



# UTTAR PRADESH PUBLIC SERVICE COMMISSION

Advertisement No. : A-5/E-1/2019

Date: 30.12.2019

## Combined State Engineering Services (General Recruitment/ Special Recruitment) Examination-2019

Date of Commencement of On-line Application : 30.12.2019

Last Date for Receipt of Examination Fee On-line

in the Bank : 27.01.2020

Last Date for On-line Submission of Application : 30.01.2020

### Important

- (i) If at any stage it is found that the candidate has concealed or misrepresented any desired/required information, his candidature may be cancelled and other appropriate action like debarment may be initiated against him.
- (ii) The candidates must send hard copy of their on-line applications and enclose self attested copies of all certificates in support of their claims rendered in the on-line application. In this Connection, a separate press communique shall be published in due course by the commission.

**"SPECIAL NOTICE :-** (a) On-Line Applications will be accepted only when prescribed fee is deposited in the Bank upto prescribed last date for fee deposit. If the fee is deposited in Bank after the last date prescribed for fee deposit, the on-line application of the candidate will not be accepted and the fee deposited in the Bank will not be refunded in any condition. It will be responsibility of the candidates to deposit fee in the Bank upto the last date prescribed for fee deposit and to 'submit' the application upto the last date prescribed for submission of applications. It is also informed that any amount deposited in the form of examination fee shall not be refunded in any condition.

(b) In Online Application System, the candidates have to provide their Mobile No. and valid e-mail ID in prescribed column failing which their Basic Registration shall not be completed. All relevant informations/instructions shall be sent through SMS on that mobile and e-mail on their valid e-mail ID.

### NECESSARY INFORMATION TO APPLICANTS FOR FILLING THEIR APPLICATIONS THROUGH ON-LINE

This advertisement is also available on the Commission's website <http://uppsc.up.nic.in>. The online application system is applicable for applying against this advertisement. Applications sent by any other mode shall not be entertained hence candidates are advised to apply On-line only. In connection with On-line application, candidates are advised to go through the instructions thoroughly given as under and apply accordingly.

1. When the candidate clicks "ALL NOTIFICATIONS/ADVERTISEMENTS" on the Commission's website <http://uppsc.up.nic.in> the On-line advertisement shall be automatically displayed, wherein there shall be 3 parts as given below :

1. User instructions
2. View Advertisement
3. Apply

A list of all the advertisements will be displayed in which "On-line System" is applicable. The Instructions for filling "On-line form" have been given in User Instruction. The Candidates desirous to see the advertisement will have to click before 'View Advertisement' to which they are desirous to see, full advertisement will be displayed along with sample snapshots of ON-LINE Application Procedure. Click on "Apply" for On-line Application.

On-line application will be completed in three stages :

**First Stage:** On clicking "Apply", Candidate Registration will be displayed. Basic Registration form will be displayed on clicking the 'Candidate Registration' respective to Examination. After filling the Basic Registration form, the candidates must check all the informations filled by them. If any correction/modification is required,

click on "Edit" button and ensure the required corrections/ modifications. After being fully satisfied with all the informations filled, click on 'Submit button'. Consequently, the registration of first stage shall be over. Thereafter 'Print Registration Slip' shall be displayed and Print of Registration Slip must be taken by clicking on Print Registration Slip.

**Second Stage:** After the completion of the procedure of first stage. 'Fee to be deposited [in INR]' shall be displayed with caption "Click here to proceed for payment". After clicking the above caption of "Click here to proceed for payment", home page of State Bank MOPS (Multi Option Payment System) shall be displayed comprising of 03 modes of payment viz. (i) NET BANKING (ii) CARD PAYMENTS and (iii) OTHER PAYMENT MODES. After depositing the required fee by any one of the above prescribed modes, "Payment Acknowledgement Receipt (PAR)" shall be displayed along with detail of fee deposit, the print of which must be taken by clicking on "Print Payment Receipt."

**Third stage :** On completion of the procedure of second stage, click on "Proceed for final submission of application form as a result of which 'format' shall be displayed. The candidates are required to enter all the required informations in the format. The photo and signature, duly scanned shall be uploaded also. The candidate should scan his/her photograph and signature in the prescribed size (the size will be mentioned at the specified space in the On-line application). This should also be kept in notice that the photo must be latest passport size. In case the photo and signature, scanned in the prescribed size, are not uploaded, then the On-line system will not accept it. The procedure related for scanning of the photo and signature is laid down in the **Appendix-1**. After filling in all entries in the format, the candidates may click "**PREVIEW**" to see for themselves that all entries and informations are correctly entered and after satisfying themselves should click "Submit" button to forward the same to the Commission. It is essential that the candidate should fill all informations On-line correctly according to the instructions given and click the "Submit" button by the last date prescribed for submission of the application form. If the candidate does not click the "Submit" button, the ON-LINE application process shall not be completed finally and the candidate shall be accountable for this. After clicking the 'Submit' button, the candidate may take a print of the application to preserve it with them. In the event of any discrepancy, the candidate will be required to submit the said print in the office of the Commission, otherwise his/her request shall not be entertained.

**2. Application Fee :** In the ON-LINE Application process, after completing the procedure of first stage, Category wise prescribed examination fee is to be deposited as per Instructions provided in second stage.

The prescribed fee of examination for different categories is as under:-

- |  |   |
|--|---|
| (i) Unreserved/Economically weaker Sections/<br>Other Backward Class | - Exam fee ` 200/- + On-line processing fee ` 25/-<br>Total = ` 225/- |
| (ii) Scheduled Caste/Scheduled Tribe                                 | - Exam fee ` 80/- + On-line processing fee ` 25/-<br>Total = ` 105/-  |
| (iii) Handicapped  | - Exam fee NIL + On-line processing fee ` 25/-<br>Total = ` 25/-      |
| (iv) Ex-Service Man  | - Exam fee ` 80/- + On-line processing fee ` 25/-<br>Total = ` 105/-  |
| (v) Dependents of the Freedom Fighters/Women                         | - According to their original category                                |

**3.** The Basic Registration of such candidates will not be accepted who have been debarred from U.P. Public Service Commission and their period of debarment has not been completed. In addition to above, the applications submitted without requisite informations regarding debarment, if it is found at any stage in future that the application have been submitted concealing this fact, his/her candidature will be rejected at any stage and the commission will consider to debar them from all future examinations/selections including extension of debarment period. In this regard, if the claims of the candidates made in their On-line applications are not found true, they can be debarred not only from the examination in question but from all the future examinations and selections made by the commission also including other appropriate penalties.

**4. Modify Submitted Application:** If a candidates comes to know about any error/ errors in the submitted application form except in name of the Examination and type of recruitment, Registered Mobile Number, E-mail

ID, Aadhaar Number and such cases where prescribed fee for modified category is higher (In case of error in these entries, candidate may submit new online application with prescribed fee only as previously deposited fee will neither be adjusted nor refunded) he/she will be given only one opportunity to modify it/them according to the following procedure before the last date of the submission of application form. "Candidate has to click on 'Modify Submitted Application' under 'Online application process' in Candidate Segment. After that 'Candidate Personal Details' will be displayed on the screen to fill in Registration No., Date of Birth, Gender, Domicile and Category. After filling the Verification code the candidate has to click on the 'proceed' button following which for Authentication of the candidate OTP (One Time Password) will be sent on the registered mobile No. of the candidate and the 'Option Box' will be displayed on the screen to fill in the OTP. After the candidate has filled in the OTP and clicks on the 'proceed' button his/her previously submitted on line application form will be displayed on the screen. The candidate can submit his/her on line application form after making required modifications in it. This facility will be available to the candidates only one time within the last date of submission of application form".

5. The U.P. Public Service Commission shall hold a Written Examination at various Centres of the Districts mentioned in Appendix-2 of this advertisement. Only such candidates will be called for interview who are declared successful on the basis of above Examination. The selection will be made on the basis of total marks obtained by the candidates in written examination and interview. On some of these post, recruitment shall be made on the basis of total marks obtained in the written examination, according to the provision of concerned service rules of such posts. The date and centre of examination decided by the Commission, will be intimated to the candidates by means of their e-Admission certificate. The No. of Districts/Centres may be increased or decreased according to the decision of the Commission on the basis of final No. of applications received.

6. **No. of Vacancies :** Vacancies are as under :-

(i) **General Recruitment**

Sl. No.	Name of Department	Name of post	No. of Vacancies	Branch
1	Irrigation Deptt.	Asstt. Engg. (Civil)	171	Civil
2	Irrigation Deptt.	Asstt. Engg. (Mechanical)	73	Mechanical
3	Minor Irrigation Deptt.	Asstt. Engg. (Agriculture)	09	Agriculture
4	Minor Irrigation Deptt.	Asstt. Engg. (Civil)	04	Civil
5	Minor Irrigation Deptt.	Asstt. Engg. (Mechanical)	05	Mechanical
6	Rural Engineering Deptt.	Asstt. Engg. (Civil)	57	Civil
7	Public Works Deptt. (P.W.D)	Asstt. Engg. (Civil)	108	Civil
8	Public Works Deptt. (P.W.D)	Asstt. Engg. (Electrical/ Mechanical)	46	Electrical/ Mechanical
9	Mandi Parishad	Asstt. Engg. (Civil)	31	Civil
10	Mandi Parishad	Asstt. Engg. (Electrical/ Mechanical)	05	Electrical/ Mechanical
11	Housing and Urban Planning Deptt.	Asstt. Engg. (Civil)	26	Civil
12	Housing and Urban Planning Deptt.	Asstt. Engg. (Electrical/ Mechanical)	25	Electrical/ Mechanical
13	Nagar Vikas Vibhag	Asstt. Engg. (Civil)	24	Civil
14	Nagar Vikas Vibhag	Asstt. Engg. Mechanical) (Electrical/	06	Electrical/ Mechanical
15	Nagar Vikas Vibhag	Asstt. Engg. (Water)/'B' Category Jalkal Engg.	19	Civil/Electrical Mechanical
16	Medical Deptt.	Asstt. Engg. (Civil)	04	Civil
17	Panchayati Raj Deptt.	Engineer	01	Civil

18	Agriculture Deptt.	U.P. Agriculture Service Group 'B' (Engg. Branch)	12	Agriculture
19	Irrigation and Water Re-Sources Deptt.	Bhoomi Sanrakshan Adhikari/Technical Officer	31	Agriculture/Civil
20	Energy Department	Asstt. Director, Electrical Security	21	Electrical
21	Labour Deptt.	Asstt. Engg. (Factories)	13	Civil/Mechanical/ Electrical/ Chemical/ Industrial
22	Labour Deptt.	Asstt. Engg. (Boilers)	01	Mechanical
		<b>Total</b>	<b>692</b>	

**(ii) Special Recruitment**

Sl. No.	Name of Department	Name of post	No. of Vacancies	Branch
1	Nagar Vikas Vibhag	Asstt. Engg. (Water)/'B' Category Jalkal Engg.	18 (SC/ST/OBC)	Civil/Electrical Mechanical
2	Mandi Parishad	Asstt. Engg. (Electrical/ Mechanical)	02 (OBC)	Electrical/ Mechanical
		<b>Total</b>	<b>20</b>	

**Pay Scale :** Rs. 15,600-Rs. 39,100/- Grade Pay Rs. 5400/-.

**Note:-** No. of vacancies may increase or decrease on the request of the Govt. in special circumstances.

**7. Reservation :** The reservation for Scheduled Castes of U.P./Scheduled Tribes of U.P./Other Backward Class of U.P./Economically Weaker Sections candidates of U.P. shall be admissible in accordance with the provisions of relevant Govt. Rules. Accordingly, reservation for category under horizontal as Dependents of Freedom Fighters of U.P., Ex-serviceman of U.P., P.H. of U.P. and Women candidates shall be admissible on settlement of vacancies. Reservation for PH of U.P. shall be permissible for the notified/identified posts.

