the name in the Admit Card in some cases may be abbreviated due to technical reasons.
- iii) Candidates must ensure that their Mobile No. & Emails IDs given in their online application are valid and active till the completion of selection process.
- iv) All communications to the Commission should invariably contain the following particulars: -
 - 1. Name and year of the examination.
 - 2. Application Number
 - 3. Roll Number (if received)
 - 4. Name of candidate (in full and in block letters)
 - 5. Complete postal address as given in the application form.

Communication not containing the above particulars may not be attended to.

- v) Candidates should note down their Application Number for future reference. They may be required to indicate the same in connection with their candidature in future.
- vi) Candidates will be informed of the final result in due course through HPSC website/ Newspaper and the interim enquires about the result are, therefore, unnecessary and will not be attended to. The Commission do not enter into correspondence with the candidates about reasons for their non-selection for interview/appointment.
- vii) All correspondence with the Commission should be addressed to the Secretary, Haryana Public Service Commission, Bays No. 1-10, Block- B, Sector-4, Panchkula, Haryana.

PART-B
GENERAL INSTRUCTIONS

13. CANDIDATES TO ENSURE THEIR ELIGIBILITY FOR THE POST:

- 1. Before applying in response to the advertisement, the candidate should read carefully all the terms and conditions of the advertisement including the essential qualifications required for the post for which the candidate wants to apply, age limit, physical measurements, nature of experience required etc.
- 2. The candidate should start the process of filling in the application form only after ensuring that she/he is eligible in all respects to apply for the post and she/he is in possession of all certificates and other relevant documents as per the terms and conditions of the advertisement.
- 3. Application forms of the candidates who do not fulfill the essential qualifications,



age and experience, if any, requirements would not be accepted by the portal.

4. Admission to the recruitment process will be purely provisional subject to satisfying the prescribed eligibility conditions.
5. The prescribed essential qualifications are the minimum and mere possession of the same does not entitle candidates to be called for interview/viva-voce. The candidates are advised to mention all their qualifications in the application form over and above the basic qualifications required for the post for which they are applying.
6. The qualification which is not claimed/mentioned by the candidate in the online application form will not be taken into consideration by the Commission. Hence it is the sole responsibility of the candidate to mention all qualifications correctly and clearly while filling in the online application form. Subsequent claim regarding the same would not be considered.
7. **The eligibility of a candidate with reference to the documents submitted by him/her is assessed only after the candidate has qualified for the interview/viva-voce.**
8. The candidate should declare / disclose all pending FIRs / Criminal Cases, allegations of misconduct, disciplinary proceedings, investigations and civil cases known to him / her, whether pending before any court of law or any other authority. If any information provided by the candidate in online application form is found to be false or incomplete, his / her candidature is liable to be cancelled without any claim to benefits from the Government.

Note:

1. The Commission reserves its right to check the eligibility of a candidate even before he/she qualifies for interview/viva-voce if deemed fit by it.
2. The decision of the Commission regarding the eligibility of the candidate shall be final.

14. INSTRUCTIONS REGARDING SUBMISSION OF APPLICATIONS:

1. The candidate should read all the instructions mentioned in the advertisement carefully before filling in the Online Application Form.
2. After filling the Online Application Form, the candidate should check all the particulars filled up in the application form to ensure the correctness of information and take a print out of the same. After checking the information filled in the application form, the candidate should sign the printout of his/her application form and upload the same along with all relevant documents to complete the submission of his/her application form.
3. After successful submission of application, candidate should again take print out of



signed application form which has been uploaded by him/her. The hard copy of the application form along with all uploaded documents must be brought at the time when called upon to do so by the Commission.

4. Application forms submitted without uploading the duly filled and signed copy of the application form or without uploading the relevant certificates/documents with the application form would be treated as **incomplete or defective application forms and the same shall be summarily rejected**. No representation or correspondence regarding such rejection shall be entertained under any circumstances.
5. Candidates are advised to fill in their application forms carefully such as Name, Father's/Mother's name, Date of Birth, Category, Aadhar Number, Qualification, marks obtained, passing year, photo, Signature, details, fee etc. The candidate should carefully mention the Category to which he/she belongs, in the application form. The candidature of a candidate would be considered only in the category mentioned by him/her in the application form.
6. After final submission of the application form, no request for change of category or any other particular mentioned in the application form shall be entertained by the Commission at any stage due to any reason.
7. In case the candidate feels that he/she has filled up the form erroneously, he/she should fill up a fresh online application form along with fresh requisite fee on or before the Closing Date. No change in particulars mentioned by the candidate in the online application form would be allowed by the Commission after submission of the application form.
8. The applicants are advised to submit only a single application. However, if due to any unavoidable situation, if he/she submits another/multiple applications, then he/she must ensure that application with the highest/latest application number is complete in all respects like applicant's details, examination center, photograph, signature, fee etc. The applicants who submit multiple applications should note that only the application with highest/latest application number shall be entertained by the Commission, and that the fee paid against one Application Number shall not be adjusted against any other Application Number.
9. The candidate will solely be responsible for any mistake in the application form and fees paid by him/her will not be refunded in case the application form of the candidates is rejected.
10. The application of the candidates, who do not fulfill the qualifications/eligibility conditions on the Closing Date, shall not be accepted by the online application system.
11. Only the documents/certificates which have been submitted /uploaded along with the application form would be taken into consideration for assessing the eligibility/candidature of the candidate. Any document/certificate issued/submitted after the closing date would not be taken into consideration.

