

PUBLIC SERVICE COMMISSION, WEST BENGAL

ADVERTISEMENT NO.05/2010

Applications in the prescribed format are invited from Indian Citizens and such other nationals as are declared eligible by Govt. of India for the undermentioned competitive examinations :-

- (1) Assistant Public Prosecutors' Recruitment Examination, 2010.**
- (2) West Bengal Legal Service Examination, 2010.**
- (3) West Bengal Forest Service and West Bengal Subordinate Forest Service Examination, 2010.**
- (4) West Bengal Audit and Accounts Service Examination, 2010.**

Examinations at item Nos.1 & 2 will be conducted by the Commission separately in **October, 2010 & December, 2010** or thereabout respectively in Kolkata followed by the Personality Tests also to be held in Kolkata. Examinations at item Nos.3 & 4 will also be held separately each in two successive stages viz., (1) **Preliminary Examination (Objective Type)** and (2) **Main Examination (Conventional Type - Written Examination)** followed by Personality Test. The Preliminary examination will be held in Kolkata and at Darjeeling centres during **October-November, 2010** or therabout. Only Scheduled Tribe candidates of Darjeeling District and other candidates of its three hill Sub-divisions viz., Darjeeling Sadar, Kalimpong and Kurseong are eligible to appear at Darjeeling centre. The main examination will be held in Kolkata centre only. The Personality Test of the candidates to be selected on the results of the main examination (Written) will be held at the Commission's office in Kolkata.

N.B. : ABILITY TO READ, WRITE AND SPEAK IN BENGALI IS AN ESSENTIAL QUALIFICATION FOR RECRUITMENT TO ALL POSTS MENTIONED BELOW, PROVIDED THAT THE SAID COMPULSORY REQUIREMENT OF KNOWLEDGE IN BENGALI IS NOT APPLICABLE FOR CANDIDATES FROM THE HILL AREAS OF DISTRICT OF DARJEELING.

1. ASSISTANT PUBLIC PROSECUTORS' RECRUITMENT EXAMINATION, 2010.

Pay : (PB-4) Rs.9,000-40,500/- + Grade Pay of Rs.5,400/-

Gross emoluments at the entry level : **Rs.26,670/-** besides M.A. and H.R.A. admissible as per rules.

Vacancies : 50 [Unreserved - 28, SC - 11, ST - 05 (03+02*), BC - 04 and PH - 02].

*Vacancies are carried forward from the previous year.

N.B. : In terms of Notification bearing No.616JL dt. 03.11.2008 issued by the Judicial Department, Govt. of West Bengal, the persons or class of persons suffering from blindness and cerebral palsy are exempted from the purview of reservation in terms of proviso to Sec. 33 of the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 (1 of 1996). **Candidates with low vision will be allowed the help of scribe, if required.**

Qualification : i) A degree in Law from a recognized University.
ii) A minimum 3 (three) years' continuous practice as a Lawyer on the date of application and must be either an Advocate* or a Barrister-at-Law*.

*The attested photocopy of the certificate furnished in this regard should be issued by competent authority of the Bar Association or from the District Judge or from the Presiding Officer of the Court in which the candidate practised as to his/her practice as a Lawyer, mentioning clearly the nature of duties performed and the duration of the experience obtained.

Age : Not less than 25 years and not more than 35 years on 01.01.2010 (i.e. born not earlier than the 2nd January, 1975 and not later than the 1st January, 1985).

2. WEST BENGAL LEGAL SERVICE EXAMINATION, 2010.

Pay : (PB-4) Rs.9,000-40,500/- + Grade Pay of Rs.5,400/-

Gross emoluments at the entry level : **Rs.26,670/-** besides M.A. and H.R.A. admissible as per rules.

Vacancies : 41 (Unreserved – 25, SC – 09, ST – 04, BC – 02 and PH – 01).

N.B. : In terms of notification bearing No.861-L dated 21st June, 2007 issued by the Law Department, Govt. of West Bengal, the persons or class of persons suffering from blindness and cerebral palsy are exempted from the purview of reservation in terms of proviso to Sec. 33 of the persons with disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 (1 of 1996). **Candidates with low vision will be allowed the help of Scribe, if required.**

Qualification : A degree in Law from a recognized University.

Age : Not less than 23 years and not more than 35 years on 01.01.2010 (i.e. born not earlier than the 2nd January, 1975 and not later than the 1st January, 1987). Upper age limit is relaxable for the candidates serving under Govt. of West Bengal.

3. WEST BENGAL FOREST SERVICE AND WEST BENGAL SUBORDINATE FOREST SERVICE EXAMINATION, 2010.

Pay for W.B.F.S : (PB-4) Rs.9,000-40,500/- + Grade Pay of Rs.5,400/-

Gross emoluments at the entry level : **Rs.26,670/-** besides M.A. and H.R.A. admissible as per rules.

Pay for W.B.S.F.S : (PB-3) Rs.7,100-37,600/- + Grade Pay of Rs.3,900/-.

Gross emoluments at the entry level : **Rs.15,583/-** besides M.A. and H.R.A. admissible as per rules.

Vacancies will be announced later. Some of the vacancies to be filled on the results of the examination may be reserved for S.C., S.T. and B.C. candidates of West Bengal as per Govt. Rules.

Qualification : i) Bachelor's Degree in Science or Engineering of any recognized University or Institute with at least one of the following subjects : Agriculture, Botany, Chemistry, Computer Science, Computer Applications, Agricultural Engineering, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Electronics Engineering, Mechanical Engineering, Environmental Science, Forestry, Geology, Horticulture, Mathematics, Physics, Statistics, Veterinary Science, Zoology.

ii) **Physical Requirements :** A candidate must have the following minimum standard of physical fitness.

Minimum standard of height and chest girth for a candidate shall be as under :-

Sex of Candidate	Height (cm)	Chest Girth (Normal) (cm)	Girth Expansion (cm)
Male	163	84	05
Female	150	79	05

NOTE : The following minimum standard of height may be allowed to candidates belonging to the categories of Scheduled Tribes Community and races such as Nepali, Garwali, Gorkha.

a) Male candidates – 152 cm.,

b) Female candidates – 145 cm.

Age : Not less than 21 years and not more than 32 years on 01.01.2010 (i.e. born not earlier than 02.01.1978 and not later than 01.01.1989).

N.B.: In terms of existing rules, the persons or class of persons suffering from blindness, low vision, leprosy-cured, hearing impairment, locomotor disability, cerebral palsy, mental retardation and mental illness are exempted from the purview of reservation contemplated under Section 33 of the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 (1 of 1996).

4. WEST BENGAL AUDIT AND ACCOUNTS SERVICE EXAMINATION, 2010.

Pay : (PB-4) Rs.9,000-40,500/- + Grade Pay of Rs.5,400/-.

Gross emoluments at the entry level : **Rs.26,670/-** besides M.A. and H.R.A. admissible as per rules.

Vacancies : 36 [Unreserved – 16, SC – 11(7 + 4*), ST – 2, BC – 2, PH – 5 (OH – 2, HI – 3)]

* Vacancies are carried forward from the previous year.

Qualification : Bachelor's Degree in Commerce of a recognized University or Membership of the Institute of Chartered Accountants of India or Members of the Institute of Costs and Works Accountants of India.

Age : Not more than 32 years as on 01.01.2010 (i.e. born not earlier than the 2nd January, 1978).

N.B.: Candidates suffering from blindness or low vision are not eligible.

FEE : Candidates must enclose with their applications a fee of Rs.210/- (Rupees Two Hundred and Ten) only by Indian Postal Order which must be purchased on a date after publication of this advertisement and crossed and endorsed to the Secretary, Public Service Commission, West Bengal or by a receipted challan from a Govt. Treasury in West Bengal of the Reserve Bank of India, Kolkata under the head "0051-00-105-State PSC Examination fees-001-Examination fees-16 other fees". The Postal Orders should be made payable at G.P.O., Kolkata. Money Order, Cheque, Bank Draft, Cash etc. will not be accepted. No application will be considered unless accompanied with the requisite application fees.

SC/ST candidates of West Bengal and Physically Handicapped (40% and above) candidates are not required to pay any fee. No fee exemption is available to BC candidates. No claim for refund of the fee will be entertained nor will it be held in reserve for any other examination.

WEBSITE FOR GUIDANCE OF CANDIDATES :

'Important Information', 'Scheme and Syllabi' of the examinations in detail and the 'Application Format' are obtainable through the Commission's Website at :

<http://www.pscwb.org.in>

Closing date for receipt of application : **THE 12TH JULY, 2010.**

IMPORTANT INFORMATION

1. Candidates who wish to apply for more than one category of posts should submit separate application along with requisite fees for each.
2. The qualification prescribed in the advertisement are as per the notified recruitment rules issued by Govt.
3. Besides pay, the posts carry allowances as admissible.
4. The benefits of reservation of vacancies and upper age concession upto 5 years are admissible only to SC and ST candidates of West Bengal and upto 3 years to BC candidates of West Bengal and upto 45 years for persons with disabilities having disability of 40% and above as per Govt. Rules. SC, ST and BC candidates of other States may apply for unreserved vacancies as General candidates. Proof of belonging to a SC or ST or BC or persons with disability must be submitted along with the application form and no claim in this regard will be entertained afterwards.
5. (a) A candidate claiming to be SC, ST or BC must have a certificate in the prescribed format in support of his/her claim from a competent authority of West Bengal as specified below:-
 - i) In the District, the Sub-Divisional Officer of the Sub-Division concerned and
 - ii) In Kolkata, the District Magistrate, South 24-Parganas or such Additional District Magistrate, South 24-Parganas, as may be authorized by the District Magistrate, South 24-Parganas in this behalf.

[vide the West Bengal SCs and STs (Identification) Act, 1994 at SCs & STs Welfare Department Order No.261-TW/EC/MR-103/94 dated 06.04.1995).
- (b) For Persons with Disabilities (vide West Bengal Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Rules, 1999.)

Certificate issued by a Medical Board constituted at Govt. Medical College Hospitals, District Hospitals, Sub-Divisional Hospitals and Block Level Hospitals.
6. Candidates in service of Govt., a local or Statutory Body must submit their applications in prescribed form with the requisite documents direct to the Commission's Office within the closing date. They are required to submit an undertaking (as in the declaration printed in the Application Form) to the effect that they have informed, in writing, their Head of Office/Department as to their applying for the examination.

A certificate in Original must be submitted from the appointing authority where necessary for relaxation of age as an employee of Govt. of West Bengal.
7. Completed application must be submitted along with the photocopies of the documents regarding citizenship (by registration), age, qualification and experience either self-certified or attested by competent authority.

8. Application Forms, not properly filled in or incomplete in any respect or without requisite documents would be summarily rejected. Wilful suppression of any material fact will also be similarly dealt with.
9. Submission of more than one application for a particular Examination is strictly forbidden.
10. One copy of candidates' recent passport size photograph duly signed by him/her (An identical copy of the photograph will be required for pasting on the Attendance Sheet to be sent by this office along with the Admit Card for eligible candidates.) must be pasted on the application form.
11. The Public Service Commission, West Bengal may make enquiries about the integrity of the candidates and other particulars regarding suitability and eligibility, if any candidate fails to furnish any certificate or other relevant documents or information relating to his/her candidature within the time specified by the Commission, his/her claim for allotment may be passed over without further reference to him/her.
12. A candidate should note that his/her admission to the examination will be deemed provisional subject to determination of his/her eligibility in all respects.
13. A candidate must abide by the instructions as may be given by Supervisor/Invigilator of the Examination. If the candidate fails to do so or indulge in disorderly or improper conduct he/she will render himself/herself liable to expulsion from the Examination Hall and/or such other punishment as the Commission may deem fit to impose.

A candidate who has been reported against by the Supervisor of the Examination Centre for violating any of the instructions will be punished with cancellation of candidature and also debarment from future examinations and selections as may be decided by the Commission according to the circumstances of the case.