**Note :** (1) शासनादेश संख्या-39 रिट/का-2/2019 दिनांक-26 जून, 2019 द्वारा शासनादेश संख्या- 18/1/99/का-2/2006 दिनांक-09 जनवरी, 2007 के प्रस्तर-4 में दिये गये प्राविधान, "यह भी स्पष्ट किया जाता है कि राज्याधीन लोक सेवाओं और पदों पर सीधी भर्ती के प्रक्रम पर महिलाओं को अनुमन्य उपरोक्त आरक्षण केवल उत्तर प्रदेश की मूल निवासी महिलाओं को ही अनुमन्य है" को रिट याचिका संख्या-11039/2018 विपिन कुमार मौर्या व अन्य बनाम उत्तर प्रदेश राज्य व अन्य तथा सम्बद्ध 6 अन्य रिट याचिकाओं में मा. उच्च न्यायालय, इलाहाबाद द्वारा दिनांक- 16-01-2019 को अधिकारातीत (ULTRA VIRES) घोषित करने सम्बन्धी निर्णय के अनुपालन में शासनादेश दिनांक-09-01-2007 से प्रस्तर-04 को विलोपित किए जाने का निर्णय लिया गया है। उक्त निर्णय शासन द्वारा मा. उच्च न्यायालय के आदेश दिनांक-16.01.2019 के विरुद्ध दायर विशेष अपील (डी) संख्या-475/2019 में मा. उच्च न्यायालय द्वारा पारित होने वाले अन्तिम निर्णय के अधीन होगा। (2) The Candidates claiming the benefit of reservation/age relaxation must obtain, in support of their category a certificate issued by competent authority on the proforma available on Appendix-3 of the Website of this detailed advertisement and shall submit the same to the Commission when asked for. (3) All Reserved category candidates of U.P. must mention their Category/Sub Category in the Application. (4) Candidates claiming reservation/Age relaxation in more than one category will be entitled to only one concession whichever is more beneficial to them. (5) The Scheduled Caste, Scheduled Tribes, Other Backward Class, Economically Weaker Sections, Dependents of Freedom Fighter, Ex-service Man and PH candidates who are not the permanent residents of U.P. shall not be given the benefit of reservation/Age relaxation. (6) In case of women candidates the caste certificate issued from father side only will be treated valid.

**8. Conditions of Eligibility (For age relaxation only) :** (I) Eligibility in case of Emergency Commissioned/Short Service Commissioned Officers: In accordance with the provision of the G.O. No. 22/10/1976-Karmik-2-85, dated 30-1-1985 Emergency Commissioned/Short Service Commissioned Officers who have not been released from Army but whose period of Army service has been extended for rehabilitation may also apply for this examination on the following conditions: (A) Such applicants will have to obtain a certificate of the competent authority of Army, Navy, Air Force to the effect that their period of Service has been extended for rehabilitation

and no disciplinary action is pending against them. (B) Such applicants will have to submit in due course a written undertaking that in case they are selected for the post applied for, they will get themselves released immediately from the Army Service. The above facilities will not be admissible to Emergency/Short Service Commissioned Officers, if (a) he gets permanent Commission in the Army, (b) he has been released from the Army on tendering resignation, (c) he has been released from the Army on grounds of misconduct or physical disability or on his own request and who gets gratuity.

**9. MARITAL STATUS :** Male candidates who are married and have more than one wife living and female candidates who have married a person already having a wife, shall not be eligible unless the Hon'ble Governor has granted exemption from this condition.

**10. EDUCATIONAL QUALIFICATION :**

Sl. No.	Name of post/Name of Deptt.	Qualifications
1.	<b>Assistant Engineer (Civil/Mechanical) (Irrigation department) (Sl. No.- 1 and 2 in table of vacancies)</b>	<b>Essential:</b> Must possess a degree in Civil or Mechanical Engineering as the case may be, from an institution or university recognised by the Government, or be a qualified Associate Member of the institution of Engineer (India) Civil Engineering Branch or Mechanical Engineering Branch, as the case may be. <b>PREFERENTIAL:</b> A candidate who has. (i) served in the Territorial Army for a minimum period of two years, or (ii) obtained a "B" Certificate of N.C.C. or (iii) Successfully completed one year training as trainee, shall other things being equal, be given preference in the matter of direct recruitment.
2.	<b>Assistant Engineer (Agriculture/Civil/Mechanical) (Minor Irrigation department) (Sl. No.- 3, 4 and 5 in table of vacancies)</b>	<b>Essential-</b> Must possess a Bachelor degree in Agriculture/Civil or Mechanical Engineering or a degree recognised by the Government as equivalent thereto or has passed Associate Membership Examination in section "A" and "B" in Civil or Mechanical Engineering from Institution of Engineers (India). <b>Preferential:</b> A candidate who has (i) Served in the Territorial Army for a minimum period of two years, or (ii) obtained a "B" Certificate of N.C.C. shall other things being equal be given preference in the matter of direct recruitment.
3.	<b>Assistant Engineer (Civil) (Rural Engineering Department) (Sl. No.- 6 in table of vacancies)</b>	<b>Essential-</b> Must possess (A) a Bachelor degree in Civil Engineering from an Institution or University recognized by the Government, or (B) has passed Associate Membership Examination in section "A" and "B" in Civil Engineering from Institution of Engineers (India). <b>Preferential:</b> A candidate who has (i) served in the Territorial Army for a minimum period of two years, or (ii) obtained a "B" Certificate of N.C.C. shall other things being equal, be given preference in the matter of direct recruitment.
4.	<b>Assistant Engineer(Civil) (Public Works Department (P.W.D.) and Mandi Parishad) (Sl. No.- 7 and 9 in table of vacancies)</b>	<b>Essential-</b> Must possess a Bachelor's degree in Civil Engineering from a university established by law in India or a qualification recognized by the Government as equivalent thereto. <b>Preferential:</b> A candidate who has (i) served in the Territorial Army for a minimum period of two years, or (ii) obtained a "B" Certificate of N.C.C. or (iii) Successfully completed one year training as trainee shall other things being equal, be given preference in the matter of direct recruitment.
5.	<b>Assistant Engineer (Electrical/ Mechanical)</b>	<b>Essential-</b> Degree in Electrical or Mechanical Engineering from an university established by law in India or any degree recognised

	<b>Works Department (Public (P.W.D) and Mandi Parishad) (Sl. No.- 8 and 10 in table of vacancies)</b>	<p>equivalent by the Govt. or passed Associate Examination of Electrical or Mechanical Engineering from City and Guild Institute (Imperial College of Science and Technology South, Kesington) or passed section 'A' and 'B' of Electrical or Mechanical Engineering of Associate Membership of Institution of Engineers London or completely eligible Associate Engineers (India) or passed section 'A' and 'B' in Electrical or Mechanical Engineering of Institution of Engineers (India).</p> <p><b>Preferential:</b> A candidate who has (i) served in the Territorial Army for a minimum period of two years, or (ii) obtained a "B" Certificate of N.C.C. shall other things being equal, be given preference in matter of direct recruitment.</p>
6.	<b>Assistant Engineer (Housing and Urban Planning Department) (Sl. No.- 11 in table of vacancies)</b>	<p><b>Essential-</b> Degree in Civil Engineering from a recognized college or university in India or abroad.</p> <p><b>Preferential:</b> A candidate who has (i) served in the Territorial Army for a minimum period of two years, or (ii) obtained a "B" Certificate of N.C.C. shall other things being equal, be given preference in the matter of direct recruitment.</p>
7.	<b>Assistant Engineer (Electrical/ Mechanical) (Sl. No.- 12 in table of vacancies)</b>	<p><b>Essential-</b> Degree in Electrical or Mechanical Engineering from a recognized college or university in India or abroad.</p> <p><b>Preferential:</b> A candidate who has (i) served in the Territorial Army for a minimum period of two years, or (ii) obtained a "B" Certificate of N.C.C. shall other things being equal, be given preference in the matter of direct recruitment.</p>
8.	<b>Assistant Engineer (Civil) (Nagar Vikas Vibhag) (Sl. No.- 13 in table of vacancies)</b>	<p><b>अनिवार्य:-</b> भारत या विदेश में किसी मान्यता प्राप्त कॉलेज या विश्वविद्यालय से सिविल इंजीनियरिंग की डिग्री या डिप्लोमा जो इन्स्टीट्यूशन ऑफ इंजीनियर्स (इण्डिया) द्वारा मान्य हो और जिसके आधार पर अभ्यर्थी उक्त इन्स्टीट्यूशन के एसोसिएट मेम्बरशिप परीक्षा के सेक्शन 'ए' तथा 'बी' से मुक्त हो या अभ्यर्थी ने सिविल इंजीनियरिंग में इन्स्टीट्यूशन ऑफ इंजीनियर्स (इण्डिया) की एसोसिएटशिप परीक्षा के सेक्शन 'ए' तथा 'बी' अवश्य पास कर लिये हों। <b>अधिमाननी:-</b> अन्य बातों के समान होने पर ऐसे अभ्यर्थियों को अधिमान दिया जाएगा जिसने (1) प्रादेशिक सेना में न्यूनतम 02 वर्ष की अवधि तक सेवा की हो, या (2) राष्ट्रीय कैडेट कोर का "बी" प्रमाण-पत्र प्राप्त किया हो।</p>
9.	<b>Assistant Engineer (Electrical/ Mechanical) (Nagar Vikas Vibhag) (Sl. No.- 14 in table of vacancies)</b>	<p><b>अनिवार्य:-</b> भारत या विदेश में किसी मान्यता प्राप्त कॉलेज या विश्वविद्यालय से इलेक्ट्रिकल या मैकेनिकल इंजीनियरिंग की डिग्री जो इन्स्टीट्यूशन ऑफ इंजीनियर्स (इण्डिया) द्वारा मान्य हो और जिसके आधार पर अभ्यर्थी उक्त इन्स्टीट्यूशन के एसोसिएट मेम्बरशिप परीक्षा के सेक्शन 'ए' तथा 'बी' से मुक्त हो या अभ्यर्थी ने मैकेनिकल/ इलेक्ट्रिकल इंजीनियरिंग में इन्स्टीट्यूशन ऑफ इंजीनियर्स (इण्डिया) की एसोसिएट मेम्बरशिप परीक्षा के सेक्शन 'ए' तथा 'बी' अवश्य पास कर लिये हों। <b>अधिमाननी:-</b> अन्य बातों के समान होने पर ऐसे अभ्यर्थियों को अधिमान दिया जाएगा जिसने (1) प्रादेशिक सेना में न्यूनतम 02 वर्ष की अवधि तक सेवा की हो, या (2) राष्ट्रीय कैडेट</p>