15. DOCUMENTS TO BE UPLOADED WITH APPLICATION FORM:

The candidates should upload the following documents with application form:-

1. Scanned Photo of the Candidate.
2. Scanned Signatures of the Candidate.
3. Scanned copies of degrees and mark sheets of Educational Qualifications.
4. Scanned copy of DSC/OSC certificate of Haryana as per classification of the SC Category given in notification dated 13.11.2024.
5. Scanned copy of BC-A (Non Creamy Layer) & BC-B (Non Creamy Layer) certificate issued on or before the closing date in the year 2025-26, as per Govt. instructions dated 22.03.2022 & notifications dated 16.07.2024.
6. Scanned copy of EWS certificate valid for year 2025-2026 as per Govt. instruction dated 25.02.2019 / 14.01.2026.
7. Scanned copy of DESM certificate for the year 2025-26.
8. Scanned copy of ESM/DFF certificate.
9. Scanned copy of PwBD Certificate. (For PwBD).
10. Scanned copy of Aadhar card.
11. Scanned copy of Haryana Resident/ Domicile Certificate (if a candidate is availing benefits of reservation).
12. Scanned copy of Experience Certificate for claiming age relaxation as per Govt. of Haryana letter dated 25.03.2022.
13. Scanned copy of NOC from Department (For Haryana Govt. Employees who have signed Bond).
14. Scanned copy of proof of having worked on adhoc/contract/work-charged/ daily wages basis in any Department / Board / Corporation of Haryana Government (For candidates claiming benefit of age relaxation).
15. Scanned copy of Disability Certificate in case of Disabled ESM.

16. NATIONALITY:

For this recruitment, a candidate must be either: -

- (a) a citizen of India, or
- (b) a subject of Nepal, or



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

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

17. RESERVATION:

- (i) The benefit of reservation will be given only to those DSC/OSC/BC-A (Non Creamy Layer)/BC-B (Non Creamy Layer)/EWS/PwBD category candidates who are Residents/ Domiciles of Haryana State.
- (ii) **BC-A/BC-B Candidates who are domiciles of Haryana State and who fall within the Creamy layer as per Haryana Govt. notification No. 40/13/2024-1SW dated 16.07.2024 are not eligible to claim any benefit of reservation of BC-A/BC-B Category. Such candidates should submit their application form under General category.**
- (iii) All the candidates of Scheduled Castes category are required to submit/upload the latest DSC/OSC category certificate issued as per notification No.22/163/2024-5HR-II dated 13.11.2024.
- (iv) The women candidates, Residents/ Domiciles of Haryana State, seeking reservation under DSC/OSC/BC-A (Non Creamy Layer)/BC-B (Non Creamy Layer)/PwBD/EWS category are required to submit the Caste Certificate issued by the Competent Authority from **Parental Side (Father's side)** only. It should be noted that the Certificate from in-laws (Husband Side) will not be entertained.
- (v) The State Government has specified the criteria for exclusion of persons within the Backward Classes as Creamy Layer, regarding reservation in Service and Admission vide notification No. 40/13/2024-1SW dated 16.07.2024. Therefore, the candidates belonging to BC-A (Non Creamy Layer)/BC-B (Non Creamy Layer) category of



Haryana are required to attach latest/updated Certificate as per Govt. notification No. 40/13/2024-1SW dated 16.07.2024(available on the website of C.S. Haryana i.e. <http://csharyana.gov.in>). The certificate should be issued by the Competent Authority during **2025-26 only** i.e. from April 2025 to March 2026.

(vi) It is essential to mention here that it is clearly mentioned at point No. (xiii) (iii) of the Govt. instruction No.22/132/2013-1GS-III dated 22.03.2022, under the heading "Validity of a Caste Certificate" that "*Certificate which include income and/or assets based information like creamy layer criteria shall become invalid after the validity period prescribed on the said certificate. Such certificates shall be valid for the current financial year, i.e. till coming 31st March (included) from the date it has been issued*".

Hence, the candidates should ensure that they have submitted their BC-A (Non Creamy Layer), BC-B (Non Creamy Layer) & EWS certificates which have been issued on or before the closing date and are valid for the current financial year i.e. **1st April 2025 to 31st March,2026**.