14. In all the answer papers under examination due credit will be given for proper economy of words combined with clarity, precision and effectiveness of expression and originality of approach.
15. 10% of the full marks may be deducted from the total marks obtained in a particular paper of a candidate who discloses his/her identity by writing his/her name, roll number or by putting any identifying mark inside the answer script of that paper.
16. Candidates must fulfill the essential qualifications by the closing date.
17. Canvassing in any form will disqualify the candidate.
18. Application in the given proforma as available in the Commission's website [<http://www.pscwb.org.in>] may be submitted personally in open condition at the enquiry counter of the Commission's office at 161-A, S. P. Mukherjee Road, Kolkata – 700 026 between 11-00 a.m. and 3-30 p.m. on all working days (Saturdays and Sundays are holidays) or sent by post (strictly by registered or speed post or U.C.P.) on or before the closing date addressed to the Deputy Secretary (Examination), Public Service Commission, West Bengal at the above address superscribing on the envelope the advertisement no. and name of the examination. Applications received after the closing date shall be rejected. The application form shall be filled in candidate's own handwriting in blue/black ink and signed by him/her.

PUBLIC SERVICE COMMISSION, WEST BENGAL

ASSISTANT PUBLIC PROSECUTORS' RECRUITMENT EXAMINATION, 2010

SCHEME AND SYLLABUS

The examination will comprise two successive parts :-

- Part – I : Written Examination;**
Part – II : Personality Test.

PART – I : Written Examination : The written examination will consist of four papers, each carrying 100 marks.

Paper – I

Indian Penal Code and Code of Criminal Procedure, 1974		– 100 marks
(i) Indian Penal Code	-	50 marks
(ii) Code of Criminal Procedure, 1974	-	50 marks
		<u>100 marks</u>

Paper – II

Indian Evidence Act, 1872 and Constitution of India Part-II, Part-III, Part-V (Chapter-IV) and Part-VI (Chapter-V and Chapter-VI)		– 100 marks
(i) Indian Evidence Act, 1872	-	80 marks
(ii) Constitution of India	-	20 marks
		<u>100 marks</u>

Paper – III

Criminal Rules and Orders, Civil Laws, namely, Registration Act, 1908, Transfer of Property Act, 1882, West Bengal Land Reforms Act, 1955, Parts-I to IV of the Code of Civil Procedure, 1908 and Negotiable Instruments Act, 1881		– 100 marks
(i) Criminal Rules and Orders	-	30 marks
(ii) Civil Laws	-	70 marks
		<u>100 marks</u>

Paper – IV

Other Laws		– 100 marks
Prevention of Food Adulteration Act, 1954, Bengal Excise Act, 1909, West Bengal Municipal Act, 1993, West Bengal Panchayat Act, 1973, Essential Commodities Act, 1955, Narcotic Drugs and Psychotropic Substances Act, 1985, Child Marriage Restraint Act, 1929, Indian Arms Act, 1878, Indian Explosives Act, 1884, Explosive Substances Act, 1908, Dowry Prohibition Act, 1961, Water (Prevention and Control of Pollution) Act, 1974, Police Regulations, Calcutta and Police Regulations, Bengal.		

PART – II : Personality Test – 100 marks

For this purpose, a limited number of candidates selected on the results of the written examination will be called to appear at the personality test. The final merit list will be prepared on the basis of total marks obtained in the written examination and in the personality test.

N.B. : The Commission shall have the discretion to fix qualifying marks in the aggregate.

PUBLIC SERVICE COMMISSION, WEST BENGAL

APPLICATION FORMAT

APPLICATION FOR ASSISTANT PUBLIC PROSECUTORS' RECRUITMENT EXAMINATION, 2010

ADVERTISEMENT NO. 05(1)/2010

(CLOSING DATE FOR RECEIPT OF APPLICATION : The 12TH July, 2010.)

CAUTION

(i) A candidate must consult the "Important Information" available with advertisement in the Commission's Website, then use the prescribed application format and fill in the application form correctly against all the items in his/her own handwriting with ball point pen of black/blue ink and furnish required particulars/documents. If any item(s) of the application is considered inapplicable to the candidate he/she should write 'NOT APPLICABLE or (N.A.)' against the particular item(s) and in any case **no item of the application should remain unfilled.**

(ii) Correction/overwriting, if any, should be accompanied by signature of the candidate.

(iii) *In case the application is not filled in accordance with the above instructions or any of the required documents is not enclosed, it will be treated as incomplete/defective and summarily rejected.*

Note : **Keeping the application form in front, the particulars/documents are to be stitched with the application securely in the following sequence - I.P.O. or Treasury Challan, in original (not required for SC/ST candidates of W.B. and Persons with Disability), Attested or Self-certified photocopies of (1) Madhyamik or equivalent qualification cert., (2) Law Degree certificate, (3) SC/ST/BC/PH/Ex-Serviceman cert. (if applicable), (4) Citizenship Certificate (for candidates acquiring citizenship by registration), (5) Experience Certificate as a Law Practitioner and (6) Two self-addressed unstamped envelopes.**

(Space for office use)

Roll No.

Space for pasting recent
passport size photograph
signed in full by the
candidate

1. Name in full (IN CAPITAL LETTERS) :
2. (a) I.P.O./Treasury Challan attached for : Rs. _____
(b) I.P.O. No(s). and value :
(c) Date of purchase and name of issuing post office with address :
(d) No., amount and date of receipted Treasury Challan attached :
3. (a) Indicate your community : Genl. SC ST BC
(Put a '✓' mark in appropriate box/boxes).
SC/ST/BC candidates not belonging to the State of West Bengal should indicate their community as 'General'. [SC/ST/BC candidate shall attach self-certified or attested copy of certificate(s)]
- (b) If SC/ST/BC, mention your Sub-caste, the name of the State from which SC/ST/BC certificate obtained and the designation of issuing authority. : Sub-Caste State Issuing Authority

4. (a) Whether you are a person with disability, (write 'Yes' or 'No') [If yes, attach self-certified or attested photocopy of P.H. certificate] :
- (b) State the category of disability (Put '✓' mark in the appropriate box) :

Low Vision	Hearing Impaired	Orthopaedically Handicapped
<input type="text"/>	<input type="text"/>	<input type="text"/>
- (c) In case, you are a low vision candidate mention if you require the help of a Scribe (Put '✓' mark in the appropriate box) :

Yes	No
<input type="text"/>	<input type="text"/>
5. S E X (Put '✓' mark in appropriate box) :

Male	Female
<input type="text"/>	<input type="text"/>
6. (a) **Date of birth** (as recorded in Madhyamik or equivalent examination certificate) [attach attested or self-certified copy of Madhyamik or equivalent examination certificate] :

Date	Month	Year
<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>	<input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/> <input style="width: 20px; height: 20px;" type="text"/>
- (b) Do you claim relaxation of age as SC/ST/BC of West Bengal or as Person with Disability [Write 'Yes' or 'No'] :
7. (a) Whether a citizen of India (Write 'Yes' or 'No') :
- (b) State, whether a natural citizen or a citizen by registration (If by registration, attach self-certified or attested copy of certificate) :
8. Father's Name :
9. Address (IN CAPITAL LETTERS) mentioning Post Office, Sub-Division, District and Pin Code
- (a) Postal Address :
- (b) Permanent Address :
10. (a) Do you have the ability to read, write and speak in Bengali (Write 'Yes' or 'No') :
- (b) Whether you are a person from hill areas of Darjeeling District (Write 'Yes' or 'No') :
- (c) State your mother tongue :

11. Academic Qualifications (Madhyamik and onwards) :
 [Self-certified or attested copy of all certificates must be attached to the application].

Name of Examination passed	Name of Board/Council/University	Division/Class	Year of passing	Remarks

12. Period of practice as a Lawyer (attach attested photocopy of certificate from the appropriate authority of the Bar Association or from the District Judge or from the Presiding Officer of the Court in which you have been practising). :

Name of the Court(s)	From (indicate exact date)	To (indicate exact date)

13. (a) Have you at any time been employed? (write 'Yes' or 'No'):

(b) If yes, give details :

Name of the Post	Temporary/Permanent/on Contract basis	Office where employed	Date of joining	Date of leaving, if any	Cause of leaving

14. The list of documents enclosed :

- i) _____ ii) _____
- iii) _____ iv) _____
- v) _____ vi) _____

DECLARATION

I solemnly declare that (a) all statements made in this application are true, complete and correct to the best of my knowledge and belief and in the event of any information being found false my candidature will be liable to be cancelled, (b) Original documents, certificates will be produced on demand, (c) I agree to take this examination at my own risk subject to verification of my eligibility by the Commission. If subsequently the Commission finds me ineligible for admission to the examination, it may cancel my candidature even after finalization of the results. (d) I have submitted no other application for this examination. *(e) I have informed the Head of my Office/Department in writing that I am applying for this examination (*Strike out if not applicable).

Yours faithfully,

Place : _____

Date : _____

 (Full signature of the candidate)
 (Full name to be written clearly)
 [Not in capital letters]

PUBLIC SERVICE COMMISSION, WEST BENGAL

WEST BENGAL LEGAL SERVICE EXAMINATION, 2010

SCHEME AND SYLLABUS

The examination will comprise two successive parts :-

Part – I : Written Examination;

Part – II : Personality Test.

Part-I. Written Examination. – The written examination shall consist of following nine papers, each paper carrying 100 marks:-

Paper-I	(a) English composition, essay, précis writing	-	50 marks;	
	(b) Composition and essay writing in Bengali/Hindi/Urdu/ Nepali and translation from English to Bengali/Hindi/Urdu/Nepali.	-	50 marks;	
Paper-II	(a) General Knowledge	-	50 marks;	
	(b) Current Affairs	-	50 marks;	
Paper-III	(a) Constitutional Law of India	-	50 marks;	
	(b) Constitution of India	-	50 marks;	
Paper-IV	Administrative Law	-	100 marks;	
Paper-V	(a) Interpretation of Statutes and Principles of Legislation and Legislative drafting,	-	80 marks;	} - 100 marks;
	(b) The General Clauses Act, 1897 (10 of 1897) and the Bengal General Clauses Act, 1899 (Ben Act I of 1899).	-	20 marks;	
Paper-VI	(a) The West Bengal Estates Acquisition Act, 1953 (West Ben. Act I of 1954) — Chapters I, II and VII;	}		- 100 marks;
	(b) The West Bengal Land Reforms Act, 1955 (West Ben. Act X of 1956) — Chapters I, II, IIA, IIB, III & IX;			
	(c) The Land Acquisition Act, 1894 (1 of 1894);			
	(d) The Public Premises (Eviction of Unauthorised Occupants) Act, 1971 (40 of 1971);			
	(e) The Environment (Protection) Act, 1986 (29 of 1986);			
Paper-VII	(a) The Civil Procedure Code, 1908 (5 of 1908) (Sections only);	}		- 100 marks;
	(b) Civil Rules and Orders (Chapters 1, 2, 6, 7, 8, 9, 10, 11, 12, 18, 19, 20, 24, 25, 27, 28 and 29);			
	(c) Criminal Rules and Orders (Chapters I, II, III, IV, V, VI, VII, VIII, X, XI, XII, XIII, XIV, XVI, XVII and XVIII).			
Paper-VIII	(a) The Criminal Procedure Code, 1973 (2 of 1974) (Chapters I, II, III, IV, V, VIII, IX, X, XII, XIII, XIV, XV, XVI, XVII, XVIII, XIX, XX, XXIII, XXVII, XXIX, XXX, XXXI, XXXIV, XXXV, XXXVI);	}		- 100 marks;
	(b) High Court Original Side Rules and Orders;			
	(c) High Court Appellate Side Rules and Orders.			
Paper-IX	(a) The Evidence Act, 1872 (1 of 1872);	}		- 100 marks;
	(b) The Indian Penal Code, 1860 (45 of 1860).			

Part-II. Personality Test. — The Personality Test will be of 100 marks. For this purpose, a limited no. of candidates, selected in order of merit on the results of the written examination will be called. Final merit list will be prepared on the basis of the total marks obtained in all the written papers and in the Personality Test.

The Public Service Commission, West Bengal shall have the discretion to fix qualifying marks in the aggregate.

The standard of examination in the Law papers (Compulsory and Optional) will be that of the LL.B. Degree of the Calcutta University. All answers must be written either in English or in Bengali except in Paper - I.

In all the answer papers of the Final Examination due credit will be given for proper economy of words combined with clarity and effectiveness of expression and originality of approach.