		कोर का “बी” प्रमाण-पत्र प्राप्त किया हो।
10.	Assistant Engineer (Water)/'B' Category Jalkal Engineer (Nagar Vikas Vibhag) (Sl. No.- 15 in table of vacancies)	<b>अनिवार्य:-</b> भारत या विदेश में किसी मान्यता प्राप्त कॉलेज या विश्वविद्यालय से सिविल इंजीनियरिंग या इलेक्ट्रिकल या मैकेनिकल इंजीनियरिंग की डिग्री जो इन्स्टीट्यूशन ऑफ इंजीनियर्स (इण्डिया) द्वारा मान्य हो और जिसके आधार पर अभ्यर्थी उक्त इन्स्टीट्यूशन के एसोशिएट मेम्बरशिप सेक्शन 'ए' तथा 'बी' से मुक्त हो या अभ्यर्थी ने सिविल इंजीनियरिंग/इलेक्ट्रिकल/मैकेनिकल इंजीनियरिंग में इन्स्टीट्यूशन ऑफ इंजीनियर्स (इण्डिया) का सेक्शन 'ए' तथा 'बी' अवश्य पास किया हो। <b>अधिमान:-</b> अन्य बातों के समान होने पर ऐसे अभ्यर्थियों को अधिमान दिया जाएगा जिसने (1) प्रादेशिक सेना में न्यूनतम 02 वर्ष की अवधि तक सेवा की हो, या (2) राष्ट्रीय कैडेट कोर का “बी” प्रमाण-पत्र प्राप्त किया हो।
11.	Assistant Engineer (Civil) (Medical Department) (Sl. No.- 16 in table of vacancies)	<b>Essential-</b> (A) Must possess a Bachelor degree in Civil Engineering from a University established by Law in India or degree recognised by the Government as equivalent there to (B) Associate Member of Institute of Engineers (India) in Civil Engineering branch. <b>Preferential:</b> A candidate who has (1) Served in the Territorial Army for a minimum period of 02 years or (2) obtained a “B” Certificate of N.C.C. But a candidate who is a trainee, for Assistant Engineer (Civil) post, shall other things being equal, be given preference in matter of direct recruitment.
12.	Engineer (Panchayati Raj Department) (Sl. No.- 17 in table table of vacancies)	<b>Essential-</b> A Bachelor degree in Civil Engineering from a University established by Law in India or qualification recognized by the Government as equivalent there to. <b>Preferential:</b> A candidate who has (i) Served in the Territorial Army for a minimum period of 02 years or (2) obtained a “B” Certificate of N.C.C. shall other things being equal, be given preference in matter of direct recruitment.
13.	U.P Agriculture Service Group “B” (Engineering branch) (Agriculture Department) (Sl. No.- 18 in table of vacancies)	<b>Essential-</b> Bachelor's degree in Agriculture Engineering from a University established by Law in India or a qualification recognised by Government as equivalent there to. <b>Preferential:</b> (i) Post graduate degree in Agricultural Engineering from a university established by law in India or a qualification recognised by Government as equivalent there to. (ii) Served in the Territorial Army for a minimum period of 02 years or (iii) obtained a “B” Certificate of N.C.C. shall other things being equal, be given preference in the matter of direct recruitment.
14.	Bhoomi Sanrakshan Adhikari/Technical Officer (Irrigation and Water Resources department) (Sl. No.- 19 in table of vacancies)	<b>Essential-</b> Must possess Bachelor degree in Agricultural/Civil Engineering from a University established by Law in India or a qualification recognised by the Government as equivalent there to. <b>Preferential:</b> Diploma in Soil Conservation and water management (i) A Candidate who has served in the Territorial Army for a Minimum period of two years, or (ii) obtained a “B” Certificate of N.C.C. shall other things being equal, be given preference in matter of direct recruitment.
15.	Assistant Director, Electrical Security (Energy	<b>Essential-</b> A Bachelor's degree in Electrical Engineering from a University established by Law in India or be an Associate Member of

	<b>department) (Sl. No.- 20 in table of vacancies)</b>	the Institution of Engineers (India) in Electrical Engineering. <b>Preferential:</b> A Candidate who has (i) served in Territorial Army for a Minimum period of two years or (ii) obtained a "B" Certificates of N.C.C. shall other things being equal, be given preference in the matter of direct recruitment.
16.	<b>Assistant Director (Factories) (Labour department) (Sl. No.- 21 in table of vacancies)</b>	<b>Essential-</b> (i) Intermediate Examination with Science of the Board of High School and Intermediate Education, Uttar Pradesh or an examination recognised by the Government as equivalent there to. (ii) A degree of Engineering or Technology in any one branch of Civil Mechanical, Electrical, Chemical or Industrial Engineering from a university established by law in India or a qualification recognised by the Government as equivalent there to. (iii) Working knowledge of Hindi written in Devnagri Script.
17.	<b>Assistant Director (Boilers) (Labour department) (Sl. No.- 22 in table of vacancies)</b>	<b>Essential-</b> (i) A degree in Mechanical Engineering of a University established by Law in India or a qualification recognised by the Government as equivalent there to, with practical training in the design construction, operation or maintenance of boilers for not less than two years (ii) Working knowledge of Hindi written in Devnagri Script.

**11. (i) AGE LIMIT :** Candidates must have attained the age of 21 years and must not have crossed the age of 40 years on July 1, 2019 i.e. they must have not been born earlier than 2nd July, 1979 and not later than July 1, 1998. For PH candidates, the maximum age limit is 55 years i.e. they must have not been born before 02 July, 1964. (ii) Relaxation in Upper Age Limit: (a) Upper age limit shall be greater by five years for candidates belonging to Scheduled Castes of U.P., Scheduled Tribes of U.P., Other Backward Classes of U.P., Skilled players of U.P. of Classified Games, State Govt. Employees of U.P. including Teachers/Staff of the Basic Shiksha Parishad of U.P. and Teachers/Staff of the Government Aided Madhyamik Vidyalayas of U.P. i.e. they must have not been born before 2nd July, 1974. (b) Upper age limit shall be greater by fifteen years for physically handicapped persons of U.P. (c) Upper age limit shall also be greater by five years for Group- 'B' posts for the Emergency Commissioned Officers/ Short Service Commissioned Officers/Ex-Army Personnels of U.P. who have rendered five years service in Army, but there shall be no reservation for Group- 'B' posts.

Note- (i) For the posts of Assistant Engineer (Civil) of Medical deptt., Assistant Engineer (Civil, Mechanical) of Irrigation deptt. and Assistant Engineer (Civil) of P.W.D. (Sl. No.- 1, 2, 7 and 16 of vacancy table)- "The upper age limit in the case of a candidate, who is trainee, shall be greater by one year" (ii) राज्य कृषि उत्पादन मण्डी परिषद के सहायक अभियन्ता (सिविल) एवं सहायक अभियन्ता (विद्युत/यांत्रिक) (रिक्तियों की तालिका के क्रम सं.- 9 व 10) पदों हेतु:- "सिविल अपील संख्या- 4092/2001 स्टेट आफ 30 प्र0 पिटीशनर बनाम नीरज अवस्थी व अन्य में मा0 सर्वोच्च न्यायालय द्वारा पारित निर्णय दिनांक 16.12.2005 से आच्छादित मण्डी परिषद/मण्डी समितियों की सेवा से पृथक किये गये कार्मिकों को उक्त निर्णय से आच्छादित होने के साक्ष्य सहित आवेदन करने पर अधिकतम आयु सीमा में अधिवर्षिता आयु की सीमा तक छूट अनुमन्य होगी। किसी भी स्तर पर किसी आवेदक के वास्तव में उक्त निर्णय से आच्छादित न होना पाये जाने पर उसका आवेदन शून्य समझा जायेगा और अग्रेतर उसका कोई दावा मान्य नहीं होगा।" आयु सीमा तक छूट इस प्रतिबन्ध के साथ अनुमन्य होगी कि उनके पास अधिवर्षिता आयु से पूर्व पर्याप्त समय उपलब्ध हो, जिससे कि चयन होने की दशा में वे अधिवर्षिता से पूर्व चयनित पद पर योगदान कर सकें। (iii) For the post of Assistant Engineer (Civil) and Assistant Engineer (Electrical/Mechanical) of Nagar Vikas Vibhag (Sl. No.- 13 and 14 of vacancy table), "In the case of person who has already rendered one year's service or more in any of the centralised Services or in the Palika, the maximum age-limit shall be greater to the extent he has rendered continuous service or a period of seven years whichever is less". (iv) For the post of Assistant Engineer (Civil, Electrical/Mechanical) of Housing and Urban Planning department (Sl. No.- 11, 12 of vacancy table):- "(A) In the case of a person who has already rendered one year's service or more in any of the service in the



development Authority, the maximum age limit shall be greater to the extent he has rendered continuous service or for a period of seven years whichever is less. (B) A candidate who was entitled in respect of his age to appear at a selection in any year in which no selection is made though a vacancy existed, shall be deemed to be entitled in respect of his age to appear at the next following selection." (v) For the post of Assistant Engineer (Water)/'B' Category- Jalkal Engineer (Sl. No.- 15 of vacancy table)& "(A) In the case of person who has already rendered one year's service or more in any of the centralised services or in the Palika or Jal Sansthan, as the case may be, the maximum age-limit shall be greater to the extent he has rendered continuous services or a period of Seven year, whichever is less. (B) A candidate, who was entitled in respect of his age to appear at a selection in any year, in which no selection is made, shall be deemed to be entitled in respect of his age to appear at the next following selection."

**12. SOME INFORMATION ABOUT EXAMINATION AND INTERVIEW :** (1) The dates and venue for the examination shall be informed by the Commission later on through e-Admit Card. (II) All original certificates shall be verified at the time of interview. Candidates will also be required to furnish four passport size Photographs, two unattested and two attested by their Head of Department or Head of the Institution where they received education or by a Gazetted Officer at the time of Interview. (III) Candidates serving under the Central or State Government will have to produce 'No Objection Certificate' from their employer at the time of interview issued by the competent authority.

**NOTE:** The candidates must enclose self attested copies of all certificates in support of their claims rendered in the application form for the examination. If they do not enclose self attested copies of all certificates in support of their all claims, their candidature shall be cancelled. The candidates will have to fill up the prescribed Application Form before the interview (Viva-Voce Test).

**13. IMPORTANT INSTRUCTIONS FOR CANDIDATES:** (1) As per decision of the UPPSC a candidate will be liable to be debarred from this examination and all other future examinations and selections upto a maximum period of five years for furnishing any wrong information in his/her application form which cannot be substantiated by relevant documents or for any other malpractice. (2) The claim of category, subcategory, domicile, gender, date of birth, name and address will be valid only till the last date of online application. On submission of false/misleading information, the candidature will be cancelled. In this regard no application for error correction/modification shall be acceptable. Incomplete application form shall be summarily rejected and no correspondence shall be entertained in this regard. (3) The date of birth of the candidates shall be admissible as entered in High School Certificate. The candidate will have to attach his/her High School or Equivalent Examination Certificate with the application form of Examination. No Other Certificate shall be acceptable for Date of Birth and if it is not attached with the application it shall be rejected. (4) The candidates will have to enclose self attested copies of Marksheets, Certificates & Degrees along with the application form of examination in support of their claims of Educational Qualifications. If they do not enclose self attested copies of certificates/documents in support of their claims, the application shall be rejected. (5) The benefit of reservation to the categories of Handicapped persons of society shall be given only on the posts which shall be identified by the Government for their Sub category. For this benefit, the Handicapped persons must produce a certificate of being handicapped in that Sub category issued by prescribed Medical Officer/Specialist and counter signed by the Chief Medical Officer according to Rule 3 of U.P. Public Service (Reservation for physically Handicapped, Dependent of Freedom Fighters and Ex-Servicemen (Amendment) Act, 2018. It is worth while mentioning that as per section-3 of the said Act, the new identification of post has not yet been received from the government, however as per identification (Category/Subcategory) mentioned in requisitions received from the Appointing authorities the selection process will be completed accordingly. (6) The Ex-Army personnels must be discharged from army upto the last date prescribed for receipt of applications. (7) Date, time and venue etc. of examination along with Roll No. will be communicated to the candidates through e-Admit Cards, Candidates will have to appear at the centre/venue allotted to them by the Commission. No change in centre/ venue is permissible and no application shall be entertained in this regard. (8) The candidature of such candidates who are subsequently found ineligible according to the terms laid down in advertisement will be cancelled and their any claim for the Examination will not be entertained. The decision of the Commission regarding eligibility of the candidates shall