(vii) Candidates having **OBC Certificate** are directed to submit their BC-A (Non Creamy Layer)/ BC-B (Non Creamy Layer) Certificates issued by Competent Authority clearly mentioning their category otherwise OBC Certificates will not be considered.

(viii) **The candidates of reserved categories of Haryana for which no post is available /reserved, can apply against the posts of General/UR category, if he / she fulfils all the eligibility conditions as meant for General/UR category candidates, except fee.** Such candidates must attach scanned copy of their Caste Certificate and Resident of Haryana Certificate for claiming fee concession.

(ix) It is clarified that only such DSC/OSC/BC-A (Non Creamy Layer)/BC-B (Non Creamy Layer) candidates who are selected on the same standards as applied to General candidates shall not be adjusted against reserved vacancies. In other words, when a relax standard is applied in selection of an SC/ BC-A (Non Creamy Layer)/BC-B (Non Creamy Layer) candidate, e.g. in the age limit, experience, qualification, extended zone of consideration larger than what is provided for general category candidate etc. the SC/BC-A (Non Creamy Layer)/BC-B (Non Creamy Layer) candidates are to be counted against reserve vacancies. Such candidates would be deemed as unavailable for consideration against unreserved vacancies.



- (x) The candidates belonging to BC-A & BC-B categories who fall in the Creamy Layer zone as per latest Govt. instruction will be treated as General Category candidate for all purpose and they have to pay full fees as meant for candidates of General category.
- (xi) The reserved category candidates belonging to other States will compete against the posts meant for General / Unreserved Category and will be considered as General / Unreserved category candidates. They should fulfill all the eligibility conditions of a General category candidate and should not have availed the benefit of reservation.
- (xii) **It is clarified that the candidature of a candidate will be considered only in the category filled by him/her in the application form. No change of category will be allowed under any circumstances.**
- (xiii) In case the candidature of any candidate of reserved Category is rejected due to invalid Category Certificate/Non-Submission of Certificate / Certificate issued after closing date or on such similar grounds, his/her candidature would not be considered in General category.
- (xiv) **Economically Weaker Section (EWS) of Haryana: -**
 - (i) The candidates belonging to EWS category of Haryana are required to attach necessary CERTIFICATE as per Haryana Govt. Instructions issued vide No. 22/12/2019-IGS-III dated **25.02.2019 / 14.01.2026** (Available on the website of CS Haryana i.e. <http://csharyana.gov.in/>) issued by the Competent Authority.
 - (ii) The EWS certificate should be valid for the year 2025-26 i.e. from April 2025 to March 2026.

NOTE:-

1. BC-A (Non Creamy Layer)/ BC-B (Non Creamy Layer) and EWS candidates are required to submit their latest certificate issued by the competent authority for the year 2025-26. Certificates issued during the year 2024-25 will not be accepted.
2. BC-A (Non Creamy Layer) and BC-B (Non Creamy Layer) candidates claiming that they do not fall within the Creamy Layer as specified in Government Notification dated 16.07.2024 are informed that BC-A (Non-Creamy Layer)/BC-B (Non-Creamy Layer) certificate is issued on the basis of income of the applicant during the previous financial year and his/her assets during the last 3 financial years. Hence the BC-A/BC-B (Non-Creamy Layer)

Vic

candidates are directed specifically to submit a certificate based on the income of F.Y 2024-25, i.e. for the period 01.04.2024 to 31.03.2025 & issued after

01.04.2025. Old certificates issued on the basis of income during earlier years would not be valid and would not be considered.

3. Similarly EWS candidates are required to submit EWS Certificate issued on the basis of income of applicant during the F.Y 2024-25, i.e. for the period 01.04.2024 to 31.03.2025 & issued after 01.04.2025 and valid for the year 2025-26. Old certificates issued on the basis of income during earlier years would not be considered.

(xv) The reservation for **Ex-servicemen of Haryana** will be given as per instructions issued vide No. 12/15/2019-4GS-II dated 09.03.2022 and further clarified vide letter even No. dated 13.04.2022 by the Chief Secretary to Govt. Haryana. The candidates belonging to ESM/ DESM/DFF categories are directed to submit a ESM/ DESM/ DFF certificate issued by the competent authority / concerned Zila Sainik Board which is valid on the closing date for submission of online application form, as the case may be.

The benefit of reservation under ESM/DESM and DFF category would be given as under:-

(A) An ex-serviceman who herself/himself or her/his family members has already secured employment in civil service on regular basis in any Department/ Board/ Corporation/ University etc. under the State Government with availing the benefit of reservation.

- (i) she/he/herself/himself shall not be entitled to avail the benefit of reservation in civil service for any subsequent appointment in any Department / Board / Corporation / University etc. under the State Government. However, the benefit of age relaxation for securing another employment in a higher pay scale or post shall remain continue; and
- (ii) her/his family member shall also not be entitled to avail the benefit of reservation against the posts reserved for ex-servicemen.