4. (a) Whether you are a person with disability, (write 'Yes' or 'No') [If yes, attach self-certified or attested xerox copy of P.H. certificate] :
- (b) State the category of disability (Put '✓' mark in the appropriate box) :

Low Vision	Hearing Impaired	Orthopaedically Handicapped
<input type="text"/>	<input type="text"/>	<input type="text"/>
- (c) In case, you are a low vision candidate mention if you require the help of a Scribe (Put '✓' mark in the appropriate box) :

Yes	No
<input type="text"/>	<input type="text"/>
5. S E X (Put '✓' mark in appropriate box) :

Male	Female
<input type="text"/>	<input type="text"/>
6. (a) **Date of birth** (as recorded in Madhyamik or equivalent examination certificate) [attach attested or self-certified copy of Madhyamik or equivalent examination certificate] :

Date	Month	Year
<input style="width: 30px; height: 20px;" type="text"/>	<input style="width: 30px; height: 20px;" type="text"/>	<input style="width: 30px; height: 20px;" type="text"/>
- (b) Do you claim relaxation of age as SC/ST/BC of West Bengal or as Person with Disability [Write 'Yes' or 'No'] :
- (c) Do you claim relaxation of age limit for being a Government Servant ? (Write 'Yes' or 'No') [If yes, attach original certificate from the appointing authority] :
7. (a) Whether a citizen of India (Write 'Yes' or 'No') :
- (b) State, whether a natural citizen or a citizen by registration (If by registration, attach self-certified or attested copy of certificate) :
8. Father's Name :
9. Address (IN CAPITAL LETTERS) mentioning Post Office, Sub-Division, District and Pin Code
- (a) Postal Address :
- (b) Permanent Address :
10. (a) Do you have the ability to read, write and speak in Bengali (Write 'Yes' or 'No') :
- (b) Whether you are a Nepali speaking person from hill areas of Darjeeling District (Write 'Yes' or 'No') :
- (c) State your mother tongue :
- (d) State your choice of language in case you do not take up Bengali in Paper-IB (Put a '✓' mark in appropriate box) :

Hindi	Urdu	Nepali
<input type="text"/>	<input type="text"/>	<input type="text"/>

11. Academic Qualifications (Madhyamik and onwards) :
 [Self-certified or attested copy of all certificates must be attached to the application].

Name of Examination passed	Name of Board/Council/University	Division/Class	Year of passing	Remarks

12. (a) Have you at any time been employed? (write 'Yes' or 'No'):

(b) If yes, give details :

(1) Name of the Post	(2) Temporary/Permanent/on Contract basis	(3) Office where employed	(4) Date of joining	(5) Date of leaving, if any	(6) Cause of leaving

13. The list of documents enclosed :

- i) _____ ii) _____
- iii) _____ iv) _____
- v) _____

DECLARATION

I solemnly declare that (a) all statements made in this application are true, complete and correct to the best of my knowledge and belief and in the event of any information being found false my candidature will be liable to be cancelled, (b) Original documents, certificates will be produced on demand, (c) I agree to take this examination at my own risk subject to verification of my eligibility by the Commission. If subsequently the Commission finds me ineligible for admission to the examination, it may cancel my candidature even after finalization of the results. (d) I have submitted no other application for this examination. *(e) I have informed the Head of my Office/Department in writing that I am applying for this examination (*Strike out if not applicable).

Yours faithfully,

Place : _____

Date : _____

 (Full signature of the candidate)
 (Full name to be written clearly)
 [Not in capital letters]

PUBLIC SERVICE COMMISSION, WEST BENGAL

West Bengal Forest Service & West Bengal Subordinate Forest Service Examination, 2010

SCHEME AND SYLLABUS

A. Scheme and Syllabus for Preliminary Examination :

The Preliminary Examination will consist of only one paper of "General Studies and Arithmetic". The question paper will be an objective type consisting of 200 multiple choice questions. The paper will carry 200 marks and will be of 2½ hours duration. The standard of the paper will be of the level of knowledge as expected of a graduate of a recognized Indian University or Institute. The paper will include questions covering the following fields of knowledge :

(i)	English Composition	...	...	20 marks,
(ii)	General Science	...	...	25 marks,
(iii)	Current Events of National and International Importance	...	...	25 marks,
(iv)	History of India	...	...	25 marks
(v)	World Geography	...	...	25 marks,
(vi)	Indian Polity and Economy	...	...	20 marks,
(vii)	Indian National Movement	...	...	20 marks,
(viii)	General Mental Ability	...	...	20 marks,
(ix)	Arithmetic	...	...	20 marks,

The Preliminary examination is meant to serve as a screening test only for the purpose of selection of candidates for the Main examination. The marks obtained in this examination by the candidates will not be considered for Final Selection. Only those candidates who will be declared qualified at the Preliminary examination in a year will be eligible for admission to the West Bengal Forest Service (Main) and West Bengal Subordinate Forest Service (Main) Examination of that year.

The Commission shall have the discretion to fix the qualifying marks in the examination.

B. SCHEME OF THE MAIN EXAMINATION :

Written examination :

The written examination shall be held in two Groups-

- (a) Compulsory Subjects; (b) Optional Subjects

(a) Compulsory Subjects :

There shall be three compulsory subjects as stated below :-

Paper - I : English Essay, Precis Writing and Composition;

Paper - II : Bengali/Hindi/Urdu/Nepali (Essay, precis writing and composition);

Paper - III: General Studies

(b) Optional Subjects :

Candidates shall take up any two subjects from the following list of subjects :-

i) Agriculture,	ii) Botany,	iii) Chemistry,
iv) Computer Science,	v) Computer Application,	vi) Agricultural Engineering,
vii) Chemical Engineering,	viii) Civil Engineering,	ix) Computer Engineering,
x) Electrical Engineering,	xi) Electronics Engineering,	xii) Mechanical Engineering,
xiii) Environmental Science,	xiv) Forestry,	xv) Geology,
xvi) Horticulture,	xvii) Mathematics,	xviii) Physics,
xix) Statistics,	xx) Veterinary Science,	xxi) Zoology.

(The standard of Syllabus of these subjects shall be that of Bachelor's degree in Science or Engineering of a recognized Indian University or Institute).

SYLLABI FOR PRELIMINARY EXAMINATION

Questions on English Composition will cover Synonyms, Antonyms, Idioms and Phrases, Vocabulary test, phrasal verbs, the same words bearing more than one meaning, use of appropriate and qualifying words etc. Questions on General Science will cover general appreciation and understanding of science, including matters of everyday observation and experience as may be expected of a well educated person who has not made a special study of any scientific discipline. In History emphasis will be on broad general understanding of the subject in its social, economic and political aspects. In Geography emphasis will be on Geography of India. Question on the Geography of India will relate to physical, social and Economic Geography of the country including the main features of Indian Agricultural and Natural Resources. Questions of Indian Polity and Economy will test the knowledge of the country's Political system, Panchayatee Raj, Community Development and Planning in India. Questions on the Indian National Movement will relate to the nature and character of the Nineteenth Century Resurgence, Growth of Nationalism and Attainment of Independence, General Mental Ability will relate to Logical perception, understanding and natural conclusion. Arithmetic will be of Madhyamik or equivalent standard.

Syllabi of Compulsory and Optional Subjects of Main Examination

A. COMPULSORY

The standard of Compulsory papers will be such as may be expected of a Science or Engineering Graduate of an Indian University.

NOTE - 1 : Each of the compulsory subject will carry 100 marks and examination will be of 3 (three) hours duration. Each optional subject will have two papers carrying 100 marks each and examination will be of 3 (three) hours duration for each paper.

NOTE - 2 : Restriction on choice of optional subjects :

Candidates will be allowed to offer optional subjects mentioned below in the following restricted manner:

- i) Agriculture or Agricultural Engineering or Veterinary Science;
- ii) Chemistry or Chemical Engineering;
- iii) Computer Application or Computer Science or Computer Engineering;
- iv) Electrical Engineering or Electronics Engineering;
- v) Mathematics or Statistics.

PERSONALITY TEST :

There shall be a Personality Test carrying 200 marks for the W.B. Forest Service and 100 marks for the W.B. Sub-ordinate Forest Service..

A number of candidates to be selected in order of merit on the results of the Main Examination (Written) for the service will have to appear for the Personality Test.

Each candidate will be asked questions on matters of general interest. The purpose of the test will be to assess the personal qualities of the candidate, e.g. alertness of mind, power of clear and logical exposition, intellectual and moral integrity, leadership and also the range of interest of the candidate.

ABSTRACT TABLE PAPERS/SUBJECTS AND MARKS FOR MAIN EXAMINATION AND PERSONALITY TEST :

A. Compulsory Subjects	West Bengal Forest Service		West Bengal Subordinate Forest Service	
	No. of Papers	Marks	No. of Papers	Marks
1. English	one	100	one	100
1. Bengali/Hindi/ Urdu/Nepali	one	100	one	100
3. General Studies	one	100	one	100
B. Optional Subjects				
1. Subject I	Two	200	Two	200
2. Subject II	Two	200	Two	200
C. Personality Test	----	200	----	100
Total marks...	----	900	----	800

DISCRETION OF THE COMMISSION :

The Commission shall have discretion to fix qualifying marks in any paper or all papers and in the aggregate.

AGRICULTURE

Paper-I :

Agricultural Botany (Plant cytology, genetics, breeding and physiology, morphology of crop plants).

Agricultural Entomology and Plant Pathology. Life history of crops and stored grains, pests and methods of their control. Classification of insects up to orders. Insecticides and their use. Principles of plant quarantine regulations. Insect ecology. Life History of economic insects and methods of rearing them. Classification, taxonomy and nomenclature of Fungi. Major diseases of crops and methods of their prevention and control. Plant viruses and bacteria. Fungicides and their use.

Paper-II :

Agricultural Chemistry and Soil Science (Properties of important carbo-hydrates, proteins, lipids, organic acids, plant pigments and alkaloids) Chemistry of Fertilisers, Pesticides and Herbicides, Chemistry of simple and compound fertilisers and measures. Nitrification and nitrogen fixation. Soil development and their composition. Soil structures. Physical properties of soil. Soil-water relationship. Soil-plant relations soil fertility and plant growth. Soil Microbiology.

BOTANY

Paper-I :

Morphology, Anatomy, Embryology and Taxonomy of Angiosperms.

Anatomy - Tissues and Tissue systems, Morphology and anatomy of stem, root, leaf, flower and seed including developmental aspects and anomalous growth, Structure of anther and ovule. Fertilisation and development of seed.

Taxonomy - Principles of nomenclature and classification of angiosperms. Modern trends in Taxonomy. A general knowledge of the more important families of angiosperm.

Physiology - Ecology and elementary idea of plant geography and dispersal of plants.

Paper-II :

Plant Pathology - Knowledge of important plant diseases in India caused by Fungi, bacteria and viruses. Mode of infection and methods of prevention and control physiology of parasitism.

Evolution, Cytology, Genetics and Plant Breeding; Economic Botany, Origin and importance of cultivated plants. General account of important sources of food, fibre, wood and drugs.

CHEMISTRY

Paper-I :

Physical and Organic

Atomic structure and Chemical bonding; valence bonds and molecular orbitals; Molecular structure and molecular spectra; Raman spectra; Chemical Kinetics, Catalysis. Electro-Chemistry; Transition metal Chemistry, Physical organic Chemistry, Aliphatic Chemistry, Carbohydrates, Stereo-Chemistry; Aromatic Chemistry; Dyes. Vitamins. Antibiotics, Cellulose, Starch and Organic Polymers, Organic Photo Chemistry.

Paper – II :

Inorganic and Industrial

Inorganic Polymers, Silicones. Alloys and Intermetallic compounds. Chemistry of : Boron, Titanium, Germanium, Tungsten, Tantalum, Thorium, Uranium, Octahedral and Planar Inorganic complexes, Industrial importance of Cellulose, Starch, Coal Tar Chemicals, Organic Polymers, Oils and fats, Petro-Chemicals, Vitamin, Hormone, Alkaloids, Antibiotics, Proteins.

COMPUTER SCIENCE

Paper – I :

Operating system, System software, Software engineering, Computer networks, Internet and Java programming.

Paper-II :

Design and analysis of algorithms, Computer system architecture, Computer graphics, Relational data base management system.

COMPUTER APPLICATION

Paper – I :

Digital computer fundamental, Discrete mathematics, Numerical methods, Resource management techniques, MC and Assembly language programming.