be final. (9) The Application/candidature will be rejected/ cancelled if the application is not submitted on prescribed form, date of birth is not mentioned or wrong date of birth is mentioned, overage, under age, not fulfilling the minimum educational qualifications, application received after last date and no signature under declaration in the format. (10) The Commission may admit the candidates provisionally after summarily checking of the application but if it is found at any stage that applicant was not eligible or that his/her application should have been rejected or was not entertainable initially, his/her candidature will be rejected and if the candidate is selected, the recommendation of the Commission for appointment shall be withdrawn. (11) The Commission reserves the right of cancelling the candidature of any candidate found indulging in any malpractice i.e. copying in examination hall or indiscipline, misbehaviour or canvassing for his/her candidature. On violation of these instructions, the candidates may be debarred from this examination as well as future examinations. In this regard the decision of the Commission shall be final. (12) In all communications to the Commission, the candidates must mention the name of examination, advertisement No., registration No., date of birth, father's/husband's name and also the Roll Number, if communicated. (13) Candidates selected for appointment will have to undergo Medical Examination as required under the Rules. (14) 2 times candidates to the number of vacancies shall be called for interview on the basis of examination. It is essential for the candidates to appear in the interview as the place of candidates will depend on aggregate of marks obtained in written examination and interview (on some of these post recruitment shall be made on the basis of total marks obtained in the written examination, according to the provision of concerned service rules). Preferences for Deptt. wise posts will be asked at the time of interview which will be treated final and no change, therein will be admitted later. (15) The candidates who are appearing in the Examination of essential qualification prescribed for the posts need not to apply, because they are not eligible. (16) While filling the OMR answer sheets the candidates "must use Black Ball Point Pen only". Use of any other pen or pencil is strictly prohibited. (17) Candidates are directed to fill in all the entries correctly in the OMR Answer Sheet. In case of leaving them blank or filling them erroneously the candidate will be wholly responsible for the same & the commission will not evaluate his/her OMR Answer Sheet. The informations filled in the OMR Answer Sheets must not be erased by whitener, blade or rubber etc. (18) Candidates shall be provided OMR Answer Sheets in duplicates i.e. original copy and candidate's copy. After completion of the examination, the candidates are required to hand over the original copy to the Invigilator and the candidate's copy to keep with them. (19) In the Examination for the objective type Question papers, penalty (Negative Marking) shall be imposed for wrong answers given by the candidates which is as below:- (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, one third (0.33) of the marks assigned to that question will be deducted as penalty. (ii) If a candidate gives more than one answer, it will be treated as a wrong answer even if one of the given answer happens to be correct and there will be same penalty as above for that question. (iii) If a question is left blank i.e. no answer is given by the candidate there will be no penalty for that question. (20) The minimum efficiency standard for S.C. & S.T. candidates is fixed 35% i.e. the Candidates of these Categories shall not be placed in the merit/select list if they have secured less than 35% marks in the examination. Similarly, the minimum efficiency standard for the candidates of other categories is fixed 40% i.e. such candidates shall not be placed in the merit/select list if they have secured less than 40% marks in the examination. All such candidates who have secured less marks than the marks of minimum efficiency standard as fixed by the Commission shall be treated disqualified.

#### **GENERAL INSTRUCTIONS**

1. In no circumstances, applications of any stage shall be accepted after the last prescribed date and time. Applications found without requisite informations and without photograph and signature, even when received in time, may be summarily rejected.
2. In the On-line system the candidates must ensure that all the requisite informations have been duly filled and must click the submit Button by the Last prescribed Date & Time. Candidates must take the print and keep it safely. In any discrepancy candidates will have to produce the said print otherwise no request shall be entertained.

3. Those candidates, willing to take the benefit of the reservation/age relaxation must obtain a certificate, issued by the competent authority, in support of the reserved category, in the prescribed format printed in this detailed advertisement (Appendix-3) and submit the same to the Commission, whenever required to do so. Those claiming more than one reservation/Age relaxation will be given only one such concession, which will be more beneficial. The candidates who are not originally domiciled of U.P. belonging to SC, ST, O.B.C., EWS, dependants of freedom fighters, Ex-Servicemen, skilled players and P.H. are not entitled to benefit of reservation/age relaxation. In case of the women candidates, the caste certificate issued from father side will be treated valid.
4. The Commission do not advise to candidates about their eligibility. Therefore, they should carefully read the advertisement and when satisfied about their eligibility conditions of the advertisement, then only apply. The candidates must possess all the requisite qualifications till the last date for submitting the applications.
5. In the category of dependants of the freedom fighters only sons, daughters, grandsons (Son's son/Daughter's son) and grand daughters (son's daughter/daughter's daughter, married/unmarried) are covered. It is advised that the candidates of the aforesaid category must obtain the reservation certificate from the District Magistrate in terms of Govt. Order No. 453/79-V-1-15-1(Ka)14-2015 dated 07.04.2015 in the prescribed format and submit the same.
6. In the event of involvement of a candidate in the concealment of any important information, pendency of any case/criminal case, conviction, more than a husband or wife being alive, submission of facts in a distorted manner malpractice, canvassing for candidature/selection etc., the Commission reserves the right to reject the candidature and debar him from appearing in the examination in question and in all other future examinations and selections.
7. In case the candidates feel any problem in the "On-line Application" they may get their problem resolved by contacting over phone or on Website clicking '**Contact us**'.
8. The name of Districts for Examination are available in the advertisement in Appendix-2. In the same way the plan of Examination and the syllabus on **Appendix-4**.

#### **Detailed Application Form:**

At the top of the page, there is a Declaration. The candidates are advised to go through the content of the Declaration carefully. Candidate has the option either to agree or disagree with the content of Declaration by clicking on '**I Agree**' or '**I do not agree**' buttons. In case the candidate opts to disagree, the application will be dropped, and the procedure will be terminated. Accepting to agree only will submit the candidate's On-line Application.

#### **Notification Details :**

This section shows information relevant to Notification

#### **Personal Details**

This section shows information about candidate's personal details i.e. Registration Number, candidate's name, Father/Husband's name, Gender, DOB, UP domicile, Category, Marital status, email ID and contact number.

#### **Other Details of Candidate**

Other details of candidate shows the information details about UP Freedom Fighter, Ex Army service duration and your physical deformity.

#### **Education & Experience Details**

Its shows your educational and experience details.

#### **Candidate address, photo & signature details**

Here you will see your complete communication address and photo with your signature.

#### **Declaration segment**

At the bottom of the page there is a 'Declaration' for the candidates. Candidates are advised to go through the content of the Declaration carefully.

After filling all above particulars there is provision for preview your detail before final submission of application form on clicking on "**Preview**" button.

Preview page will display all facts/particulars that you have mentioned on entry time, if you are sure with filled details then click on “Submit” button to finally push data into server with successfully submission report that you can print.

Otherwise using “Back” button you can modify your details.

**[CANDIDATES ARE ADVISED TO TAKE A PRINT OF THIS PAGE BY CLICKING ON THE “PRINT” OPTION AVAILABLE]**

For other Information: For other Information candidates are advised to select desired option in 'Home Page' of Commission's website <http://uppsc.up.nic.in>

**CANDIDATE SEGMENT**

<b>NOTIFICATIONS/ADVTS</b>
All Notification/Advertisements
<b>ONLINE FORM SUBMISSION</b>
1. Candidate Registration (First Stage)
2. Fee Deposition / Reconciliation (SECOND STAGE)
3. Submit Application Form (Third Stage)
<b>APPLICATION FORM STATUS</b>
Update your transaction ID by Double Verification mode View Application Status
List of Applications Having photo related Objections
Print Duplicate Registration Slip
Print Detailed Application Form
<b>EXAMINATION SEGMENT</b>
Print Address Slip for sending Documents to commission [Only for Direct Recruitment]
<b>DOWNLOAD SEGMENT</b>
Download Admit Card
Download interview letter
Download Syllabus
Know your Registration No.
Click here to view Key Answer Sheet

**Regarding Application :**

1. On clicking “View Application status” option in Candidate Segment page you can see current status of candidate.
2. On clicking “Result” option in Candidate Segment page candidate can see result status of periodically.
3. “Interview/Exam Schedule” option in Candidate Segment page candidate can see interview and examination schedule details periodically.
4. On clicking “Key Answer Sheet” candidate can download key answer sheet.
5. On clicking “Admit Card/Hall Ticket” candidate can download their Admit Card using with some basic credential of candidate.
6. On clicking “List of Rejected Candidate” candidate can view Rejected candidate list.
7. On clicking “Syllabus” candidate can view syllabus of particular examination.

[Candidates applying on-line need NOT send hard copy of the Online Application filled by them on-line or any other document/certificate/testimonial to the Uttar Pradesh Public Service Commission. However they are advised to take printout of the On-line Application and retain it for further communication with the UPPSC.] [The Candidates applying for the examination should ensure that they fulfill all eligibility conditions for admission to examination. Their admission at all the stages of the examination will be purely provisional subject to satisfying the prescribed eligibility conditions.] UPPSC takes up verification of eligibility conditions with reference to original documents at subsequent stages of examination process.

**LAST DATE FOR RECEIPT OF APPLICATIONS :** On-line Application process must be completed (including filling up of Part-I, Part-II and Part-III of the Form) before last date of form submission according to Advertisement, after which the Web-Link will be disabled.

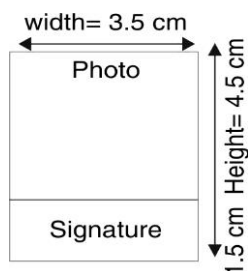
**परिशिष्ट-1**

The Procedure relating to upload Photo & Signature.

**Guide Lines for Scanning Photograph with Signature**

1. Paste the Photo on any white paper as per the above required dimensions. Sign in the Signature Space provided. Ensure that the signature is within the box.
2. Scan the above required size containing photograph and signature. Please do not scan the complete page.
3. The entire image (of size 3.5 cm by 6.0 cm) consisting of the photo along with the signature is required to be scanned, and stored in \* .jpg, .jpeg, .gif, .tif, .png format on local machine.
4. Ensure that the size of the scanned image is not more than **50 KB**.
5. If the size of the file is more than **50 KB**, then adjust the settings of the scanner such as the DPI resolution, no. colours etc., during the process of scanning.
6. The applicant has to sign in full in the box provided. Since the signature is proof of identity, it must be genuine and in full; initials are not sufficient. Signature in CAPITAL LETTERS is not permitted.
7. The signature must be signed only by the applicant and not by any other person.
8. The signature will be used to put on the Hall Ticket and wherever necessary. If the Applicant's signature on answer script, at the time of the examination, does not match the signature on the Hall Ticket, the applicant will be disqualified.

**Sample Image & Signature :-**



**परिशिष्ट - 2**

The name of districts where Exam will be held are **Lucknow** and **Prayagraj**.

The No. of Districts/Centers may be increased or decreased according to the decision of commission on the basis of final No. of applications received.

**परिशिष्ट - 3**

**उ0प्र0 की अनुसूचित जाति तथा अनुसूचित जनजाति के लिये जाति प्रमाण-पत्र**

प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारी ..... सुपुत्र/सुपुत्री श्री..... निवासी ग्राम ..... तहसील ..... नगर ..... जिला ..... उत्तर प्रदेश राज्य की ..... जाति के व्यक्ति हैं जिसे संविधान (अनुसूचित जाति) आदेश, 1950 (जैसा कि समय-समय पर संशोधित हुआ)/ संविधान (अनुसूचित जनजाति, उत्तर प्रदेश) आदेश, 1967 के अनुसार अनुसूचित जाति/अनुसूचित जनजाति के रूप में मान्यता दी गई है।

श्री/श्रीमती/कुमारी ..... तथा अथवा उनका परिवार उत्तर प्रदेश के ..... ग्राम ..... तहसील ..... नगर ..... जिला ..... में सामान्यतया रहता है।

स्थान .....

हस्ताक्षर .....

दिनांक .....

पूरा नाम .....

मुहर .....

पद नाम .....