(B) (i) An ex-servicemen who herself/himself has already secured employment in civil services on regular basis in any Department / Board/

Corporation/University etc. under the State Government without availing the benefit of reservation in such case she/he herself/himself or one of her/his family members (son, daughter or spouse) will be entitled to avail the benefit of reservation;

- (ii) where an ex-servicemen who herself/himself is eligible to avail the benefit of reservation under these instructions but she/he does not want re-employment in civil service in such case one of her/his family members (son, daughter or spouse) will be entitled to avail the benefit of reservation.
- (C) If an ex-servicemen applies for various vacancies before joining any civil employment, she/he can avail the benefit of reservation as ex-servicemen for any one of the subsequent employments. However, to avail of this benefit, an ex-servicemen as soon as she/he joins any civil employment, should give self-declaration/undertaking to the concerned employer about the date-wise details of application for various vacancies for which she/he had applied for before joining the initial civil employment. Further, this benefit would be admissible only in respect of vacancies which are filled by direct recruitment and wherever reservation is applicable to the ex-servicemen.
- (D) The family members of martyr military personnel shall be entitled to exercise an option either:-
 - (i) to avail the benefit of reservation upto two family members; or
 - (ii) to avail the benefit of compassionate appointment to one of the family members under the Ex-gratia Policy namely *Compassionate Appointment to family members of Martyr Armed forces Personnel Policy* notified by Government from time to time.
- (E) The priority list for recruiting agency for preparation of final list of selection/appointment of ex-servicemen or their family members against the posts reserved for ex-servicemen shall be as under:-
 - (i) disabled ex-servicemen, the post(s) for which they are physically fit;
 - (ii) failing i), family member of disabled ex-servicemen;
 - (iii) failing ii), other ex-servicemen who are eligible to get the benefit of reservation under these instructions;
 - (iv) failing iii), family member of other ex-servicemen who are eligible to get the benefit of reservation under these instructions.
- (F) 'Disabled ex-serviceman' means a person who has been released from military



service due to disability attributable or aggravated due to military service. An ex-serviceman shall not be treated disabled one who has been released from military service not on account of her/his disability but has been released in the normal course after the completion of her/his term or retired from military service voluntarily.

- (G) Both the reservations are horizontal, therefore, a disabled Ex-serviceman who is selected against the post reserved for Ex-servicemen will not be counted against the post reserved for PwBD.
- (H) In all circumstances the benefit of reservation against the posts reserved for Ex-servicemen shall be admissible at the time of final selection list only and not at the time of preliminary examination / test, main examination / test or interview.
- (I) An ex-serviceman who has been discharged from military service by way of dismissal, misconduct or inefficiency neither she/he herself/ himself nor her/his family members shall be entitled to avail the benefit of reservation in civil service.
- (xvi) **Definition of Ex-Serviceman (ESM)** (As per Haryana Govt. Instructions No. 12/99/8-2GSII dated 08.11.1988 and No. 12/18/2006-4GSII dated 08.01.2008) is as under:-

“An ex-serviceman” means a person, who has served in any rank whether as a combatant or non-combatant in the Regular Army, Navy and Air Force of the Indian Union and

- (i) who retired from such service after earning her/his pension; or
- (ii) who has been released from such service on medical grounds attributable to military service or circumstances beyond his control and awarded medical or other disability pension; or
- (iii) who has been released otherwise than on his own request from such service as a result of reduction in establishment; or
- (iv) who has been released from such service after completing the specific period of engagements, otherwise than at his own request or by way of dismissal or discharge on account of misconduct or inefficiency, and has been given a gratuity”; and includes personnel of the Territorial Army of the following categories namely:-

- Pension holders for continuous embodied service,



- Persons with disability attributable to military service; and
- Gallantry award winners."

a) ESM candidates of Haryana claiming benefit under this category must have valid Ex-Serviceman Certificate issued by Zila Sainik Board showing the date of entry into military and date of release, on the **Closing Date** fixed for submission of online applications and will have to produce the same as and when required by the Commission.

b) Dependents of Ex-serviceman (DESM) candidates will be considered as General / SC / BC-A / BC-B Category (their own category) candidates for all intents and purposes. However, in case of non-availability of suitable Ex-Servicemen (ESM) of Haryana, their dependent sons and daughters of the same category who fulfill all the conditions of qualifications, age etc. prescribed for the posts in question will also be considered on merit against the reserved posts for ESM and this entitlement would be available to one dependent child only. Dependents of Ex-serviceman (DESM) of Haryana claiming benefit must have valid eligibility certificate issued by Zila Sainik Board on the last date of submission of online application form.