Paper – II :

Data and file structure, C programming, Object oriented programming, Visual programming, PC maintenance and trouble shooting.

AGRICULTURAL ENGINEERING

Paper-I :

1. Soil and Water Conservation :

Definition and scope of soil conservation; Mechanical and types of erosion their causes. Hydrologic cycle, rainfall and runoff-factors affecting them and their measurements, stream gauging-Evaluation of runoff from rainfall, Erosion control measures-Biological and Engineering.

Basic open channel hydraulics. Designs of soil conservation structures-terraces, bunds, outlets and grassed waterways. Principles of flood control. Flood routing. Design of farm ponds and earth dams. Stream bank erosion and its control, Wind erosion and its control. Principles of watershed management.

Investigation and planning in River Valley Projects.

2. Irrigation and drainage :

Soil-Water-plant relationships. Sources and types of Irrigations. Planning and design of minor irrigation projects, Techniques of measuring soil moisture.

Duty of water-consumptive use. Water requirement of crops. Measurement and cost of irrigation water. Measuring devices-flow through orifices, wires and flumes. Levelling and layout of irrigation systems, design and construction of channels, field channels, pipe lines, head gates, diversion boxes structures and road crossing. Occurrence of ground water, Hydraulic of wells, Types of wells, their construction, drilling methods. Well development. Testing of wells.

Drainage-Definition-causes of water logging. Methods of drainage. Drainage of irrigated lands. Design of surface and subsurface systems.

Paper-II :

1. Building materials :

Kinds of building materials-their properties. Timber, Brick work and R.C. construction. Design of columns, beams, roof trusses, joints, Layout of farmstead. Design of farm houses, animals shelters and storage structures. Rural water supply and sanitation.

2. Farm power and machinery :

Construction of different types of internal combustion engines, Ignition, fuel, lubricating, Cooling and governing system of IC engines. Different type of tractors, chassis, transmission and steering. Farm machinery for primary and secondary tillage, seeding machinery, interculture tools and machinery. Plant producing equipment. Harvesting and threshing equipment. Machinery for land development. Pumps and pumping machinery.

3. Electricity and rural electrification power generation and transmission :

Distribution of electricity for rural electrification; A.C. & D.C. circuits. Uses of electric energy on the farm. Electric motors used in agriculture-types, selection, installation and maintenance

CHEMICAL ENGINEERING

Paper-I :

1. Transport phenomena : (Under steady State conditions)

(a) Momentum transfer :-

i) Different patterns of flow and their criteria.

ii) Velocity profile.

iii) Filtration; Sedimentation; Centrifuge.

iv) Flow of solids through fluids.

(b) Heat transfer : Different modes of heat transfer : conduction calculation for single and composite walls of flat, cylindrical, spherical shapes.

Convection-different dimensionless groups used in forced and free convection, Equivalent diameter.
Determination of individual and overall heat transfer coeff.

Evaporation-Radiation-Stefan Boltzman law.

Emmissivity and absorptivity, Geometrical shape factor, Heat load of furnaces-Calculation.

(c) Mass transfer : Diffusion in gases and liquids. Absorption, desorption, humidification, dehumidification, drying and distillation Analogy between momentum, heat and mass and transfer.

2. Thermodynamics :

(a) 1st, 2nd and 3rd Laws of thermodynamics.

(b) Determination of internal energy, entropy, enthalpy and free energy-Determination of chemical equilibrium constants for homogeneous and heterogeneous systems. Use of thermodynamics in combustion, distillation and heat transfer. Mechanism and theory of mixing, various mixers for liquid-liquid, solid-liquid and solid-solid.

Paper-II :

1. Reaction Engineering :

i) Kinetics : Homogeneous and heterogeneous reactions, 1st, 2nd order reactions.

Batch and flows – Reactors and their design.

ii) Catalysis choice of catalysis; Preparations; Mechanics of catalysis based upon mechanism.

2. Transportation :

Storage and transport of materials and in particular, powders, resins volatile and non-volatile liquids, emulsions and dispersions, pumps, compressors and blowers, Mixer-Mechanisms and theory of mixing, various mixers for liquid-liquid; solid-solid; solid-liquid.

3. Materials :

Factors that determine choice of materials for construction in chemical industries-Metals and alloys, ceramics, plastics and rubbers, Timber and timber products, plywood laminates.

Fabrication of equipment with particular reference to production of vats, barrals, filter presses etc.

4. Instrumentation and process control :

Mechanical, hydraulic, pneumatic, thermal, optical, magnetic, electrical and electronic instruments, controls and control systems, automation.

CIVIL ENGINEERING

Paper-I :

1. Building materials and properties and strength of materials :

Building materials-Timber stone, brick, lime, tile, sand, surki, mortar and concrete, metal and glass structural properties of metals and alloys used in engineering practice.

Stresses and strains, Hook's law, Bending, Torsion and direct stresses. Elastic theory of bending of beams, maximum and minimum stresses due to eccentric loading, Bending moment and Shear force diagrams and deflection of beams under static and live loads.

2. Structural Engineering :

Steel structures : Permissible stresses, Design of beams, simple and built-up columns and simple roof trusses and girders, column bases and grillages for axially and eccentrically loaded columns, Bolted, rivetted and welded connections.

R.C.C. structures, Specification of materials used, proportioning workability and strength requirement, I.S.I. standards for design loads, permissible stresses in R.C.C. members subject to direct and bending stresses. Design of simply supported overhanging and cantilever beams, rectangular and Tee beams in floors, roofs and lintels, Axially loaded columns and their bases.

Paper-II :

1. Building-construction, water supply and sanitary engineering

Construction-Brick and stone masonry walls, floors and roofs, stair cases, carpentry in wooden floor, roof, ceiling, doors and windows, Finishes (plastering, pointing, painting and varnishing etc.).

Soil mechanics-Soil and their investigation. Bearing capacity and foundations of buildings and structures, principles of design,

Building estimates - principle, units of measurement, Taking out quantities for building and preparation of abstract of costs, specifications and data sheets for important items.

Water supply-sources of water, Standards of purity, methods of purification, layout of distribution system, pumps and boosters.

Sanitation - Sewers, storm water overflows, house drainage requirements and appurtenances, septic tanks, Imhoff tanks, sewage treatment and dispersion trenches. Activated sludge process.

2. Roads and bridges

Survey and alignment : Highway materials and their placements principles of design, width of foundation and pavement, camber, gradient, curves and super-elevation, Retaining walls.

Construction - Earth roads, stabilized and water bound macadam roads, bituminous surfaces and concrete roads, Draining of roads, Bridges - Types, Economical spans, I.R.C. loading, designing superstructure of small span bridges. Principles of designing foundation of abutments and piers of bridges, pile and well foundations.

Estimating Earthwork for roads and canals.

COMPUTER ENGINEERING

Paper-I :

Number system, Data representation, Microprocessors, Architecture and instruction set of microprocessors, Assembly language programming, Microprocessor based system design.

Paper-II :

Fundamental of computer architecture, Processor design, Control unit design, Memory organisation, System organisation, Personal computers and their typical use, Elements of high level programming language PASCAL/C, Use of data structure, Programming.

ELECTRICAL ENGINEERING

PAPER-I :

Network :

Steady state analysis of d.c. and a.c. networks, network theorems. Matrix Algebra, network functions, transient response, frequency response, Laplace transform, Fourier series and Fourier transform, frequency spectral polezero concept, elementary network synthesis.

Statics and Magnetics :

Analysis of electrostatic and Magnetostatic fields: Laplace and Poisson Equations, solution of boundary value problems, Maxwell's equations, electromagnetic wave propagation, ground and space waves, propagation between earth station and satellites.

Measurements :

Basic methods of measurements, standards, error analysis, indicating instruments, cathode ray oscilloscope, measurement of voltage, current, power, resistance, inductance, capacitance, time, frequency and flux; electronic meters.

Electronics :

Vacuum and semiconductor devices; equivalent circuits transistor parameters, determination of current and voltage gain and input and output impedances biasing technique, single and multistage, audio and radio small signal and large signal amplifiers and their analysis; feedback amplifiers and oscillators : wave shaping circuits and time base generators; analysis of different type of multivibrator and their uses; digital circuits.

Electrical Machines :

Generation of e.m.f., m.m.f. and torque in rotating machines; motor and generator characteristics of d.c. synchronous and induction machines equivalent circuits. Commutation parallel operation, phasor diagram and equivalent circuits of power transformer, determination of performance and efficiency, auto-transformers, 3-phase transformers.

PAPER-II :

SECTION -A

Control systems :

Mathematical modelling of dynamic linear control systems, block diagrams and signal flow graphs, transient response steady state error, stability, frequency response techniques, root-locus techniques series compensation.

Industrial Electronics :

Principles and design of single phase and polyphase rectifiers, controlled rectification, smoothing filters; regulated power supplies speed control circuits for drivers, inverters, d.c. to a.c. conversion, Choppers; timers and welding circuits.

SECTION - B (Heavy currents)

Electrical Machines :

Induction Machines - Rotating magnetic field; poly phase motor; principle of operation, phasor diagram; Torque slip characteristic; Equivalent circuit and determination of its parameters; circle diagram; starters; speed control double case motor; Induction generator; Theory; phasor diagram, characteristics and application of single phase motors. Application of two phase induction motor.

Synchronous Machines - e.m.f. equation phasor and circle diagrams; operation on infinite bus, synchronizing power, operating characteristic and performance by different methods; sudden short circuit and analysis of oscillogram to determine machine reactances and time constants, motor characteristics and performance methods of starting applications.

Special Machines – Amplidyne and metadyne operating characteristics and their applications.

Power Systems and Protection - General layout and economics of different types of power stations; Baseload, peak-load and pumped-storage plants; Economics of different systems of d.c. and a.c. power distribution; Transmission line parameter calculation; concept of G.M. D. short, medium and long transmission line; Insulators, voltage distribution in a string of insulators and grading; Environmental effects on insulators. Fault calculation by symmetrical components; load flow analysis and economic operation; steady state and transient stability; Switch-gear Methods of arc extinction: Re-striking and recovery voltage; Testing of circuit breaker, Protective relays; protective schemes for power system equipment; C.T. and P.T. Surges in transmission lines; Travelling waves and protection,

Utilisation- Industrial drives electric motors for various drives and estimates of their rating; Behaviour of motors during starting acceleration, braking and reversing operation; Schemes of speed control for d.c. and induction motors.

Economic and other aspects of different systems of rail traction; mechanics of train movement and estimation of power and energy requirements and motor rating characteristics of traction motors, Dielectric and induction heating.

O R

SECTION- C (Light currents)

Communication Systems – Generation and detection of amplitude frequency-phase – and pulse-modulate signals using oscillators, modulators and demodulators ,Comparison of modulated systems, noise, problems, channel efficiency sampling theorem, sound and vision broadcast transmitting and receiving system, antennas, feeders and receiving circuits, transmission line at audio, radio and ultra high frequencies.

Microwaves – Electromagnetic wave in guided media, wave guide components cavity resonators, microwave tubes and solid state devices, microwave generators and amplifiers, filters microwave measuring techniques, microwave radiation pattern; communication and antenna systems. Radio aids to navigation.

D.C. Amplifiers – Direct coupled amplifiers, difference amplifiers, choppers and analog computation.

ELECTRONICS ENGINEERING

PAPER-I :

1. Physical Electronics :

Conduction in Semiconductors, principle of operation of p-n junction diodes, scr's and transistors; electron emission: deflection of electron beam with electric and magnetic fields and its application in CRT and picture tubes.

2. Electronic Circuits :

Rectifiers and filters; transistor characteristics; and concept of load line, hybrid parameters of transistors; transistor amplifiers (biasing, stabilization and frequency response); feedback in amplifiers; transistor oscillators, power amplifiers; DC and AC power control using SCR's.

3. Operational Amplifiers and Analog computers :

Basic principle and structure of operational amplifiers, its characteristics; scalar, adder, sub-tractor and Integrator using op. amps; Analog Computation fundamentals, solution of differential equations, concept of time and amplitude scaling.

4. Control Systems :

Concept of open and closed loop systems; block diagram and signal flow graph of control systems; transient and frequency response of control systems; stability concepts; Root-locus technique.