जिलाधिकारी/अतिरिक्त जिलाधिकारी/सिटी मजिस्ट्रेट/परगना मजिस्ट्रेट/तहसीलदार/ अन्य वेतन भोगी मजिस्ट्रेट यदि कोई हो/जिला समाज कल्याण अधिकारी

**उत्तर प्रदेश के अन्य पिछड़े वर्ग के लिए जाति प्रमाण-पत्र**

प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारी ..... सुपुत्र/सुपुत्री श्री ..... निवासी  
ग्राम ..... तहसील ..... नगर ..... जिला ..... उत्तर प्रदेश राज्य की .....  
पिछड़ी जाति के व्यक्ति हैं। यह जाति उत्तर प्रदेश लोक सेवा (अनुसूचित जातियों, अनुसूचित जनजातियों तथा अन्य पिछड़े वर्गों के लिये  
आरक्षण) अधिनियम, 1994 (यथासंशोधित) की अनुसूची-एक के अन्तर्गत मान्यता प्राप्त है।

यह भी प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारी ..... पूर्वोक्त अधिनियम, 1994 (यथासंशोधित) की  
अनुसूची-दो (जैसा कि उत्तर प्रदेश लोक सेवा) (अनुसूचित जातियों, अनुसूचित जनजातियों और अन्य पिछड़े वर्गों के लिये आरक्षण)  
(संशोधन) अधिनियम, 2001 द्वारा प्रतिस्थापित किया गया है एवं जो उत्तर प्रदेश लोक सेवा (अनुसूचित जातियों, अनुसूचित  
जनजातियों और अन्य पिछड़े वर्गों के लिये आरक्षण) (संशोधन) अधिनियम, 2002 द्वारा संशोधित की गयी है, से आच्छादित नहीं है।  
इनके माता-पिता की निरंतर तीन वर्ष की अवधि के लिये सकल वार्षिक आय आठ लाख रुपये या इससे अधिक नहीं है तथा इनके पास  
अन्य अधिनियम, 1957 में यथा विहित छूट सीमा से अधिक सम्पत्ति भी नहीं है।

श्री/श्रीमती/कुमारी ..... तथा/अथवा उनका परिवार उत्तर प्रदेश के ग्राम .....  
तहसील ..... नगर ..... जिला ..... में सामान्यतया रहता है।

स्थान ..... हस्ताक्षर .....

दिनांक ..... पूरा नाम .....

मुहर ..... पद नाम .....

जिलाधिकारी/अतिरिक्त जिलाधिकारी/सिटी मजिस्ट्रेट/परगना मजिस्ट्रेट/तहसीलदार।

(प्रपत्र-I)

उत्तर प्रदेश सरकार

कार्यालय का नाम .....

आर्थिक रूप से कमजोर वर्ग के सदस्य द्वारा प्रस्तुत किया जाने वाला आय एवं परिसम्पत्ति प्रमाण-पत्र

प्रमाण-पत्र संख्या- .....

दिनांक- .....

वित्तीय वर्ष ..... के लिए मान्य

प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारी ..... पुत्र/पति/पुत्री ..... ग्राम/  
कस्बा ..... पोस्ट ऑफिस ..... थाना ..... तहसील ..... जिला  
..... राज्य ..... पिनकोड ..... के स्थायी निवासी हैं, जिनका फोटोग्राफ नीचे अभिप्रमाणित है,  
आर्थिक रूप से कमजोर वर्ग के सदस्य हैं, क्योंकि वित्तीय वर्ष ..... में इनके परिवार की कुल वार्षिक आय 8 लाख (आठ  
लाख रुपये मात्र) से कम है। इनके परिवार के स्वामित्व में निम्नलिखित में से कोई भी परिसम्पत्ति नहीं है:-

- I. 5 (पाँच) एकड़ कृषि योग्य भूमि अथवा इससे ऊपर।
- II. एक हजार वर्ग फीट अथवा इससे अधिक क्षेत्रफल का फ्लैट।
- III. अधिसूचित नगरपालिका के अन्तर्गत 100 वर्ग गज अथवा इससे अधिक का आवासीय भूखण्ड।
- IV. अधिसूचित नगरपालिका से इतर 200 वर्ग गज अथवा इससे अधिक का आवासीय भूखण्ड।

2. श्री/श्रीमती/कुमारी ..... जाति ..... के सदस्य हैं, जो अनुसूचित जाति, अनुसूचित जनजाति तथा  
अन्य पिछड़े वर्गों के रूप में अधिसूचित नहीं हैं।

आवेदक का  
पासपोर्ट साईज  
का अभिप्रमाणित  
फोटोग्राफ

हस्ताक्षर .....(कार्यालय का मुहर सहित)

पूरा नाम .....

पदनाम .....

जिलाधिकारी/अतिरिक्त जिलाधिकारी/सिटी

मजिस्ट्रेट/परगना मजिस्ट्रेट/तहसीलदार।

(प्रपत्र-II)

आर्थिक रूप से कमजोर वर्ग के लाभार्थ स्वयं घोषणा पत्र

स्वयं घोषणा पत्र

मैं ..... पुत्र/पुत्री/पत्नी ..... ग्राम/कस्बा ..... पोस्ट  
ऑफिस ..... थाना ..... ब्लाक ..... तहसील ..... जिला .....  
राज्य ..... ने आर्थिक रूप से कमजोर वर्ग के प्रमाण पत्र हेतु आवेदन दिया है, एतद्वारा घोषणा करता/करती हूँ:-

1. मैं ..... जाति से सम्बन्ध रखता/रखती हूँ, जो उत्तर प्रदेश हेतु अधिसूचित अनुसूचित जाति, अनुसूचित जनजाति  
एवं अन्य पिछड़ा वर्ग की सूची में सूचीबद्ध नहीं है।
2. मेरे परिवार की कुल स्रोतों (वेतन, कृषि, व्यवसाय, पेशा इत्यादि) से कुल वार्षिक आय रु. .... (शब्दों में) है।
3. मेरे परिवार के पास उल्लिखित आय के सिवाय अथवा इसके अतिरिक्त अन्यत्र कोई परिसम्पत्ति नहीं है।

अथवा

कई स्थानों पर स्थित परिसम्पत्तियों को जोड़ने के पश्चात् भी मैं (नाम) ..... आर्थिक रूप से कमजोर वर्ग के दायरे में आता/आती हूँ।

4. मैं घोषणा करता/करती हूँ कि मेरे परिवार की सभी परिसम्पत्तियों को जोड़ने के पश्चात् निम्नलिखित में से किसी भी सीमा से अधिक नहीं है:-

- I. 5 (पाँच) एकड़ कृषि योग्य भूमि अथवा इससे ऊपर।
- II. एक हजार वर्ग फीट अथवा इससे अधिक क्षेत्रफल का फ्लैट।
- IV. अधिसूचित नगरपालिका के अन्तर्गत 100 वर्ग गज अथवा इससे अधिक का आवासीय भूखण्ड।
- V. अधिसूचित नगरपालिका से इतर 200 वर्ग गज अथवा इससे अधिक का आवासीय भूखण्ड।

मैं प्रमाणित करता/करती हूँ कि मेरे द्वारा उपरोक्त जानकारी मेरे ज्ञान और विश्वास के अनुसार सत्य है और मैं आर्थिक रूप से कमजोर वर्ग के लिए आरक्षण सुविधा प्राप्त करने हेतु पात्रता धारण करता/करती हूँ। यदि मेरे द्वारा दी गई जानकारी असत्य/गलत पायी जाती है तो मैं पूर्ण रूप में जानता/जानती हूँ कि इस आवेदन पत्र के आधार पर दिये गये प्रमाण पत्र के द्वारा शैक्षणिक संस्थान में लिया गया प्रवेश/लोक सेवाओं एवं पदों में प्राप्त की गई नियुक्ति निरस्त कर दी जायेगी/कर दिया जायेगा अथवा इस प्रमाण पत्र के आधार पर कोई अन्य सुविधा/लाभ प्राप्त किया गया है उससे भी वंचित किया जा सकेगा और इस सम्बन्ध में विधि एवं नियमों के अधीन मेरे विरुद्ध की जाने वाली कार्यवाही के लिए मैं उत्तरदायी रहूँगा/रहूँगी।

**नोट:-** जो लागू नहीं हो उसे काट दें।

आवेदक/आवेदिका का हस्ताक्षर तथा पूरा नाम।

स्थान :-

दिनांक :-

**उ.प्र. के विकलांगों के लिए प्रमाण-पत्र**

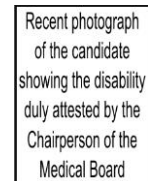
**DISABILITY CERTIFICATE FOR PHYSICALLY HANDICAP OF U.P.**

**NAME & ADDRESS OF THE INSTITUTE/HOSPITAL**

Certificate No. ....

Date .....

**DISABILITY CERTIFICATE**



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

**A. Locomotor or cerebral palsy:**

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

**B. Blindness or Low Vision:**

- (i) B-Blind

(ii) PB-Partially Blind

**C. Hearing impairment:**

(i) D-Deaf

(ii) PD-Partially Deaf

(Delete the category whichever is not applicable)

2. This condition is progressive/non-progressive/likely to improve/ not likely to improve. Re-assessn of this case is not recommended/is recommended after a period of ..... year ..... months.

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

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

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

(Dr. ....)

Member

Medical Board

(Dr. ....)

Member

Medical Board

(Dr. ....)

Chairperson

Medical Board

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

Strike out which is not applicable.

**उ.प्र. लोक सेवा (शारीरिक रूप से विकलांग, स्वतंत्रता संग्राम सेनानियों के आश्रितों और भूतपूर्व सैनिकों के लिए आरक्षण) अधिनियम 1993 (यथासंशोधित) के अनुसार स्वतंत्रता संग्राम सेनानी के आश्रित के लिए प्रमाण-पत्र**

**प्रमाण-पत्र**

प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारी ..... निवासी ..... ग्राम ..... तहसील ..... नगर ..... जिला ..... उत्तर प्रदेश लोक सेवा (शारीरिक रूप से विकलांग, स्वतंत्रता संग्राम सेनानियों के आश्रित और भूतपूर्व सैनिक के लिए आरक्षण) अधिनियम 1993 के अनुसार स्वतंत्रता संग्राम सेनानी हैं और श्री/श्रीमती/कुमारी (आश्रित) ..... पुत्र/पुत्री/पौत्र (पुत्र का पुत्र या पुत्री का पुत्र)/पौत्री (पुत्र की पुत्री या पुत्री का पुत्री) (विवाहित अथवा अविवाहित) उपरांकित अधिनियम 1993 (यथासंशोधित) के प्रावधानों के अनुसार उक्त श्री/श्रीमती (स्वतंत्रता संग्राम सेनानी) ..... के आश्रित हैं।

स्थान .....

दिनांक .....

हस्ताक्षर .....

पूरा नाम .....

मुहर .....

जिलाधिकारी .....

सील .....

कुशल खिलाड़ियों के लिये प्रमाण-पत्र जो उ.प्र. के मूल निवासी हैं  
शासनादेश संख्या-22/21/1983-कार्मिक-2 दिनांक 28 नवम्बर, 1985

प्रमाण-पत्र के फार्म - 1 से 4 प्रारूप -1

(मान्यता प्राप्त क्रीड़ा/खेल में अपने देश की ओर से अन्तर्राष्ट्रीय प्रतियोगिता में भाग लेने वाले खिलाड़ी के लिये)

सम्बन्धित खेल की राष्ट्रीय फेडरेशन/राष्ट्रीय एसोसिएशन का नाम ..... राज्य सरकार की सेवाओं/पदों पर नियुक्ति के लिए कुशल खिलाड़ियों के लिए प्रमाण-पत्र



प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारी ..... आत्मज/पत्नी/आत्मजा श्री ..... निवासी ..... पूरा पता ..... ने दिनांक ..... से दिनांक ..... तक ..... (स्थान का नाम) में आयोजित ..... (क्रीड़ा/खेल-कूद का नाम) की प्रतियोगिता/टूर्नामेन्ट में देश की ओर से भाग लिया। उनके टीम के द्वारा उक्त प्रतियोगिता/टूर्नामेन्ट में ..... स्थान प्राप्त किया गया। यह प्रमाण-पत्र राष्ट्रीय फेडरेशन/राष्ट्रीय एसोसिएशन/(यहाँ संस्था का नाम दिया जाये) ..... में उपलब्ध रिकार्ड के आधार पर दिया गया है।

स्थान .....  
दिनांक .....