(xvii) **Reservation for Freedom Fighters (FF) and their children/ grandchildren (Dependents of Freedom Fighters) (DFF)** of Haryana will be available only if quotas reserved for Ex-servicemen or Backward Classes (subject wise) remains unfulfilled due to non-availability of suitable Ex-servicemen (ESM) or Children of Ex-servicemen or non-availability of suitable candidates from Backward Classes. Over all reservation, either from the unfilled vacancies of Ex-servicemen or from the Backward Classes, for FF and DFF of Haryana will remain limited to 2% only. This benefit will be available to all grandchildren i.e. sons and daughters of sons and daughters (parental as well as maternal) of the Freedom Fighters. DFF shall be required to upload the Certificate duly issued by the respective competent authority.

18. REGARDING NO OBJECTION CERTIFICATE BY THE EMPLOYER:

(i) The employees of Haryana Government who have not executed any bond with the State Government, may forward their application without NOC from the



Department. However, self-declaration of such Government employees is required to be submitted to the effect that employee is not facing any disciplinary proceedings. In the case of employees who have executed bond with the State Government (e.g. Doctors), the NOC of Head of the Department (HOD) shall, however, be required. If the candidate resigns after sending the application, then such candidate will be interviewed only if he/ she produces a letter from the HOD to the effect that he / she has resigned from the post and his / her resignation has been accepted. The NOC or the letter, as the case may be, shall be submitted on or before the date of his/her interview failing which he/she will not be interviewed.

- (ii) The candidate who joins service under any Government, Quasi-Government Organization, Public Sector Undertaking after the submission of application and has executed a bond, will have to produce No Objection Certificate from the employer, on or before the date of his / her interview failing which he or she will not be interviewed.
- (iii) Persons in private employment are not required to submit their application forms through their employer or to produce the employer's NOC / permission at the time of interview.

19. Scribe / Extra Time for PwBD Category Candidates:

- i) An extra / compensatory time @ 20 minutes per hour will be allowed in each paper to the Persons with Benchmark Disabilities (Blind and Low vision or Locomotor Disability), **only on production of a Medical Certificate issued by Medical Board constituted by the Chief Medical Officer of concerned district, and after issuing permission by the Commission in this regard.**
- ii) The PwBD (Blindness and Low vision) candidates who want the help of a scribe to write his/her paper will have to submit his/her written request to the Commission for the permission of a scribe separately well in time i.e. at least 05 days prior to the commencement of the Examination.
- iii) The candidate has to make his / her own arrangement of a scribe.
- iv) The scribe should be a studying-student up to 10+2 and his/her photo & other particulars should be duly verified by the Principal of the Institution in which the



student is studying. No online request for a scribe will be accepted by the Commission.

- v) The PwBD (Blindness and Low vision) candidates who want only extra time (without the help of a scribe) will have to submit his/her written request to the Commission for permission for extra time well in time.
- vi) The PwBD candidates suffering from (Locomotors Disability) who want extra/ compensatory time will have to apply to the Commission for permission. Such candidates will be allowed extra time @ 20 minutes per hour for Examination, on production of medical certificate issued by a Medical Board, clearly stating therein that the candidate's writing ability is severely affected due to his / her disability.
- vii) It should be noted that **no such permission** in the above cases **will be granted by the Centre Supervisor.**

20. PENALTY FOR CERTAIN ACTS:

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

- (i) Obtaining support for his candidature by the following means, namely:
 - (a) offering illegal gratification to; or
 - (b) applying pressure on; or
 - (c) blackmailing, or threatening to blackmail any person connected with the conduct of the examination; or
- (ii) impersonation; or
- (iii) procuring impersonation by any person; or
- (iv) submitting fabricated documents or documents which have been tampered with; or
- (v) Uploading irrelevant photos in the application form in place of actual photo/signature.
- (vi) Making statements which are incorrect or false or suppressing material information; or
- (vii) Resorting to the following means in connection with his/her candidature for the examination, namely:
 - (a) obtaining copy of question paper through improper means.
 - (b) finding out the particulars of the persons connected with secret work relating to the examination.
 - (c) influencing the examiners; or



- (viii) being in possession of or using unfair means during the examination; or
- (ix) writing obscene matter or drawing obscene sketches or irrelevant matter in the scripts; or
- (x) misbehaving in the examination hall including tearing of the scripts, provoking fellow examinees to boycott examination, creating a disorderly scene and the like; or
- (xi) harassing or doing bodily harm to the staff employed by the Commission for the conduct of their examination; or
- (xii) being in possession of or using any mobile phone, (even in switched off mode), pager or any electronic equipment or programmable device or storage media like pen drive, smart watches etc. or camera or Bluetooth devices 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; or
- (xiii) violating any of the instructions issued to candidates along with their admission certificates permitting them to take the examination; or
- (xiv) attempting to commit or, as the case may be, abetting the commission of all or any of the acts specified in the foregoing clauses; may in addition to rendering himself liable to criminal prosecution, be liable:
 - (a) to be disqualified by the Commission from the Examination for which he is a candidate; and/or
 - (b) to be debarred either permanently or for a specified period:
 - (i) by the Commission, from any examination or selection held by them.
 - (ii) by the Government from any employment under them; and
 - (c) to disciplinary action under the appropriate rules if he is already in service under Government:

Provided that no penalty under this rule shall be imposed except after:

- (i) giving the candidate an opportunity of making such representation in writing as he may wish to make in that behalf; and
- (ii) taking the representation, if any, submitted by the candidate within the period allowed to him into consideration.