PAPER – II :

1. Digital Electronics :

Pulse response of linear passive circuits, clipping and clamping; Representation of numbers, Boolean Algebra, binary arithmetic, Logic Gates; astable, monostable and bistable multivibrators; registers and counters.

2. Instrumentation and Measurement :

Basic Instrumentation Scheme; transducers for non-electrical quantities; use of op. amps in Instrumentation; D/A and A/D converters.

Indicating Instruments :-

CRO, Digital voltmeter; Time and Frequency Measurements, Q-measurement, measurement of sensitivity, selectivity and fidelity of an AM Receiver.

3. Principles of Communication :

Basic principles of telegraph and telephone, two and four terminal passive networks, attenuators, filters and transmission lines; principles of amplitude and frequency modulation and demodulation; time division and frequency multiplexing; fundamentals of digital communication, sampling, quantization, pulse code modulation; signal transmission in presence of noise and signal to noise ratio; optical Communication fundamentals.

4. Electromagnetic fields and Antennas :

Displacement current; Maxwell's Equations; Wave Equation and its solution for sinusoidal variations; propagation of electromagnetic waves; directional properties of dipole antennas; two-element array; broadcast arrays.

5. Microprocessor fundamentals :

Computer organisation; Architecture of microprocessors, micro and macro operations; Input/Output, Memory and peripheral devices; Concepts of Interrupts and Interfacing; Assembly level programming.

MECHANICAL ENGINEERING

Paper-I :

1. Strength of Materials

Stresses and strains, Hooke's Law and relations between elastic constants, Compound bars in tension and compression and stresses due to temperature changes.

Bending Moment, shear force and deflection in simply supported, over hanging and cantilever beams for simple loading.

Torsion in round bars – Transmission of power by shafts, springs.

Simple cases of combined bending and direct stresses, and combined bending and torsion.

Elastic theory of failure – Stress concentration and fatigue.

2. Applied Thermodynamics

Fuel Combustion, Air supply, Analysis of fuels and exhaust gases.

Boilers, Superheaters and Economisers, Boiler mountings and accessories, Boiler trial.

Physical properties of steam, Steam tables and their use.

Laws of Thermodynamics, gas law, expansion and compression of gases, air compressors.

Ideal and actual engine cycle, use of temperature, entropy, heat entropy and pressure-volume charts and diagrams.

Simple steam engines and internal combustion engines.

Indicators and Indicator Diagrams-Mechanical, Thermal, air standard and actual efficiencies – General construction – Engine trial and heat balance.

Paper-II :

1. Theory of machines and Machine Designs

Relative velocities of parts in machines graphically and by calculation.

Crank effort diagram of engines, Speed-Variation of flywheels, Governors power transmitted by belt drives, Friction and Lubrication of journals and thrust bearings, ball and roller bearings, Design of fastenings and locking devices, preparations for revetted, bolted and welded joints and fastenings.

2. Production Engineering

Common machine tools : Working principles and design features of Lathes, Shapers, planers, drilling machines, Milling machines, Grinding machines, jigs and fixtures. Metal cutting tool materials, Tool geometry.

Cutting forces, Abrasive Wheels.

Welding, Weldability and different welding processes, testing of welds.

Forming process-moulding, casting, forging, rolling and drawing of metals.

Metrology, Linear and angular measurements, Limits and fits. Measurement of screws and gears, surface finish. Optical instruments.

Industrial engineering Methods of study and work measurement Motion-time data, work sampling, job evaluation, wages and incentives, planning, control, plant lay out.

3. Fluid mechanics and Water power

Bernoulli's equation, Moving plates and vanes, pumps and turbines Design Principles, application and characteristic curves; Principles of similarity, Governing, Hydraulic accumulators and intensifiers, Cranes and Lifts, Surge tanks and Storage reservoirs.

ENVIRONMENTAL SCIENCE

PAPER-I :

Fundamentals of Environment :

Concept of environment- hydrosphere, lithosphere, atmosphere and biosphere; impact of man and environment; period of hunting and food gathering; period of plant and animal domestication; period of science, technology and industrialization.

Ecosystem :

Concept, components, food chain and food web, energy flow and productivity in ecosystem, nutrient cycle in ecosystem, types of ecosystems (forest, grassland, desert, aquatic, marine) and their problems, ecological imbalance.

Natural Resources and their management :

Water, land, forest, minerals, soil, agriculture, wildlife and energy resources status and their proper management/conservation; non-conventional resources.

Environmental Pollution :

Cause, effect and prevention of human induced environmental problems of air, water, soil, thermal, noise and marine pollution: socio-economic consequences of pollution in urban, industrial and rural areas of India.

PAPER-II :

Global Environmental Problems :

Green house effect, acid rain, El-nino, O3 depletion, deforestation, desertification, salinization, habitat and diversity loss, chemical and radiation hazards (Chernobyl disaster, Bhopal tragedy etc.) and their management.

Environment and Public Health :

Major water, food and air-borne diseases of men and animals, civic sense and personal hygiene issues, health hazards in agricultural pest control, heavy metal toxicity.

Environmental Monitoring and Impact Assessment :

Bioindicators and Monitoring; environmental impact assessment and management, safe limits of the key environmental pollutants.

Waste Management and Bioremediation :

Treatment of waste water, solid waste management, management of persistent organic pollutants, Silent valley project, the Ganga action plan, cost effective abatement technology.

The Environment Protection Laws and Human Rights :

Sustainable development environmental policies, environmental ethics, human rights issues relating to environment human population growth and lifestyle, HIV / AIDS.

FORESTRY

PAPER – I :

Section A

1. Silviculture – General :

General Silvicultural Principles : Ecological and physiological factors influencing vegetation, natural and artificial regeneration of forests; methods of propagation, grafting techniques; site factors; nursery and planting techniques-nursery beds, polybags and maintenance, water budgeting, grading and hardening of seedlings; special approaches; establishment and tending.

2. Silviculture – systems :

Clear feeling, uniform shelter wood selection, coppice and conversion systems. Management of silviculture systems of temperate, subtropical, humid tropical, dry tropical and coastal tropical forests with special reference to plantation silviculture, choice of species, establishment and management of standards, enrichment methods, technical constraints, intensive mechanized methods, aerial seeding thinning.

3. Silviculture – Mangrove and Cold desert :

Mangrove : Habitat and characteristics, mangrove, plantation-establishment and rehabilitation of degraded mangrove formations; silvicultural systems for mangrove; protection of habitats against natural disasters. Cold Desert – Characteristics, identification and management of species.

4. Silviculture of trees :

Traditional and recent advances in tropical silvicultural research and practices. Silviculture of some of the economically important species in India such as Acacia catechu, Acacia nilotica, Acacia auriculiformis, Albizzia lebbek, Albizzia procera, Antocephalus Cadamba, Anageisus latifolia, Azadirachta indica, Bamboo spp, Butea monosperma, Cassia siamea, Casuarina equisetifolia, Cedrus deodara, Chukrasia tabularis, Dalbergia sisoo, Dipterocarpus spp., Emblica officindils, Eucalyptus spp, Gmelina Arborea, hardwickia binata, Lagerstroemia Lanceolata, Pinus roxburghi, Populus spp, Pterocarpus marsupium, prosopis juliflora, Santalum album, Semecarpus anacardium, Shorea robusta, Salmalia malabaricum, Tectona grandis, Terminalis tomentosa, Tamarindus indica.

Section B

1. Agroforestry, Social Forestry, Joint Forest Management and Tribology :

Agroforestry-Scope and necessity; role in the life of people and domestic animals and in integrated land use, planning especially related to (i) soil and water conservation; (ii) water recharge; (iii) nutrient availability to crops; (iv) nature and eco-system preservation including ecological balances through pest-predator relationships and (v) providing opportunities for enhancing biodiversity, medicinal and other flora and fauna. Agroforestry systems under different agro-ecological zones; selection of species and role of multipurpose trees and NTEPs techniques, food fodder and fuel security. Research and Extension needs. Social/Urban Forestry: Objectives, scope and necessity; peoples participation.

JFM: Principles, objective, methodology, scope, benefits and role of NGOs.

Tribology - tribal science in India; tribes, concept of races, principles of social grouping, stages of tribal economy, education, cultural tradition, customs, ethos and participation in forestry programmes.

2. Forest Soils, Soil Conservation and Watershed management :

Forests Soils, classification, factors affecting soil formation, physical, chemical and biological properties.

Soil conservation: Definition, causes for erosion; types - wind and water erosion; conservation and management of eroded soils/areas, wind breaks, shelter belts, sand dunes; reclamation of saline and alkaline soils, water logged and other waste lands. Role of forests conserving soils. Maintenance and build up of soil organic matter, provision of loppings for green leaf manuring; forest leaf litter and composting; Role of microorganisms in ameliorating soils, N and C cycles, VAM.

Watershed Management: Concepts of watershed; role of mini-forests and forest trees in overall resource management, forest hydrology, water shed development in respect of torrent control, river channel stabilization, avalanche and landslide controls, rehabilitation of degraded areas; hilly and mountain areas; watershed management and environmental functions of forests; Water-harvesting and conservation; ground water recharge and watershed management, role of integrating forest trees, horticultural crops, field crops, grass and fodders.

3. Environmental Conservation and Biodiversity :

Environment : Components and importance, principles of conservation, impact of deforestation; forest fires and various human activities like mining, construction and developmental projects, population growth on environment.

Pollution : Types, global warming, green house effects, ozone layer depletion, acid rain, impact and control measures, environmental monitoring; concept of sustainable development. Role of trees and forests in environmental conservation; control and prevention of air, water and noise pollution. Environmental policy and legislation in India. Environmental Impact Assessment. Economics assessment of watershed development vis-a-vis ecological and environmental protection.

4. Tree Improvement and seed Technology :

General concept of tree improvement, methods and techniques, variation and its use, provenance, seed source, exotics: quantitative aspects of forest tree improvement, seed production and seed orchards, progeny tests, use of tree improvement in natural forest and stand improvement, genetic testing programming, selection and breeding for resistance to diseases, insects, and adverse environment; the genetic base, forest genetic resources and gene conservation in situ and ex-situ. Cost benefit ratio, economic evaluation.

PAPER II :

Section - A

1. Forest Management and Management Systems :

Objective and principles; techniques; stand structure and dynamics, sustained yield relation; rotation, normal forest, growing stock regulation of yield; management of forest plantations, commercial forests, forest cover monitoring. Approaches viz., (i) site-specific planning, (ii) strategic planning, (iii) Approval, sanction and expenditure, (iv) Monitoring, (v) Reporting and governance. Details of steps involved such as formation of Village Forest Committees, Joint Forest Participatory Management.

2. Forest Working Plan :

Forest planning, evaluation and monitoring tools and approaches for integrated planning; multipurpose development of forest resources and forest industries development; working plans and working schemes, their role in nature conservation, bio-diversity and other dimensions; preparation and control. Divisional working Plans, Annual Plan of Operations.

3. Forest Mensuration and Remote Sensing :

Methods of measuring - diameter, girth, height and volume of trees; form-factor; volumes estimation of stand, current annual. increment; mean annual increment. Sampling methods and sample plots. Yield calculation; yield and stand tables, forest cover monitoring through remote sensing; Geographic Information Systems for management and modeling.

4. Surveying and Forest Engineering :

Forest surveying-different methods of surveying, maps and map reading. Basic principles of forest engineering. Building materials and construction. Roads and Bridges. General principles, objects, types, simple design and construction of timber bridges.

Section B

1. Forest Ecology and Ethnobotany :

Forest ecology : Biotic and abiotic components, forest eco - systems; forest community concepts, vegetation concepts, ecological succession and climax, primary productivity, nutrient cycling and water relations; physiology in stress environments (drought, water logging salinity and alkalinity). Forest types in India, identification of species, composition and associations; dendrology; taxonomic classification, principles and establishment of herbaria and arboreta. Conservation of forest ecosystems. Clonal parks.

Role of Ethnobotany in Indian Systems of Medicine; Ayurveda and Unani - Introduction, nomenclature, habit, distribution and botanical features of medicinal and aromatic plants. Factors affecting action and toxicity of drug plants and their chemical constituents.

2. Forest Resources and Utilization :

Environmentally sound forest harvesting practices; logging and extraction techniques and principles, transportation system, storage and sale; Non-Timber forest Products (NTFPs) definition and scope; gums, resins, oleoresins, fibres, oil seeds nuts, rubber, canes, bamboos, medicinal plants, charcoal, lac and shellac, Katha and Bidi leaves, collection; processing and disposal.