हस्ताक्षर .....  
नाम .....  
पद .....  
संस्था का नाम.....  
मुहर .....

**नोट :** यह प्रमाण-पत्र नेशनल फेडरेशन/नेशनल एसोसिएशन के सचिव द्वारा व्यक्तिगत रूप से किये गये हस्ताक्षर होने पर ही मान्य होगा।

#### प्रारूप - 2

(मान्यता प्राप्त क्रीड़ा/खेल में अपने प्रदेश की ओर से राष्ट्रीय प्रतियोगिता में भाग लेने वाले खिलाड़ी के लिये)

सम्बन्धित खेल की प्रदेशीय एसोसिएशन का नाम ..... राज्य सरकार की सेवाओं/पदों पर नियुक्ति के लिए कुशल खिलाड़ियों के लिए प्रमाण-पत्र

प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारी ..... आत्मज/पत्नी/आत्मजा श्री ..... निवासी (पूरा पता) ..... ने दिनांक ..... से दिनांक ..... तक ..... में (क्रीड़ा/खेल-कूद का नाम) की प्रतियोगिता (टूर्नामेन्ट स्थान का नाम) ..... आयोजित राष्ट्रीय ..... में (क्रीड़ा/खेल-कूद का नाम) की प्रतियोगिता/टूर्नामेन्ट में प्रदेश की ओर से भाग लिया। उनके टीम के द्वारा उक्त प्रतियोगिता/टूर्नामेन्ट में ..... स्थान प्राप्त किया गया। यह प्रमाण-पत्र ..... (प्रदेशीय संघ का नाम) में उपलब्ध रिकार्ड के आधार पर दिया गया है।

स्थान .....  
दिनांक .....

हस्ताक्षर .....  
नाम .....  
पद .....  
संस्था का नाम .....  
पता .....  
मुहर .....

**नोट :** यह प्रमाण-पत्र प्रदेशीय खेल-कूद संघ के सचिव द्वारा व्यक्तिगत रूप से किये गये हस्ताक्षर होने पर ही मान्य होगा।

#### प्रारूप - 3

(मान्यता प्राप्त क्रीड़ा/खेल में अपने विश्वविद्यालय की ओर से अन्तर्विश्वविद्यालय प्रतियोगिता में भाग लेने वाले खिलाड़ी के लिये)

विश्वविद्यालय का नाम ..... राज्य स्तर की सेवाओं/पदों पर नियुक्ति के लिए कुशल खिलाड़ियों के लिए प्रमाण-पत्र

प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारी ..... आत्मज/पत्नी/आत्मजा श्री ..... निवास (पूरा नाम) ..... विश्वविद्यालय की कक्षा ..... के विद्यार्थी ने दिनांक ..... से दिनांक ..... तक ..... (स्थान का नाम) में आयोजित अन्तर्विश्वविद्यालय ..... (क्रीड़ा/खेल-कूद का नाम) प्रतियोगिता/टूर्नामेन्ट में ..... विश्वविद्यालय की ओर से भाग लिया। उनके टीम के द्वारा उक्त प्रतियोगिता/टूर्नामेन्ट में ..... स्थान प्राप्त किया गया। यह प्रमाण-पत्र डीन ऑफ स्पोर्ट्स अथवा इंचार्ज खेल कूद ..... विश्वविद्यालय में उपलब्ध रिकार्ड के आधार पर दिया गया है।

स्थान .....  
दिनांक .....

हस्ताक्षर .....  
नाम .....  
पद .....  
संस्था का नाम .....  
मुहर .....

**नोट :** यह प्रमाण-पत्र विश्वविद्यालय के डीन ऑफ स्पोर्ट्स या इंचार्ज खेल-कूद द्वारा व्यक्तिगत रूप से किये गये हस्ताक्षर होने पर ही मान्य होगा।

#### प्रारूप - 4

(मान्यता प्राप्त क्रीड़ा/खेल में अपने स्कूल की ओर से राष्ट्रीय खेल-कूद में भाग लेने वाले खिलाड़ी के लिये)

डाइरेक्ट्रेट ऑफ पब्लिक इन्सट्रक्शन्स/निदेशक, शिक्षा, उत्तर प्रदेश ..... राज्य स्तर की सेवाओं/पदों पर नियुक्ति के लिए

**कुशल खिलाड़ियों के लिए प्रमाण-पत्र**

प्रमाणित किया जाता है कि श्री/श्रीमती/कुमारी ..... आत्मज/पत्नी/आत्मजा श्री ..... निवास (पूरा नाम) ..... में ..... स्कूल में कक्षा ..... के विद्यार्थी ने दिनांक ..... से दिनांक ..... तक ..... (स्थान का नाम) में आयोजित स्कूलों के नेशनल गेम्स की ..... (क्रीड़ा/खेल-कूद का नाम) प्रतियोगिता/टूर्नामेन्ट में ..... स्कूल की ओर से भाग लिया। उनके टीम के द्वारा उक्त प्रतियोगिता/टूर्नामेन्ट में ..... स्थान प्राप्त किया गया।

यह प्रमाण-पत्र डाइरेक्ट्रेट ऑफ पब्लिक इन्सट्रक्शन्स/शिक्षा में उपलब्ध रिकार्ड के आधार पर दिया गया है।

स्थान .....

हस्ताक्षर .....

दिनांक .....

नाम .....

पद .....

संस्था का नाम .....

मुहर .....

**नोट :** यह प्रमाण-पत्र निदेशक/या अतिरिक्त/संयुक्त या उपनिदेशक डाइरेक्ट्रेट ऑफ पब्लिक इन्सट्रक्शन्स/शिक्षा ..... द्वारा व्यक्तिगत रूप से हस्ताक्षर होने पर मान्य होगा।

**परिशिष्ट-4**

**परीक्षा योजना एवं पाठ्यक्रम**

**सम्मिलित राज्य अभियन्त्रण सेवा परीक्षा हेतु वस्तुनिष्ठ प्रकार के निम्नवत दो प्रश्न-पत्र होंगे:-**

**प्रथम प्रश्न पत्र**

विषय	प्रश्नों की संख्या	अंक	कुल अंक	समय
1-सामान्य हिन्दी	25 (प्रत्येक प्रश्न 3 अंक)	75	375	2.30 (ढाई) घण्टा
2-मुख्य विषय ( सिविल इंजी0-I, मैके0 इंजी0-I, विद्युत इंजी0-I, कृषि इंजी0-I)	100 (प्रत्येक प्रश्न 3 अंक)	300		

**द्वितीय प्रश्न पत्र**

विषय	प्रश्नों की संख्या	अंक	कुल अंक	समय
1-सामान्य अध्ययन	25 (प्रत्येक प्रश्न 3 अंक)	75	375	2.30 (ढाई) घण्टा
2-मुख्य विषय ( सिविल इंजी0-II, मैके0 इंजी0-II, विद्युत इंजी0-II, कृषि इंजी0-II)	100 (प्रत्येक प्रश्न 3 अंक)	300		

**व्यक्तित्व परीक्षा (साक्षात्कार) - 100 अंक**

**कुल योग- 375 + 375 + 100 = 850 अंक**

**पाठ्यक्रम**

**सामान्य हिन्दी-** हिन्दी का पाठ्यक्रम इस प्रकार बनाया जायेगा ताकि उम्मीदवार की हिन्दी भाषा की समझ और शब्दों के कुशल प्रयोग की जाँच हो सके। इसका स्तर हाई स्कूल का होगा।

**सामान्य अध्ययन:** सामान्य अध्ययन के प्रश्न-पत्र समसामयिक घटनाओं और ऐसी बातों की उनके वैज्ञानिक पहलुओं पर ध्यान देते हुए जानकारी सम्मिलित होगी जो प्रतिदिन के अनुभव में आती है तथा जिनकी किसी शिक्षित व्यक्ति से अपेक्षा की जा सकती है। प्रश्न-पत्र में भारत का इतिहास, राजनीति और भूगोल के ऐसे प्रश्न भी सम्मिलित होंगे जिनका उत्तर उम्मीदवार विशेष अध्ययन किये बिना ही दे सकेंगे।

**CIVIL ENGINEERING**

**PAPER - 1**

**PART - A**

**ENGINEERING MECHANICS, STRENGTH OF MATERIALS AND STRUCTURAL ANALYSIS.**

Units and Dimensions, SI units, vectors, concept of force, Concept of particle and rigid body Concurrent, Non-Concurrent and parallel forces in a plane, moment of force and varignon's theorem free body diagram, conditions of equilibrium Principle of virtual work, equivalent force system.

First and second Moment of area, Mass moment of inertia, Static Friction, inclined plane and bearings, kinematics and kinetics, kinematics in Cartesian and Polar Coordinates, motion under uniform and non-uniform acceleration, motion under gravity, Kinetics of particle: Momentum and Energy principles, D'Alembert's principle, Collision of elastic bodies, rotation of rigid bodies, simple harmonic motion.

#### **STRENGTH OF MATERIALS:**

Simple Stress and Strain, Elastic constants, axially loaded compression members, Shear force and bending moment, theory of simple bending, bending stress, Shear Stress, Beams of uniform strength, Leaf Spring, close coiled helical springs, Strain Energy in direct stress, bending & shear. Deflection of beams; Macaulay's method, Mohr's Moment area method, Conjugate beam method, unit load method, Torsion of shafts, Transmission of power, Elastic stability of columns, Euler's Rankin's and Secant formulae. Principal stresses and strains in two dimensions, Mohr's Circle, Theories of Elastic Failure, Thin and Thick cylinder, Stresses due to internal and external pressure- Lamé's equations.

#### **STRUCTURAL ANALYSIS:**

Castigliano's theorems I and II, Unit load method of consistent deformation applied to beams and pin jointed trusses. Slope-deflection, moment distribution, Kani's method of analysis and column Analogy method applied to indeterminate beams and rigid frames. Rolling loads and influence lines: Influence lines for reactions of beam, shear force and bending moment at a section of beam. Criteria for maximum shear force and bending moment in beams traversed by a system of moving loads, influence lines for simply supported plane pin jointed trusses, Arches: Three hinged, two hinged and fixed arches, rib shortening and temperature effects, influence lines in arches, Matrix methods of analysis: Force method and displacement method of analysis of indeterminate beams and rigid frames. Plastic Analysis of beams and frames: Theory of plastic bending, plastic analysis, statical method, Mechanism method. Unsymmetrical bending: Moment of inertia, product of inertia, position of neutral axis and principal axis, calculation of bending stresses.

### **PART - B**

#### **DESIGN OF STRUCTURES: STEEL, CONCRETE AND MASONRY STRUCTURES.**

##### **STRUCTURAL STEEL DESIGN:**

**Structural steel:** Factors of safety and load factors, rivetted, bolted and welded joints and its connections, Design by working, stress/limit state method of tension and compression member, beams of built up section, rivetted and welded plate girders, gantry girders, stanchions with battens and lacings, slab and gusseted column bases, Design of highway and railway bridges: Through and deck type plate girder, Warren girder, Pratt truss.

##### **DESIGN OF CONCRETE AND MASONRY STRUCTURES:**

**Reinforced Concrete:** Working Stress and Limit State Method of design-Recommendations of B.I.S. codes, design of one way and two way slabs, stairs-case slabs, simple and continuous beams of rectangular, T and L sections, compression members under direct load with or without eccentricity, isolated and combined footings, Cantilever and counter-fort type retaining walls, Water tanks: Design requirements as per B.I.S. code for rectangular and circular tanks resting on ground, Prestressed concrete: Methods and systems of prestressing, anchorages, analysis and design of sections for flexure based on working stress, losses of prestress, Earth quake resistant design of building as per BIS code. Design of brick masonry as per I. S. Codes, Design of masonry retaining walls.