Note: - The provisions of Haryana Public Examination (Prevention of Unfair Means) Act, 2021 would also be applicable



21. IMPORTANT INSTRUCTIONS:

- i) The use of any mobile phone (even in switched-off mode), pager or any electronic equipment or programmable device or storage media like pen drive, smart watches etc. or camera or blue tooth devices 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 is strictly prohibited. Any infringement of these instructions shall entail disciplinary action including ban from future examinations.
- ii) Candidates are advised in their own interest not to bring any of the banned items including mobile phones/pagers to the venue of the written test/ examination as arrangement for safe keeping cannot be assured. Commission will not be responsible for any loss in this regard.
- iii) Candidates are also advised not to bring any valuable/costly items to the venue of the written test/examination as safe-keeping of the same cannot be assured. Commission will not be responsible for any loss in this regard.
- iv) Candidates should ensure that the signatures appended by them at all the places viz. at uploaded application form, attendance list, and in other documents as well as in all the correspondence with the Commission should be identical. If any variation is found in the signatures appended by a candidate, his/her candidature will be liable for cancellation by the Commission.
- v) No candidate shall be admitted to the written test/examination unless he/she holds a valid certificate of Admission/Admit Card issued by the Commission.
- vi) No individual information at any stage shall be given to candidates and hence all candidates should regularly visit the Website of the Commission & Public Notices in different Newspapers.
- vii) Success in the written test/examination confers no right to appointment unless the Government is satisfied after such enquiry as may be considered necessary, that the candidate is suitable in all respects for appointment.
- viii) Only those documents, which are uploaded by the candidates, shall be considered. If there is any variation in the document uploaded and produced at the time of scrutiny, candidature shall be liable to be cancelled. If any application is found without

uploading requisite supporting documents and other relevant information, the candidate himself/herself shall be responsible for that and his/her candidature would be

liable to be cancelled due to lack of proper or correct documents/information.

- ix) Candidates who have obtained degree or diploma or certificates for various courses from any Board/Institution declared fake by the University Grant Commission or not recognized by Haryana Government shall not be eligible for being considered for recruitment to the posts advertised and no representation in this regard shall be entertained.
- x) Candidates must ensure that information provided by them is true. If at any subsequent stage or at the time of interviews any information given by them or any claim made by them in their online applications is found to be false, their candidature will be liable to be rejected and they may also be debarred either permanently or for a specified period by the Commission from appearing in any examination or selection held by the Commission.
- xi) The decision of the Commission in all matters relating to acceptance or rejection of an application, eligibility/suitability of the candidates, mode and criteria for selection etc. will be final and binding on the candidates. No inquiry or correspondence will be entertained in this regard.

22. WITHDRAWAL OF APPLICATIONS:

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

Date: 05.02.2026

Unstamped 5/2/26
 Secretary
 Haryana Public Service Commission
 Panchkula

COMPUTER SCIENCE

Computer Systems and Organisation

- **Basic Computer Organisation:** Introduction to computer system, hardware, software, input device, output device, CPU, memory (primary, cache and secondary), units of memory (Bit, Byte, KB, MB, GB, TB, PB).
- **Types of software:** system software (operating systems, system utilities, device drivers), programming tools and language translators (assembler, compiler & interpreter), application software.
- **Operating system (OS):** functions of operating system, OS user interface.
- **Boolean logic:** NOT, AND, OR, NAND, NOR, XOR, truth table, De Morgan's laws and logic circuits
- **Number system:** Binary, Octal, Decimal and Hexadecimal number system, conversion between number systems.
- **Encoding schemes:** ASCII, ISCII and UNICODE (UTF8, UTF32)