Need and importance of wood seasoning and preservation; general principles of seasoning, air and kiln seasoning, solar dehumidification, steam heated and electrical kilns. Composite wood; adhesives-manufacture, properties, uses, plywood manufacture-properties, uses, fibre boards - manufacture properties, uses, particle boards manufacture, properties uses. Present status of composite wood industry in India in future expansion plans. Pulp-paper and rayon; present position of supply of raw material to industry, wood substitution, utilization of plantation wood; problems and possibilities.

Anatomical structure of wood, defects and abnormalities of wood, timber identification – general principles.

3. Forest Protection & Wildlife Biology : Injuries to forest-abiotic and biotic, destructive agencies, insect-pests and disease, effects of air pollution on forests and forest die back. Susceptibility of forest to damage, nature of damage, cause, prevention, protective measures & benefits due to chemical and biological control. General forest protection against fire, equipment and methods, controlled use of fire, economic and environmental costs; timber salvage operations after natural disasters. Role of afforestation and forest regeneration in absorption of CO₂. Rotational and controlled grazing, different methods of control against grazing and browsing animals; effect of wild animals on forest regeneration, human impacts; encroachment, poaching, grazing, live fencing, theft, shifting cultivation and control.

4. Forest Economics and Legislation :

Forest economics : Fundamental principles, cost-benefit analyses; estimation of demand and supply; analysis of trends in the national and international market and changes in production and consumption patterns; assessment and projection of market structures; role of private sector and co-operatives; role of corporate financing. Socio-economic analyses of forest productivity and attitudes; valuation of forest goods and service.

Legislation : History of forest development; Indian Forest policy of 1894, 1952 and 1990. National Forest Policy, 1988 of people's involvement, Joint Forest management, involvement of women; Forestry Policies and issues related to land use, timber and non-timber products, sustainable forest management; industrialisation policies; institutional and structural changes. Decentralization and forestry Public Administration. Forest laws, necessity; general principles, Indian Forest Act 1927; Forest Conservation Act, 1980; wildlife protection Act 1972 and their amendments; Application of Indian Penal Code to Forestry. Scope and objectives of Forest inventory.

G E O L O G Y

Paper-I :

General Geology

Origin and internal constitution of the earth; Volcanoes and earthquakes; Geological work of water, wind, and glacier; Isostasy; Common types of landforms; Soils.

Structural Geology and Geotectonics

Diastrophic and Non-diastrophic; Structures; Types of folds and faults; Joints; Planar and linear structures; Geosynclines, mobile belts and island arcs; Mid-oceanic ridges; Continental drift and concepts of sea-floor spreading and plate tectonics.

Stratigraphy

Principles of stratigraphy; Standard stratigraphic column; Principles of measurement of geological time; Sedimentary environment; Sedimentary facies: Principles of stratigraphic correlation; stratigraphy of India.

Palaeontology

Systematic palaeontology; palaeo-ecology; stratigraphic palaeontology; Important genera of India vertebrate, invertebrate and plant fossils; Organic evolution.

Paper-II :

Crystallography and Mineralogy

Crystal habits and forms; Crystal symmetry; Classification of crystals ; Principles of uses of X-ray in the study of crystals; Physical and optical properties of minerals - their classification.

Petrology

Petrography of common sedimentary rocks Forms and petrography of common igneous rocks; Principles of crystallisation of magma; Classification of igneous rocks Genesis of common types of igneous rocks; Environment, factors and types of metamorphism; Structure and petrography of common metamorphic rocks.

Economic Geology

Formation of mineral deposits and their classification; Important metalliferous and non-metalliferous deposits of India; Coal and Petroleum resources of India; Ground water geology; Principles of engineering-geology; Elements of prospecting and mineral economics.

HORTICULTURE

PAPER-I :

Principles and fundamentals of horticulture, Orchard management, nursery management and seed production. Importance of fruits and vegetables in human nutrition. Contribution of horticulture in National Economy and export. Improved production technology for fruit, plantation, spices and warm and cool season vegetable crops. Protected cultivation of vegetables, organic farming, breeding of self and cross pollinated crops, Rejuvenation of old and unproductive orchards.

PAPER-II :

Importance and scope of floriculture. History and development of gardens. Production technology of commercial flowers, medicinal and aromatic plants. Principles of art and their application in landscape compositions and interior decoration.

Harvesting techniques. Maturity standards, handling, grading, storage and transport of fruits, vegetables, plantation crops, flowers, spices and medicinal plants. Codex standards, quality assurance system, food laws, value addition, primary processing, various products from horticultural crops.

Elementary statistics, experimental design and computer application.

MATHEMATICS

Paper-I :

1. Algebra

Complex numbers, De Moivre's theorem, Determinants and Matrices; Groups and Fields.

2. Analytical Geometry of Two and Three Dimensions.

Polar equation of a conic; reduction of second degree general equation to the normal form; straight line, sphere, Cone, Cylinder.

3. Vector Algebra and Vector Calculus.

Addition and multiplication of vector, vector triple product; Rot, Div, Grad of a vector.

4. Differential Calculus, Integral Calculus and Differential Equations.

Indeterminant form, Maxima and Minima of two or more variables, Improper Integrals, Areas and Volumes, Solution of differential equation by separation of variables, Equation with constant co-efficients, Simple applications.

Paper-II :

1. Linear Programming :

The simplex method, Two phase simplex method Duality Application, The transportation and assignment problem, Convex sets, Fundamental Theorems of Linear Programming, Linear Programming Game Theory.

2. Probability and Statistics :

Events space, Axiomatic foundation, Baye's theorem. Histogram, Mean, Median, Mode, Variance; Mathematical expectation of a set of data; Binomial, Normal poissonian distributions with simple examples.

3. Statics and Dynamics :

Reduction of Coplanar forces, Friction : Sliding, tumbling and rolling, Laws of motion, Motion in a straight line under variable acceleration; Simple Harmonic Motion, Motion of Artificial Satellites around an attractive body, Simple cases of constrained motion.

4. Hydrostatics :

Perfect fluid, pressure at a point, Compressibility, Thrust on plane surfaces and on curved surfaces; Equilibrium of fluid rotating about a fixed axis, Equilibrium of the atmosphere shape and energy of liquid film, Hydraulic press; Common pumps.

PHYSICS

Paper-I :

Mechanics of a single particle. Mechanics of a system of particles, Properties of deformable bodies, Properties of liquids and gases, waves and Oscillations. Electro-acoustics Ultrasonics. Heat Transmission by Conduction, Convection and Radiation. First and Second Laws of Thermodynamics, Entropy, Classical Statistics, Bose-Einstein and Fermi-Dirac Statistics.

Paper-II :

Electrostatic and Magnetostatic Fields. Direct Current Circuits. Electro-magnetic induction. Alternative Current Circuits. Optical Phenomena of Interference, diffraction and polarization. Fundamentals of Atomic and Nuclear Physics. X-ray and Radioactivity. Semiconductor Physics. Electronics, Principles of Radio and Television.

STATISTICS

PAPER-I :

Probability, Descriptive Statistics, Numerical Mathematical Analysis, Theoretical Statistics, Elementary Theory of Estimation, Elementary Theory of Testing Hypothesis.

PAPER-II :

Economic Statistics, Vital Statistics, Application of Statistics to Agriculture, Quality Control, Sample Survey, Official Statistics.

VETERINARY SCIENCE

Paper-I :

Gross anatomy I, II and III, Veterinary Physiology I, II, III and IV. General Veterinary Biochemistry. Biostatistics and computer application, General Livestock Management. Fodder production and grassland management. Physiological chemistry. Introduction to Molecular Biology and Biotechnology. Principles of Genetics and Population Genetics. Animal Housing Sanitation. Histology and Embryology, Principles of animal nutrition and breeding (includes avian), evaluation of feed stuff and feed technology. General veterinary parasitology, microbiology and pathology. Applied anatomy, Applied nutrition I, II, Veterinary helminthology, bacteriology, protozoology, epidemiology and mycology. Autonomic and systemic pharmacology.

General and CNS pharmacology, entomology, special pathology I and II.

Paper-II :

Sociology and principles of veterinary and A.H. Extension. Livestock Economics, marketing and Business Management. Immunology and serology, systemic pathology, livestock breeding system, milk and hygiene and public health, swine or equine production and management, wild and zoo animal health care and management. Lab animal or rabbit or fur animal care and management and pet animal care. Veterinary and systemic virology, Special Pathology I, II, Cattle or buffalo or sheep or goat and avian production and management, Milk and Meat and their product technology, abattoir practice and animal by-product technology, clinical bio-chemistry, chemotherapy, zoonosis and human health, environmental hygiene, general surgery and anaesthesia, extension techniques, toxicology, gynaecology and obstetrics, regional and clinical surgery, clinical and preventive veterinary medicines, andrology and artificial insemination, lab diagnosis and ambulatory clinics.

ZOOLOGY

Paper-I :

Invertebrata – Distinctive characters of Protozoa, Plathelminthes, Nematoda, Arthropoda, Structures with functions and life history of representative species under each order.

An outline knowledge of social insects with special reference to termite and honey-bee.

Elementary knowledge of sericulture.

Chordata – General organisation and distinctive characters of pisces; elementary knowledge of fisheries.

General organisation, distinctive character and examples of Amphibia, Reptilia, Aves and Mamalia.

Paper-II :

Cytogenetics, Embryology and Histology. Laws of Heredity, Linkage and crossing over, Sex-linked inheritance and sex determination and Mutation.

Evolution, adaptation, animal association including ecology : Fertilization, Parthenogenesis, Cleavage and formation of three germinal layers in rabbit.

Development of eye, heart, brain and kidney in chick.

*** Optional Subjects with Code :**

Agriculture (01); Botany (02); Chemistry (03); Computer Science (04); Computer Application (05); Agricultural Engineering (06); Chemical Engineering (07); Civil Engineering (08); Computer Engineering (09); Electrical Engineering (10); Electronics Engineering (11); Mechanical Engineering (12); Environmental Science (13); Forestry (14); Geology (15); Horticulture (16); Mathematics (17); Physics (18); Statistics (19); Veterinary Science (20) and Zoology (21).

N.B. : IF A CANDIDATE OFFERS 2 (TWO) OPTIONAL SUBJECTS WHICH HAVE RESTRICTION ON CHOICE AS PER “**SCHEME AND SYLLABUS**” OF W.B. FOREST SERVICE AND W.B. SUBORDINATE FOREST SERVICE EXAMINATION, 2010, HE/SHE WILL BE ALLOWED ONLY THE OPTIONAL SUBJECT MENTIONED FIRST.

1. **WALKING TEST :**

Male candidates will be required to pass a Physical fitness test covering a distance of 25 kilometers within four hours on foot and the female candidates will be required to cover a distance of 16 kilometers within four hours on foot.

2. **HEALTH CERTIFICATE :**

In case of direct recruitment the candidates shall have to undergo medical examination to be conducted by a Medical Board. The Medical Board shall issue a health certificate and shall also certify that the candidate is fit for undertaking strenuous outdoor activity in the Forest Department.

3. **IN-SERVICE TRAINING (FOR POSTS IN WEST BENGAL FOREST SERVICE) :**

(a) The candidates selected for appointment on the basis of the Main Examination (Written) and personality Test) shall be sent for in-service training at any of the State Forest Service Colleges or Institutes of the Government of India from time to time.

(b) Nomination for training : Name of the candidates selected for admission together with attested copies of all certificates prescribed hereunder should be submitted to the Director, Forest Education, Government of India by the Forest Department, Government of West Bengal;

(c) **Certificates :**

The following certificates or Mark-sheets, as the case may be in original must be submitted by the candidate for verification to the Principal at the time of admission for training ;

- i) Proof of age;
- ii) Bachelor's degree
- iii) a certificate of physical test issued by Competent Authority;
- iv) Certificate of health issued by Medical Board;
- v) Appointment and Nomination letter issued by the Sponsoring Authority.