### **PART - C**

#### **Building Materials, Construction Technology, Planning and Management**

**Building Materials:** Physical properties of construction materials with respect to their use: stones bricks, tiles, lime, glass, cement, mortars, Concrete, concept of mix design, pozzolans, plasticizers, super plasticizers, Special concrete: roller compacted concrete, mass concrete, self compacting concrete, ferro cement, fibre reinforced concrete, high strength concrete, high performance concrete, Timber: properties, defects and common

preservation treatments, Use and selection of materials for various uses e.g. Low cost housing, mass housing, high rise buildings.

#### **Constructions Technology, Planning and Management:**

Masonry constructions using brick, stone, construction detailing and strength characteristics paints, varnishes, plastics, water proofing and damp proofing materials. Detailing of walls, floors, roofs, staircases, doors and windows. Plastering, pointing, flooring, roofing and construction features. Retrofitting of buildings, Principle of planning of building for residents and specific uses, National Building code provisions and uses. Basic principles of detailed and approximate estimating, specifications, rate analysis, principles of valuation of real property. Machinery for earthwork, concreting and their specific uses, factors affecting selection of construction equipments, operating cost of equipments. Construction activity, schedules, organizations, quality assurance principles. Basic principle of network CPM and PERT uses in construction monitoring, cost optimization and resource allocation. Basic principles of economic analysis and methods. Project profitability: Basis principles of financial planning, simple toll fixation criterions.

### **PART - D**

#### **GEO TECHNICAL ENGINEERING AND FOUNDATION ENGINEERING**

Types of soils, phase relationships, consistency limits particles size distribution, classifications of soils, structure and clay mineralogy. Capillary water, effective stress and pore water pressure, Darcy's Law, factors affecting permeability, determination of permeability, permeability of stratified soil deposits. Seepage pressure, quick sand condition, compressibility and consolidation, Terzaghi's theory of one dimensional consolidation, consolidation test. Compaction of soil, field control of compaction total stress and effective stress parameters, pore pressure parameters, shear strength of soils, Mohr Coulomb failure theory, shear tests.

Earth pressure at rest, active and passive pressures, Rankin's theory Coulomb's wedge theory, Graphical method of earth pressure on retaining wall, sheetpile walls, braced excavation, bearing capacity, Terzaghi and other important theories, net and gross bearing pressure.

Immediate and consolidation settlement, stability of slope, total stress and effective stress methods, conventional methods of slices, stability number.

Subsurface exploration, methods of boring, sampling, penetration tests, pressure meter tests, essential features of foundation, types of foundation, design criteria, choice of type of foundation, stress distribution in soils, Boussinessq's theory, Westergaard method, Newmarks chart, pressure bulb, contact, pressure, applicability of different bearing capacity theories, evaluation of bearing capacity from filed tests, allowable bearing capacity, settlement analysis, allowable settlement, proportioning of footing, isolated and combined footings, rafts, pile foundation, types of piles, plies capacity, static and dynamic analysis, design of pile groups, pile load test, settlement of piles lateral loads, foundation for bridges, Ground improvement techniques: sand drains, stone columns, grouting, soil stabilization geotextiles and geomembrane, Machine foundation: Natural frequency, design of machine foundations based on the recommendation of B.I.S. codes.

### **CIVIL ENGINEERING PAPER- II**

#### **Part - A**

#### **FLUID MECHANICS, OPEN CHANNEL FLOW, HYDRAULIC MACHINES AND HYDROPOWER ENGINEERING.**

**Fluid Mechanics:** Fluid properties and their roles in fluid motion, fluid statics including forces acting on plane and curved surfaces, Kinematics and Dynamics of Fluid flow: Velocity and acceleration, stream lines, equation of continuity, irrotational and rotational flow, velocity potential and stream functions, flownet, methods of drawing flownet, source and sink, flow separation, free and forced vorties.

Flow control volume equation, continuity, momentum and energy equations, Navier-Stokes equation, Euler's equation of motion and application to fluid flow problems, pipe flow, plane, curved, stationary and moving vanes sluice gates, weirs, orifice meters and Venturi meters.

**Dimensional Analysis and Similitude:** Buckingham's Pi-theorem, dimensionless parameters, similitude theory, model laws, undistorted and distorted models.

**Laminar Flow:** Laminar flow between parallel, stationary and moving plates, flow through pipes.

**Boundary Layer:** Laminar and turbulent boundary layer on a flat plate, laminar sub-layer, smooth and rough boundaries, submerged flow, drag and lift and its applications.

**Turbulent flow through pipes:** Characteristics of turbulent flow, velocity distribution, pipe friction factor, hydraulic grade line and total energy line, siphons, expansion and contractions in pipes pipe networks, water hammer in pipes and surge tanks.

**Open Channel Flow:** Flow types, uniform and nonuniform flows, momentum and energy correction factors, Specific energy and specific force, critical depth, resistance equations and roughness coefficient, rapidly varied flow, flow in transitions, Brink flow, Hydraulic jump and its applications, waves and surges, gradually varied flow, classification of surface profiles, control section, Integration of varied flow equation and their solution.

#### **HYDRAULIC MACHINES AND HYDROPOWER:**

Centrifugal pumps-Types, characteristics, Net Positive Suction-head (NPSH), specific speed, Pumps in series and parallel.

Reciprocating pumps, Air vessels, Hydraulic ram, efficiency parameters, Rotary and positive displacement pumps, diaphragm and jet pumps.

**Hydraulic turbines:** types, classification, Choice of turbines, performance parameters, controls, characteristics, specific speed.

**Principles of hydropower development:** Types, layouts and component works, surge tanks, 'types and choice, Flow duration curves and dependable flow, Storage and pondage, Pumped storage plants, Special types of hydel plants.

### **Part - B**

#### **Hydrology and Water Resources Engineering**

**Hydrology:** Hydrologic cycle, precipitation, evaporation, transpiration, infiltration, overland flow, hydrographs, flood frequency analysis, flood routing through a reservoir, channel flow routing- Muskingam method.

Ground Water flow: Specific yield, storage coefficient, coefficient of permeability, confined and unconfined aquifers, radial flow into a well under confined and unconfined conditions, Open wells and tube wells.

Ground and surface water recourses single and multipurpose projects, storage capacity of reservoirs, reservoir losses, reservoir sedimentation.

Water requirements of crops consumptive use, duty and delta, irrigation methods, Irrigation efficiencies.

**Canals:** Distribution systems for cannal irrigation, canal capacity, canal losses, alignment of main and distributory canals, Design of cannal by Kennedy's and Lacey's theorie, Water logging and its prevention.

Diversion head works: Compenents, Principles and design of weirs on permeable and impermeable foundations, Khosla's theory, Bligh's creep theory Storage works.

Cross drainage works.

**Types of dams, design principles of gravity and earth dams, stability analysis. Spillways:** Spillway types energy dissipation.

**River training:** Objectives of river training, methods of river training and bank protection.

### **Part - C**

#### **Transportation Engineering**

**Highway Engineering:** Principles of Highway alignments, classification and geometric design, elements and standards for roads.

**Pavement:** flexible and rigid pavements Design principles and methodology. Construction methods and materials for stabilized soil. WBM, Bituminous works and Cement Concrete roads.

Surface and sub-surface drainage arrangements for roads, culvert structures. Pavement distresses and strengthening by overlays.

Traffic surveys and their application in traffic planning, Typical design features for channelized, intersection, rotary etc., signal designs, standard traffic signs and markings.

**Railway Engineering:** Permanent way, ballast, sleeper, chair and fastenings, points, crossings, different types of turn outs, cross-over, setting out of points, Maintenance of track, super elevation, creep of rails ruling gradients,

track resistance tractive effort, curve resistance, Station yards and station buildings, platform sidings, turn outs, Signals and interlocking, level crossings.

**Air port Engineering:** Layouts, Planning and design.

## **Part - D**

### **Environmental Engineering**

**Water supply:** Estimation of water demand, impurities in water and their significance, physical, chemical and bacteriological parameters and their analysis, waterborne diseases, standards for potable water.

**Water collection & treatment:** Intake structures, principles and design of sedimentation tank, coagulation cum flocculation units slow sand filter, rapid sand filter and pressure filter, theory & practices of chlorination, water softening, removal of taste and salinity, Sewerage Systems, Domestic and industrial wastes, storm, sewage, separate and combined systems, flow through sewers, design of sewers.

**Waste water characterization:** Solids, Dissolved oxygen (DO), BOD COD, TOC, and Nitrogen, Standards for disposal of effluent in normal water course and on to land.

**Waste water treatment:** Principles and design of wastewater Treatment units-- Screening, grit chamber, sedimentation tank activated sludge process, trickling filters, oxidation ditches, oxidation ponds, septic tank; Treatment and disposal of sludge; recycling of waste water.

**Solid waste management:** Classification, Collection and disposal of solid waste in rural and urban areas, Principles of solid waste management.

**Environmental pollution:** Air and water pollution and their control acts. Radioactive waste and their disposal Environmental impact assessment of Thermal power Plants, mines and river valley projects, Sustainable development.

## **Part - E**

### **Survey and Engineering Geology**

**(a) Surveying:** Common methods and instruments for distance and angle measurements in Civil Engineering works, their use in plane table traverse survey, levelling, triangulation, contouring and topographical maps. Survey layouts for culverts canal, bridge, roads, railway alignment and buildings.

Basic principles of photogrammetry and remote sensing.

Introduction to Geographical information system.

#### **Engineering Geology**

Basic concepts of Engineering geology and its applications in projects such as dams, bridges and tunnels.

## **MECHANICAL ENGINEERING**

### **PAPER-I**

#### **1. Engineering Mechanics:**

Analysis of force systems, friction, centroid and centre of gravity, trusses and beams, principle of virtual work, kinematics and kinetics of particle, kinematics and kinetics of rigid bodies.

#### **2. Mechanism and Machines:**

Velocity and acceleration of links, cams and followers gears and gear trains clutches, belt drives, brakes and dynamometers, Flywheel and governors, balancing of rotating and reciprocating masses, balancing of multi cylinder engines, Free and forced vibration, damped vibration, whirling of shafts.

#### **3. Mechanics of Solids:**

Stresses and strains, compound stresses strains, Torsion of circular shafts, stresses and deflections in beams unsymmetrical bending, curved beams, Thin and thick cylinders and spheres, Buckling of columns, Energy methods, helical and leaf springs.

#### **4. Design of Machine Elements:**

Design for Static and dynamic loading, Theories of failure, fatigue principles of design of rivetted, welded and bolted joints, shafts, springs, bearings, brakes, clutches and flywheels.

#### **5. Engineering Materials:**

Crystal systems and crystallography, crystal imperfections, Alloys and phase diagrams, Heat treatment, ferrous and non ferrous metals and alloys, Mechanical properties and testing.

## **6. Manufacturing:**

Metal casting, metal forming, metal joining, Mechanics of metal cutting, machining and machine tool operations, unconventional machining methods limits, fits and tolerances, inspection: Surface roughness, comparators, computer integrated manufacturing, Flexible manufacturing systems, jigs and fixtures

## **7. Industrial Engineering:**

Production, planning and control, inventory control and operation, research, CPM and PERT.

## **8. Mechatronics and Robotics:**

Microprocessors and microcontrollers, Architecture, Programming, Computer interfacing Programmable logic controller, sensors and actuators, Piezoelectric accelerometers, Hall effect sensors, optical encoder, resolver, Inductosyn, Pneumatic and Hydraulic Actuators, stepper motor, control system, mathematical modeling, control signals, controllability and observability, Robotics: Robot classification, robot specification. Notation: Direct and inverse kinematics homogeneous co-ordinates and arm equation of four axis SCARA Robot.