Computational Thinking and Programming

- **Introduction to problem solving:** Steps for problem solving (analysing the problem, developing an algorithm, coding, testing and debugging). representation of algorithms using flow chart and pseudo code, decomposition
- **Familiarization with the basics of Python programming:** Introduction to Python, features of Python, executing a simple "hello world" program, execution modes: interactive mode and script mode, Python character set, Python tokens (keyword, identifier, literal, operator, punctuator), variables, concept of l-value and r-value, use of comments
- **Knowledge of data types:** number (integer, floating point, complex), boolean, sequence (string, list, tuple), none, mapping (dictionary), mutable and immutable data types
- **Operators:** arithmetic operators, relational operators, logical operators, assignment operator, augmented assignment operators, identity operators (is, is not), membership operators (in, not in).
- **Expressions, statement, type conversion & input/output:** precedence of operators, expression, evaluation of expression, python statement, type conversion (explicit & implicit conversion), accepting data as input from the console and displaying output
- **Errors:** syntax errors, logical errors, runtime errors
- **Flow of control:** introduction, use of indentation, sequential flow, conditional and iterative flow control
- **Conditional statements:** if, if-else, if-elif-else, flowcharts, simple programs: e.g.: absolute value, sort 3 numbers and divisibility of a number
- **Iterative statements:** for loop, range function, while loop, flowcharts, break and continue statements, nested loops, suggested programs: generating pattern, summation of series, finding the factorial of a positive number etc
- **Strings:** introduction, indexing, string operations (concatenation, repetition, membership & slicing), traversing a string using loops, built-in functions: len(), capitalize(), title(), lower(), upper(), count(), find(), index(), endswith(), startswith(), isalnum(), isalpha(), isdigit(), islower(), isupper(), isspace(), lstrip(), rstrip(), strip(), replace(), join(), partition(), split()
- **Lists:** introduction, indexing, list operations (concatenation, repetition, membership & slicing), traversing a list using loops, built-in functions: len(), list(), append(), extend(), insert(), count(), index(), remove(), pop(), reverse(), sort(), sorted(), min(), max(), sum(); nested lists, suggested programs: finding the maximum, minimum, mean of numeric values stored in a list; linear search on list of numbers and counting the frequency of elements in a list
- **Tuples:** introduction, indexing, tuple operations (concatenation, repetition, membership & slicing), built-in functions: len(), tuple(), count(), index(), sorted(), min(), max(), sum(); tuple assignment, nested tuple, suggested programs: finding the minimum, maximum, mean of values stored in a tuple; linear search on a tuple of numbers, counting the frequency of elements in a tuple
- **Dictionary:** introduction, accessing items in a dictionary using keys, mutability of dictionary (adding

a new item, modifying an existing item), traversing a dictionary, built-in functions: len(), dict(), keys(), values(), items(), get(), update(), del, clear(), fromkeys(), copy(), pop(), popitem(), setdefault(), max(), min(), count(), sorted(), copy(); suggested programs : count the number of times a character appears in a given string using a dictionary, create a dictionary with names of employees, their salary and access them

- **Introduction to Python modules:** Importing module using 'import <module>' and using from statement, Importing math module (pi, e, sqrt, ceil, floor, pow, fabs, sin, cos, tan); random module (random, randint, randrange), statistics module (mean, median, mode) Society, Law and Ethics
- Digital Footprints
- Digital society and Netizen: net etiquettes, communication etiquettes, social media etiquettes
- **Data protection:** Intellectual Property Right (copyright, patent, trademark), violation of IPR (plagiarism, copyright infringement, trademark infringement), open source softwares and licensing (Creative Commons, GPL and Apache)
- **Cyber-crime:** definition, hacking, eavesdropping, phishing and fraud emails, ransomware, preventing cyber crime
- **Cyber safety:** safely browsing the web, identity protection, confidentiality, cyber trolls and bullying.
- **Safely accessing web sites:** malware, viruses, trojans, adware
- **E-waste management:** proper disposal of used electronic gadgets
- Indian Information Technology Act (IT Act)
- **Technology & Society:** Gender and disability issues while teaching and using computers

Computational Thinking and Programming

- **Functions:** types of function (built-in functions, functions defined in module, user defined functions), creating user defined function, arguments and parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope)
- Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths
- **Text file:** opening a text file, text file open modes (r, r+, w, w+, a, a+), closing a text file, opening a file using with clause, writing/appending data to a text file using write() and writelines(), reading from a text file using read(), readline() and readlines(), seek and tell methods, manipulation of data in a text file
- **Binary file:** basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump() and load() method, read, write/create, search, append and update operations in a binary file
- **CSV file:** import csv module, open / close csv file, write into a csv file using csv.writer() and read from a csv file using csv.reader()
- **Data Structure:** Stack, operations on stack (push & pop), implementation of stack using list.