4. **IN-SERVICE TRAINING (FOR POSTS IN WEST BENGAL SUBORDINATE FOREST SERVICE) :**

- (a) Candidates provisionally selected through direct recruitment shall be sent to Forest Rangers' College at any place in India for In-Service-Training except candidates securing 1st position for Deputy Ranger/ Forester at the final examination of the State F.T.C. followed by practical training in this state.
- (b) Nomination for In-Service-Training :
Name of the candidate selected for admission together with attested copies of all certificates prescribed hereunder shall be submitted to the Director, Forest Education, Govt. of India by the Forest Department of the State Govt.
- (c) Certificates :
The following certificates or mark-sheets as the case may be in original must be submitted by the candidate for verification to the Principal at the time of admission :-
- (i) Proof of age;
 - (ii) Bachelors' Degree
 - (iii) Certificate of Physical Test issued by the competent authority;
 - (iv) Certificate of Health issued by Medical Board;
 - (v) Appointment and Nomination letter issued by the Sponsoring Authority.
- (d) The cost on account of tuition fees, travelling expense and equipment allowances sanctioned by the Govt. of India from time to time as per rules for the Forest Rangers' Course in connection with training shall be borne by the State Govt.
- (e) Special condition :
Selected candidates shall, before being deputed for training, execute a Bond undertaking to serve the Govt. of West Bengal for a period of five years. In the event of non-fulfilment of such condition, be required to refund to the State Govt. all costs incurred by the State Govt. in connection with the training including salaries.
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PUBLIC SERVICE COMMISSION, WEST BENGAL

APPLICATION FORMAT

APPLICATION FOR WEST BENGAL FOREST SERVICE AND WEST BENGAL SUBORDINATE FOREST SERVICE EXAMINATION, 2010

ADVERTISEMENT NO.05(3)/2010

(CLOSING DATE FOR RECEIPT OF APPLICATION : The 12TH July, 2010.)

CAUTION

(i) A candidate must consult the “**Important Information**” available with advertisement in the Commission’s Website, then use the prescribed application format and fill in the application form correctly against all the items in his/her own handwriting with ball point pen of black/blue ink and furnish required particulars/documents. If any item(s) of the application is considered inapplicable to the candidate he/she should write ‘**NOT APPLICABLE or (N.A.)**’ against the particular item(s) and in any case **no item of the application should remain unfilled.**

(ii) Correction/overwriting, if any, should be accompanied by signature of the candidate.

(iii) *In case the application is not filled in accordance with the above instructions or any of the required documents is not enclosed, it will be treated as incomplete/defective and summarily rejected.*

Note : ***Keeping the application form in front, the particulars/documents are to be stitched with the application securely in the following sequence – I.P.O. or Treasury Challan, in original (not required for SC/ST candidates of W.B. and Persons with Disability), Attested or Self-certified photocopies of (1) Madhyamik or equivalent qualification cert., (2) Certificates for Educational Qualifications, (3) SC/ST/BC/PH/Ex-Serviceman cert. (if applicable), (4) Citizenship Certificate (for candidates acquiring citizenship by registration) and (5) Two self-addressed unstamped envelopes.***

(Space for office use)

Roll No.

Space for pasting recent
passport size photograph
signed in full by the
candidate

1. Name in full (IN CAPITAL LETTERS) :
2. (a) I.P.O./Treasury Challan attached for : Rs. _____
(b) I.P.O. No(s). and value :
(c) Date of purchase and name of issuing :
post office with address
(d) No., amount and date of receipted :
Treasury Challan attached
3. Choice of Preliminary Examination Centre : **Kolkata** **Darjeeling**
(Put ‘✓’ mark in appropriate box/boxes).

4. (a) Indicate your community (Put a '✓' mark in appropriate box/boxes). SC/ST/BC candidates not belonging to the State of West Bengal should indicate their community as 'General'. [SC/ST/BC candidate shall attach self-certified or attested copy of certificate(s)] : Genl. SC ST BC
- (b) If SC/ST/BC, mention your Sub-caste, the name of the State from which SC/ST/BC certificate obtained and the designation of issuing authority. : Sub-Caste State Issuing Authority
5. (a) Whether you are a person with disability, (write 'Yes' or 'No') [If yes, attach self-certified or attested xerox copy of P.H. certificate] :
- (b) State the category of disability (Put '✓' mark in the appropriate box) : Low Vision Hearing Impaired Orthopaedically Handicapped
- (c) In case, you are a low vision candidate mention if you require the help of a Scribe (Put '✓' mark in the appropriate box) : Yes No
6. S E X (Put '✓' mark in appropriate box) : Male Female
7. (a) **Date of birth** (as recorded in Madhyamik or equivalent examination certificate) [attach attested or self-certified copy of Madhyamik or equivalent examination certificate] : Date Month Year
- (b) Do you claim relaxation of age as SC/ST/BC of West Bengal or as Person with Disability [Write 'Yes' or 'No'] :
8. (a) Whether a citizen of India (Write 'Yes' or 'No') :
- (b) State, whether a natural citizen or a citizen by registration (If by registration, attach self-certified or attested copy of certificate) :
9. Father's Name :
10. Address (IN CAPITAL LETTERS) mentioning Post Office, Sub-Division, District and Pin Code
(a) Postal Address :
- (b) Permanent Address :
11. (a) Do you have the ability to read, write and speak in Bengali (Write 'Yes' or 'No') :
- (b) Whether you are a person from hill areas of Darjeeling District (Write 'Yes' or 'No') :
- (c) State your mother tongue :

12. Indicate the Service(s) you intend to compete for :
 (Write "1" for W.B. Forest Service, "2" for W.B. Sub-ordinate Forest Service and "3" for both the Services)

13. Mark (with '✓') your choice of language in Compulsory Paper-II of the Main Examination. : Bengali Hindi Urdu Nepali

14. Physical Standard :

Height (cm.)	Chest Girth (Normal) (cm.)	Capacity for Chest Girth Expansion (cm.)

15. Do you belong to S.T. Community / Race such as Nepali/Garwali/Gorkha ? : Yes No

If yes, mention your Community / Race : _____

16. Academic Qualifications (Madhyamik and onwards) :
[Self-certified or attested copy of all certificates must be attached to the application].

Name of Examination passed	Name of Board/Council/University	Division/Class	Year of passing	Remarks

17. (a) Have you at any time been employed? (write 'Yes' or 'No'):

(b) If yes, give details :

Name of the Post	Temporary/Permanent/on Contract basis	Office where employed	Date of joining	Date of leaving, if any	Cause of leaving

18. ***Optional subjects** : Name of Optional Subject Code
 Mention clearly the names of Optional subjects with code after consulting the "list of Optional Subjects" and "Restriction on choice" thereof in the **Scheme & Syllabus** of the W.B. Forest Service and W.B. Subordinate Forest Service Examination, 2010
 1.
 2.

19. The list of documents enclosed :
 i) ii)
 iii) iv)
 v) vi)

DECLARATION

I solemnly declare that (a) all statements made in this application are true, complete and correct to the best of my knowledge and belief and in the event of any information being found false my candidature will be liable to be cancelled, (b) Original documents, certificates will be produced on demand, (c) I agree to take this examination at my own risk subject to verification of my eligibility by the Commission. If subsequently the Commission finds me ineligible for admission to the examination, it may cancel my candidature even after finalization of the results. (d) I have submitted no other application for this examination. *(e) I have informed the Head of my Office/Department in writing that I am applying for this examination (*Strike out if not applicable).

Yours faithfully,

Place : _____

Date : _____

(Full signature of the candidate)
(Full name to be written clearly)
[Not in capital letters]

*** Optional Subjects with Code :**

Agriculture (01); Botany (02); Chemistry (03); Computer Science (04); Computer Application (05); Agricultural Engineering (06); Chemical Engineering (07); Civil Engineering (08); Computer Engineering (09); Electrical Engineering (10); Electronics Engineering (11); Mechanical Engineering (12); Environmental Science (13); Forestry (14); Geology (15); Horticulture (16); Mathematics (17); Physics (18); Statistics (19); Veterinary Science (20) and Zoology (21).

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PUBLIC SERVICE COMMISSION, WEST BENGAL

WEST BENGAL AUDIT AND ACCOUNTS SERVICE EXAMINATION, 2010

SCHEME AND SYLLABUS

(i) Preliminary Examination

The Preliminary Examination will consist of only one paper on "General Studies". The question paper will be of an objective type consisting of 200 multiple choice questions. The paper will carry 200 marks and will be of 2½ hours duration. The standard of the paper will be of the level of knowledge as expected of a Bachelor of Commerce of a recognised Indian University/Institute. The paper will include questions covering the following fields of knowledge :

1. English Composition	...	...	25 marks,
2. General Knowledge including General Mental Ability	...	...	25 marks,
3. Current Events of National and International Importance	...	...	25 marks,
4. History of India with special reference to Indian National Movements	...	...	25 marks
5. Geography of India with special reference to West Bengal	...	...	25 marks,
6. Indian Economics & Indian Political System	...	...	25 marks,
7. Constitution of India with special reference to Planning	...	...	25 marks,
Commission, Finance Commission, Finance, Accounts & Audit	...	...	25 marks,
8. Commerce	...	...	25 marks,

The Preliminary examination is meant to serve as a screening test only. The marks obtained in this examination by the candidate will not be considered for final selection. Only those candidates who will be declared qualified in the Preliminary examination in this year will be eligible for admission to the West Bengal Audit and Accounts Service Recruitment (Main) Examination, 2010.

(ii) Main Examination

The Main Examination will be held in two stages viz.

(1) Written Examination and (2) Personality Test.

1. The Written Examination will be in two parts - (a) Compulsory and (b) Optional.

(a) **Compulsory Papers** : There shall be 4 (four) compulsory papers as stated below :-

- English Essay, Precis Writing and Composition;
- Bengali/Hindi/Urdu/Nepali Essay, Precis Writing and Composition;
- General Knowledge and Current Affairs;
- Business Mathematics and Statistics.

(b) **Optional papers** : Candidates shall take up any three papers from the following list of subjects :-

Subject	Code	Subject	Code
Advanced Accountancy	01	Commercial and Industrial Law	06
Advanced Commercial Geography	02	Costing	07
Auditing	03	Economics	08
Banking	04	Statistics	09
Business Organisation and Methods	05	Taxation Laws and Practice	10

Each of the Compulsory and Optional papers will carry 100 marks and will be of 3 hours' duration.

The syllabus for Business Mathematics and Statistics as included in the list of Compulsory Papers will be similar to that of the pass standard of the Bachelor of Commerce Degree Examination of the University of Calcutta.

The standard of optional papers will be approximately that of an Honours Degree Examination of an Indian University.

2. Personality Test : There shall be a Personality Test carrying 200 marks. A number of candidates selected in order of merit on the results of the Written Examination, will be called to the Personality Test.

Answers in all the papers may be written either in English or in Bengali (unless otherwise directed in the question papers) except in the Language Papers.

The Public Service Commission, West Bengal, shall have discretion to fix qualifying marks in any paper or all papers and in the aggregate.

Detailed Syllabus of Optional Papers

i) **Statistics** : Meaning and Scope of Statistics - Statistics as applied in the field of Business and Economics, Compilation, Classification and Tabulation of Data.

Frequency distribution and Graphs - Diagrammatic representation including different types of Charts, Bar Diagram, Pie-Diagram, Histogram, Pictograms.

Measures of Central Tendency - Compilation of Arithmetic Mean, Median, Mode. Comparison of Mean, Median, Mode. Other Measures of Central Tendency.

Measures of Dispersion - Meaning of Dispersion Range. Mean Deviation and Standard Deviation, Quartile Deviation.

Moments and Measures of Skewness and Kurtosis.

The normal curve - standard form - properties of the normal curve.

Linear Regression and Correlation - Regression - Coefficient of Correlation - relation between coefficients of Regression and Correlation.

Time Series, Moving average, trend and fluctuation - analysis of time series - elimination of seasonal fluctuation by moving averages. The least square method-fitting of straight lines. Business forecasting.

Index Number and their uses - Problems in the construction of Index Numbers - Cost of living Index Number - Indian examples - Fisher's ideal index - time reversal test.

The main sources of official Statistics - their character and meaning - shortcomings of official statistics.

(ii) **Banking** : (a) Banking Theory : General Structure and Methods of Commercial Banking - the Management of Banking Resources - Loans and advances - Investments - Acceptances - Cash Reserves - Market rate of discount - Recent tendencies of Commercial Banks - Trends towards mixed banking - Theories of assets management - Real Bills Doctrine - Its applicability in modern conditions - Shift ability and anticipated Income Theories - Term lending - Indian Banking - Structure of their assets and liabilities - The Banking Companies Act, 1949 - Role of Indian Commercial Banks in economical development.