# **MECHANICAL ENGINEERING**

## **PAPER-II**

### **1. Thermodynamics:**

Thermodynamic systems and processes, properties of pure substances, concepts and applications of zeroth, first and second law of thermodynamics, entropy, availability and irreversibility, detailed analysis of thermodynamic cycles, ideal and real gases, fuels and combustion.

### **2. Fluid Mechanics:**

Basic concepts and properties of fluids, manometry, fluid statics, buoyancy, equations of motion, Bernoulli's equation and applications, viscous flow of incompressible fluids, laminar and turbulent flows, flow through pipes and head losses in pipes, dimensional analysis, Forces on immersed bodies and boundary layer over a flat plate, isentropic and adiabatic flows, normal shock waves.

### **3. Heat Transfer:**

Modes of heat transfer, steady and unsteady heat conduction, thermocouple time constant, critical thickness of insulation, heat transfer from fins, momentum and energy equations for boundary layer flow on a flat plate. Free and forced convection, radiation heat transfer, Stefan-Boltzmann law, shape factor, black and grey body radiation heat exchange, boiling and condensation, heat exchanger analysis, LMTD and NTU - effectiveness methods.

### **4. Energy conversion:**

SI and CI engines, performance characteristics and testing of IC engines, combustion phenomena in SI and CI engines, carburetion and fuel injection systems, emissions and emission control. Reciprocating and rotary pumps, pelton wheel, Francis and Kaplan turbines, velocity diagrams impulse and reaction principles steam and gas turbines; Rankine and Brayton cycles with regeneration and reheat, high pressure boilers, draft, condensers. Unconventional power systems, including nuclear, MHD, biomass, wind and tidal systems, utilization of solar energy; Reciprocating and rotary compressors; theory and applications, Theory of propulsions, pulsejet and ramjet engines.

### **5. Environmental control:**

Vapour compression, vapour absorption, steam jet and air refrigeration systems, properties of refrigerant and their nomenclature, psychometrics properties and processes, psychrometric relations, use of psychrometric chart, load estimation, supply air conditions, sensible heat factors, air conditioning system layout, comfort chart, comfort and industrial air conditioning.

# **ELECTRICAL ENGINEERING**

## **PAPER - I**

**Networks and Systems:** Steady-state and Transient-state Analysis of systems, Thevenin's-, Norton's-, Superposition- and Maximum Power Transfer-theorems, Driving point Transfer functions, Two-port networks, Laplace and Fourier transforms and their applications in Network analysis, Z-transforms for discrete systems, R-L, R-C & L-C network synthesis.

**E.M. Theory:** Analysis of electrostatic and magnetostatic fields, Laplace, Poisson and Maxwell equations, solution of boundary value problems, electromagnetic wave propagation, ground and space waves, Propagation between Earth Station and Satellites.

**Control systems:** Mathematical modelling of dynamic linear continuous systems, Block diagrams and Signal flow graphs, time-response specifications, steady-state error, Routh-Hurwitz criterion, Nyquist techniques, Root Loci, Bode Plots, Polar Plot, and stability analysis, Lag-, Lead-, Lag-Lead-compensation, state-space modelling, state transition matrix, controllability and observability.

**Elements of Electronics:** Basics of semiconductor diodes, BJT, FET and their characteristics, different types of transistors and FET amplifiers equivalent circuits and frequency response, feedback oscillators, colpitts oscillator and Hartley Oscillator, Operational amplifiers-characteristics and applications.

**Power System Analysis and Design:** Line parameters and calculations, Performance of Transmission lines, Mechanical design of overhead lines and Insulators, Corona and radio interference Parameters of single- and three-core Cables, Bus admittance matrix, Load flow equations and methods of solutions, Fast-decoupled load flow, Balance- and Unbalanced-faults analysis, Power system stability, Power system transients and travelling Waves, EHV Transmission, HVDC transmission, Concepts of FACTS, Voltage Control and Economic operation, Concepts of distributed generation, solar and wind power, smart grid concepts.

**Elements of Electrical Machines:-** General concepts of E.m.f., m.m.f., and torque in rotating machines, DC Machines: motor and generator characteristics, equivalent circuits, commutation and armature reaction, starting and speed controls of motors; Synchronous Machines: performance, regulation, Parallel operation of generators, motor starting, characteristics and applications, Transformers: phasor-diagram and equivalent circuit, efficiency, and voltage regulation, auto-transformers, 3-phase transformers.

**Measurement:** Basic methods of measurement, Precision and standards, error analysis, Bridges and Potentiometers; moving coil, Moving iron, dynamometer and induction type instruments, measurement of voltage, current, power, energy, and power factor, Instrument transformers, digital voltmeters and multimeters, phase-, time- and frequency-measurement, Q-meters Oscilloscopes, Basics of sensors, and data acquisition system, Instrumentation systems for pressure and temperature measurements.

## **ELECTRICAL ENGINEERING**

### **PAPER - II**

**Power Electronics and Drives:** Semiconductor, power, diodes, transistors, thyristors, triacs, GTOs, MOSFETs and IGBTs static characteristics and principles of operation, triggering circuits single phase and three-phase controlled rectifiers-fully controlled and half controlled, smoothing and filters regulated power supplies, DC-DC choppers and inverters, speed control circuits for DC and A.C. drives, Basics of electric drives: types, quadrant operation, reversing and braking of electric motors, estimation of power ratings, traction motors.

**Digital Electronics:** Boolean algebra, logic gates, combinational and sequential logic circuits, multiplexers, multivibrators, sample and hold circuits, A/D and D/A converters, basics of filter circuits and applications, active filters, semiconductor memories.

**Microwaves and Communication systems:** Electromagnetic wave in guided media, wave guide components, resonators, microwave tubes, microwave generators and amplifiers.

**Analog Communication basics:** modulation and demodulation, noise and bandwidth, transmitters and receivers, signal to noise ratio, digital communication basics, sampling, quantizing, coding frequency- and time-domain multiplexing, sound and vision broadcast, antennas, transmission lines at audio and ultra-high frequencies.

**Induction and special Machines:** Three-phase Induction motors Rotating magnetic field, Torque-slip characteristics, Equivalent Circuit and determination of its parameters, starters, speed control, Induction generators. Single phase Induction motors: Theory and phasor diagrams, characteristics, starting and applications, repulsion motor, series motor: E.m.f. equation and phasor diagram and performance, servomotors, stepper motors, reluctance motors, brushless DC motors (BLDC).

**Power system protection and Switch gear:** Methods of Arc Extinction, Restriking voltages and recovery voltage, testing of circuit breakers, Protective relays, protective schemes for power system equipment, surges in transmission lines and protection.



**Numerical Methods:** Solution of non linear algebraic equations, single and multisteps methods for solution of differential equations.

**Electrical Engineering Materials:** Crystal structure and defects, conducting, insulating and magnetizing Materials, super-conductors.

**Elements of Microprocessors :** Data representation and representation of integer and floating point-numbers. Organization and programming of a microprocessor, ROM and RAM memories CPU of a microcomputer, interfacing memory and I/O devices, Programmable peripheral and communication interface. Application of microprocessors.

## **AGRICULTURAL ENGINEERING**

### **PAPER-I**

**(a) Thermodynamics and Heat Engines:** Concept of energy, temperature and heat equations; laws of thermodynamics, pure substances and their properties; entropy, Rankine, air standard Otto, Diesel and Joule cycles; indicator diagrams.

**(b) Farm Power:** Sources and status of power in India; farm power and agricultural productivity relationship; construction and operational features of IC engines, various system of IC engine namely carburetion, ignition, cooling, lubrication; valves and valve timing, special features of diesel engines, tractors and their classification, power transimission, repair and maintenance; tractor testing, and tractor economics; power tillers - their economics and suitability, Energy in Agriculture.

**(c) Farm Machinery:** Design, construction, operation, repair and maintenance of tillage tools, implements and equipment viz. mould board and disk plough; harrows, cultivators, rotary tiller, seeding and planting machines, hoe, weeders, sprayers and dusters; harvester, threshers and combines; soil and crop factors influencing machine performance and energy requirements; selection of farm machines, economics of agricultural mechanization. Earth moving machineries.

**(d) Heat and Mass Transfer:** Thermal properties of materials; steady state and transient heat conduction, natural and forced convection; boiling, condensation, thermal radiation exchange, Heat exchangers, heat and mass transfer analogy; Fick's laws of diffusion, psychrometrics; analysis of heat and mass transfer processes, instrument and measurement systems.

**(e) Process and Food Engineering :** Unit operations in post harvest processing (cleaning, grading, drying, size reduction, evaporation, pasteurization, distillation etc.); processing of cereals, pulses, oilseeds, fruits & vegetables, animal feed, spices, dairy products, meat etc.; design of processing equipment and systems, milking machines.

**(f) Storage and handling:** Changes in stored products during storage; storage of food grains and their products, perishables (vegetable, fruits, dairy product, meat and eggs) storage system- air tight ventilated, refrigerated, modified atmospheric and controlled atmospheric storages; packaging; conveyors; design and management of storage and handling systems. Reducing losses in storages and handling.

## **AGRICULTURAL ENGINEERING**

### **PAPER-II**

**(a) Hydraulics and Fluid Mechanics:** Fluid properties, units and dimensions: surface tension and capillarity, equation of continuity, Bernoulli equation, Laminar and turbulent flow, steady and unsteady flow, Flow of fluids in pipes and open channels, design of open channels for non erosive and non silting velocities, most economical cross section, measurement of irrigation water and other water measuring devices viz. weirs, notches, orifices and flumes.

**(b) Surveying and Leveling:** Linear measurements; survey methods and devices used; principle of leveling, simple, differential and profile leveling; Contouring and characteristics of contour lines; Land leveling and grading, earth work estimation.

**(c) Soil and Water Conservation Engineering:** Forms of precipitation; hydrologic cycle; Point rainfall analysis, frequency analysis, agricultural watershed and its management; water management in agri-horti-aquaculture system, mechanics of water and wind erosion; Rational method of prediction of peak runoff and its limitations; concept of unit hydrograph and instantaneous hydrograph; factors affecting erosion and runoff; water erosion

control measures - contour cultivation, strip cropping, terracing, afforestation, pastures; Design of gully control structures - temporary and permanent; stream bank erosion; flood routing; flood amelioration by upstream soil water management; wind erosion control measures and sand dunes stabilization.

**(d) Irrigation Pumps:** Design, construction, performance characteristics, selection, installation, servicing and maintenance of different pumps (reciprocating, centrifugal, gear, turbine, submersible, propeller, jet); Hydraulic ram; Renewable and non-renewable power sources for pumping solar pumps.

**(e) Irrigation and Drainage Engineering:** Water wealth and irrigation in India; Soil water plant relationship; Forms and occurrence of soil water; methods and devices for soil moisture measurement; water requirement of crops; irrigation scheduling; irrigation methods - their hydraulics and design flood, border, furrow, sprinkler and drip irrigation, concept of irrigation efficiencies; water conveyance and control; Design of canals. Lacey and Kennedy's theories.

Drainage needs and its benefits; Darcy's Law, hydraulic conductivity; drainage coefficient; drainage methods, surface drainage (drainage of flat and sloping lands); design of open ditches their alignment and construction; designs and layout of subsurface drains; depth and spacing of drains and drainage outlets; installation of drains and drainage wells; drainage of salt affected areas.

**(f) Ground Water Hydrology and Tube well Engineering:** Occurrence and movement of ground water, steady and transient flow into wells, well interference, well drilling, design of well assembly and gravel pack, installation of well screen, completion and development of wells.

**(g) Rural Engineering:** Building materials and their properties; Farmstead planning, and design of dairy barns; poultry, goat-sheep, and piggery housing; selection of site, planning and design of rural houses, farm roads, village drainage; waste disposal and sanitary structures; cost estimates, green house construction.

**Secretary**