Computer Networks

- **Evolution of networking:** introduction to computer networks, evolution of networking (ARPANET, NSFNET, INTERNET)
- **Data communication terminologies:** concept of communication, components of data communication (sender, receiver, message, communication media, protocols), measuring capacity of communication media (bandwidth, data transfer rate), IP address, switching techniques (Circuit switching, Packet switching)
- **Transmission media:** Wired communication media (Twisted pair cable, Co-axial cable, Fiber-optic cable), Wireless media (Radio waves, Micro waves, Infrared waves)
- **Network devices:** (Modem, Ethernet card, RJ45, Repeater, Hub, Switch, Router, Gateway, WIFI card)
- **Network topologies and Network types:** types of networks (PAN, LAN, MAN, WAN), networking topologies (Bus, Star, Tree)
- **Network protocol:** HTTP, FTP, PPP, SMTP, TCP/IP, POP3, HTTPS, TELNET, VoIP

- **Introduction to web services:** WWW, Hyper Text Markup Language (HTML), Extensible Markup Language (XML), domain names, URL, website, web browser, web servers, web hosting

Database Management

- **Database concepts:** introduction to database concepts and its need
- **Relational data model:** relation, attribute, tuple, domain, degree, cardinality, keys (candidate key, primary key, alternate key, foreign key)
- **Structured Query Language:** introduction, Data Definition Language and Data Manipulation Language, data type (char(n), varchar(n), int, float, date), constraints (not null, unique, primary key), create database, use database, show databases, drop database, show tables, create table, describe table, alter table (add and remove an attribute, add and remove primary key), drop table, insert, delete, select, operators (mathematical, relational and logical), aliasing, distinct clause, where clause, in, between, order by, meaning of null, is null, is not null, like, update command, delete command, aggregate functions (max, min, avg, sum, count), group by, having clause, joins: cartesian product on two tables, equi-join and natural join
- **Interface of python with an SQL database:** connecting SQL with Python, performing insert, update, delete queries using cursor, display data by using fetchone(), fetchall(), rowcount, creating database connectivity applications

Introduction to Computer System

Introduction to computer and computing: evolution of computing devices, components of a computer system and their interconnections, Input/output devices.

Computer Memory: Units of memory, types of memory – primary and secondary, data deletion, its recovery and related security concerns.

Software: purpose and types – system and application software, generic and specific purpose software.

Data Structure & Algorithms:-

- Types of data structure: Array, stack, queues, linked lists heaps, trees, binary search tree.
- Searching algorithms: Linear and Binary search.
- Sorting algorithms: Bubble, Selection, Insertion, quick sort, merge sort and heap sort.
- Analysis of Algorithm: Asymptotic notation – Big – Oh (O), Omega and Theta notations.
- Graphs: Definitions, connected graphs, regular and bipartite graphs, cycles and circuits, spanning trees, breadth first search, Depth first search.

Operating Systems (O.S.):-

- Functions of operating systems, Types of O.S. - multiprocessing, Multitasking, Multiprogramming, time sharing & distributed operating systems.
- Virtual memory, paging, segmentation & fragmentations.
- Mutual Exclusion, Lock-unlock, semaphores.
- C.P.U Scheduling, I/O scheduling, Resource scheduling, Scheduling algorithms.
- Deadlock & its handling.

Software Engineering:-

- Software, development life cycle (SDLC) introduction and various steps.
- SDLC Models:- waterfall, prototype, spiral, Agile.
- Data warehouse & Data mining: introduction and methodology.

16

Digital Logic & Circuits:-

- Number System and Codes.
- Combinational Logic circuits: Digital Logic gates, Simplifications, Half and full address, encoders, Decoders and Multiplexers.
- Sequential Logic circuits: Flip Flops, RAM and ROM.

Theory of Computation:-

- Automata Fundamentals: Finite Automata (F.A.), Deterministic F.A. & Non Deterministic F.A.
- Regular Expressions and Language,
- Context Free Grammar and Languages.
- Recursive Enumerable and non-Recursive Enumerable Language.

Compiler Design:-

- Introduction of a compiler: Lexical Analyses Recognition of tokens, Minimizing DFA.
- Parsing and Parse trees: Rightmost and leftmost derivation, Bottom-up and Top-down parser.
- Intermediate code generation.
- Code Generation and Code optimization.

Introduction to the Emerging Trends

Artificial Intelligence, Machine Learning, Natural Language Processing, Immersive experience (AR, VR), Robotics, Big data and its characteristics, Internet of Things (IoT), Sensors, Smart cities, Cloud Computing and Cloud Services (SaaS, IaaS, PaaS); Grid Computing, Block chain technology.

Database Query using SQL

Math functions: POWER (), ROUND (), MOD () .

Text functions: UCASE (), UPPER (), LCASE (), LOWER (), MID (), SUBSTRING (), SUBSTR (), LENGTH (), LEFT (), RIGHT (), INSTR (), LTRIM (), RTRIM (), TRIM () .

Date Functions: NOW (), DATE (), MONTH (), MONTHNAME (), YEAR (), DAY (), DAYNAME () .

Aggregate Functions: MAX (), MIN (), AVG (), SUM (), COUNT (); using COUNT (*).

Querying and manipulating data using Group by, Having, Order by.

Website: Introduction, difference between a website and webpage, static vs dynamic web page, web server and hosting of a website.

Web Browsers: Introduction, commonly used browsers, browser settings, add-ons and plug-ins, cookies.

Wuklo
5/1/2026