Central Banks - objectives and Functions - Discount Rate Policy - Open market operations - Variable Reserve Ratio - Selective Credit Control - Credit Control Measures of the Reserve Bank of India.

(b) Banking Practice : Relation between the Banker and the Customer - Deposit Account - Current Account - Accounts of Minor, Infants, Joint Accounts - Bankrupts - Partnership - Trading and Non-Trading Companies - The Cheques and Bills of Exchange Daily Balance - The General Ledger - Deposit Receipt - Purchase and sale of Stocks and Shares - Foreign Exchange Business.

(c) Banking Law : Banker and the Customer - Banker's entries in the Pass Book - Paying Banker and the Collecting Banker - Sufficient reasons for refusing payment - Risks and duties of paying Bankers and their Statutory Protection - Statutory Protection of Collecting Banker - The Negotiable Instruments Acts - Advances against securities - Advances against guarantee - Guarantee and Indemnity - The form of a Bank's Guarantee - The Banker and the Guarantor - Advances against collateral securities - Hypothecation and mortgage - Advances against goods and documents of title to goods - Bills of lading - Dock and Warehouse Warrants - Letter of Hypothecation - Advances against land and building.

(d) Currency and Foreign Exchange : Money in a modern Economy - value of money - Measurement of changes in the value of money - Effect of changes in the Value of money - Theory of Inflation and Deflation - Control of Inflation and Deflation.

Monetary standards - I.M.F. - Foreign Exchange Theory - Exchange Control.

(iii) **Economics** : Economics - Subject matter and scope. Theory of Consumer Demand. Theory of the firm under different market forms.

Factor Pricing - Wages, Interest, rent and Profits.

Monetary Systems - Commercial Banking and Central Banking.

Monetary Theory - Income, Employment and output - Value of money - Inflation and Deflation.

Monetary Policy - International Trade and Foreign Exchange - Balance of Payments - Exchange Rate Determination - Exchange Control.

Government Finance - Taxation - Public Expenditure - Fiscal Policy, Economic Planning.

(iv) **Advanced Accountancy** : Funds flow analysis - Purchase of Partnership firm by limited company - Merger or absorption of companies - Reduction or reconstruction of capital - Valuation of goodwill - Valuation of shares - Holding Company accounts and consolidated balance sheet - Branch Accounts, including foreign branches - Double accounts for Public Utility Undertakings - Loss of profits insurance - Government accounts - Ratio analysis from published accounts - Presentation of published accounts and Schedule VI of Companies Acts - Alternative ways of presenting published accounts.

(v) **Advanced Commercial Geography** : Bridging space and time in economics - Location of economic activities and trade as observed of each other in relation to space - factor movements and commodity movements as alternatives - trade as bridging time - similarly and non distinguishability between trade and production. The concept of region in economics.

Economic theory of location - Factors promoting location of production and trade - Geographical and natural factors - Historical factors - Economic factors. Measurement of location and localization - coefficient of localization and spatial concentration - Measures by alternative indicators. Advantages and disadvantages of localization.

Economic theory of interregional and international trade - its limited applicability - absolute and relative advantages - comparative costs - Measurement of comparative cost - balancing cost and advantages with cost of trade and transport - trade as transcending location - storage and transport as essential elements of trade - commodity movements as substitute for factor movements. Economic significance and the real social cost of trade.

Possible nature of malfunctioning of location and trade as elements of economic organization - the need for control. Popular misconceptions about trade.

(vi) **Business Organisation and methods** : Taylor's Scientific Management - Fayol's general management - principles - More recent schools of Management thought e.g., Behavioural Science, Quantitative Methods, etc. - Management as decision making.

Organisation Structure: Authority-responsibility relationships - Communication channels - functional organization - Decentralised structures and arguments for and against them - legal forms of business in India and their distinguishing characteristics, e.g., firms, Hindu Undivided family, Company - Private and Public, Government Companies.

Management Process : Delegation - Objectives and Policies - Participative management practices - Long-range planning - Training and development of human resources - Appraisal of performance - Control and Co-ordination - "Management by objectives" and other total approaches to management.

Basic ideas about production management, marketing management, purchase management, financial management - Public Sector Management in India.

(vii) **Commercial and Industrial Law**: Understanding the Structure of Commercial Law - Fundamentals of the law of contract and the Indian Contract Act - Special cases of contract - Negotiable instruments, bailment and associated areas. The problems of fictitious legal personality - The limited liability company as a special case - The social problems created by the operations of such fictitious persons - The salient points of the Indian Companies Act. The Monopolies and Restrictive Trade Practices Act. The necessity of protecting weaker parties in a contract and of protecting social interests as basis of industrial law - The salient points of the Indian Factories Act and associated legislations. Labour laws - divided into laws relating to wages and industrial disputes. The principal points covered by the Indian Trade Unions Act and Industrial Disputes Act - Payment of Wages and Minimum Wages Acts. Welfare, wealth and safety measures in important labour laws.

(viii) **Auditing** : The general idea of auditing - The limited special significance in corporate legislation - Statutory audit - The conventional procedure of statutory audit - Necessary extent of checking and verification - Extent of physical verification where necessary - Audit report - Auditors duties and responsibilities - Associated Provisions of the Indian Companies Act. The special case of and provisions for cost audit.

Auditing and Accountancy - The general meaning of the term auditing - Authorisation audit, propriety audit and achievement audit - plan fulfillment as audit. Auditing in the non-corporate sector. The structure, nature and special features of Government audit. The office of the Auditor - General and Comptroller in the Indian Constitution - Indian Audit and Accounts Service - Performance of the Government audit system - Government Audit and the Parliament, Audit of different types of Government organizations.

Auditing and the unorganized Sector - Where auditing legally necessary - Auditing and taxation - Social significance of auditing - Nationalization of auditing.

(ix) **Costing** : Cost classification : a) Prime costs and overheads, (b) Direct or variable or marginal costs and fixed costs - imputed, opportunity and sunk cost concepts - Perpetual inventory system for materials - Booking of labour time.

Full cost methods or Absorption costing : Job costing, Process costing and contract costing - Allocation and apportionment of overhead costs through various bases.

Costing for Decision making : Marginal costs - Contribution - Limiting factor - Break-even analysis - Profit-volume ratio - differential costing - Decisions like "make or buy", accept or reject an offer, shut down or keep running a department or branch, etc.

Costing for Control : Standard costing - Budgetary control - Their comparison - Responsibility accounting or reporting - Variance analysis of materials, labour and overheads.

(x) **Taxation Laws and Practice** : Direct Taxes : Income Tax procedures for assessing taxable income of individuals and partnership firms - Various heads of chargeable income - Various relief-Cases.

Company taxation - Various adjustments to published profit figures for assessment purposes - various kind of tax incentives for new fixed investments, new companies, etc.-cases.

Indirect Taxes - Sales tax laws and procedures - Inter-State sales tax problems.

Excise duties on purchases and sales.

PUBLIC SERVICE COMMISSION, WEST BENGAL

APPLICATION FORMAT

APPLICATION FOR WEST BENGAL AUDIT AND ACCOUNTS SERVICE EXAMINATION, 2010

ADVERTISEMENT NO. 05(4)/2010

(CLOSING DATE FOR RECEIPT OF APPLICATION : The 12TH July, 2010.)

CAUTION

(i) A candidate must consult the “**Important Information**” available with advertisement in the Commission’s Website, then use the prescribed application format and fill in the application form correctly against all the items in his/her own handwriting with ball point pen of black/blue ink and furnish required particulars/documents. If any item(s) of the application is considered inapplicable to the candidate he/she should write ‘**NOT APPLICABLE or (N.A.)**’ against the particular item(s) and in any case **no item of the application should remain unfilled.**

(ii) Correction/overwriting, if any, should be accompanied by signature of the candidate.

(iii) *In case the application is not filled in accordance with the above instructions or any of the required documents is not enclosed, it will be treated as incomplete/defective and summarily rejected.*

Note : ***Keeping the application form in front, the particulars/documents are to be stitched with the application securely in the following sequence – I.P.O. or Treasury Challan, in original (not required for SC/ST candidates of W.B. and Persons with Disability), Attested or Self-certified photocopies of (1) Madhyamik or equivalent qualification cert., (2) Certificates for Educational Qualifications, (3) SC/ST/BC/PH/Ex-Serviceman cert. (if applicable), (4) Citizenship Certificate (for candidates acquiring citizenship by registration) and (5) Two self-addressed unstamped envelopes.***

(Space for office use)

Roll No.

Space for pasting recent
passport size photograph
signed in full by the
candidate

1. Name in full (IN CAPITAL LETTERS) :
2. (a) I.P.O./Treasury Challan attached for : Rs. _____
(b) I.P.O. No(s). and value :
(c) Date of purchase and name of issuing :
post office with address
(d) No., amount and date of receipted :
Treasury Challan attached
3. Choice of Preliminary Examination Centre : **Kolkata** **Darjeeling**
(Put ‘✓’ mark in appropriate box/boxes).

4. (a) Indicate your community (Put a '✓' mark in appropriate box/boxes). SC/ST/BC candidates not belonging to the State of West Bengal should indicate their community as 'General'. [SC/ST/BC candidate shall attach self-certified or attested copy of certificate(s)] : Genl. SC ST BC
- (b) If SC/ST/BC, mention your Sub-caste, the name of the State from which SC/ST/BC certificate obtained and the designation of issuing authority. : Sub-Caste State Issuing Authority
5. (a) Whether you are a person with disability, (write 'Yes' or 'No') [If yes, attach self-certified or attested xerox copy of P.H. certificate] :
- (b) State the category of disability (Put '✓' mark in the appropriate box) (CANDIDATES SUFFERING FROM BLINDNESS OR LOW VISION ARE NOT ELIGIBLE) : Hearing Impaired Orthopaedically Handicapped
6. S E X (Put '✓' mark in appropriate box) : Male Female
7. (a) **Date of birth** (as recorded in Madhyamik or equivalent examination certificate) [attach attested or self-certified copy of Madhyamik or equivalent examination certificate] : Date Month Year
- (b) Do you claim relaxation of age as SC/ST/BC of West Bengal or as Person with Disability [Write 'Yes' or 'No'] :
8. (a) Whether a citizen of India (Write 'Yes' or 'No') :
- (b) State, whether a natural citizen or a citizen by registration (If by registration, attach self-certified or attested copy of certificate) :
9. Father's Name :
10. Address (IN CAPITAL LETTERS) mentioning Post Office, Sub-Division, District and Pin Code
(a) Postal Address :
- (b) Permanent Address :

11. (a) Do you have the ability to read, write and speak in Bengali (Write 'Yes' or 'No') :
- (b) Whether you are a person from hill areas of Darjeeling District (Write 'Yes' or 'No') :
- (c) State your mother tongue :
- (d) State your choice of language (Bengali/Hindi/Urdu/ Nepali) in Compulsory Paper-II of the Main Examination (Put a '✓' mark in appropriate box) : Bengali Hindi Urdu
-

12. ***OPTIONAL SUBJECTS** : Name of Optional Subject Code
- Mention clearly the names of Optional subjects with code after consulting the "list of Optional Subjects" thereof in the **Scheme & Syllabus** of the W.B. Audit and Accounts Service Examination, 2010
1.
2.
3.

13. Academic Qualifications (Madhyamik and onwards) :
[Self-certified or attested copy of all certificates must be attached to the application].

Name of Examination passed	Name of Board/Council/University	Division/Class	Year of passing	Remarks

14. (a) Have you at any time been employed? (write 'Yes' or 'No'):

(b) If yes, give details :

Name of the Post	Temporary/Permanent/on Contract basis	Office where employed	Date of joining	Date of leaving, if any	Cause of leaving

15. The list of documents enclosed :

- i) ii)
iii) iv)
v) vi)

DECLARATION

I solemnly declare that (a) all statements made in this application are true, complete and correct to the best of my knowledge and belief and in the event of any information being found false my candidature will be liable to be cancelled, (b) Original documents, certificates will be produced on demand, (c) I agree to take this examination at my own risk subject to verification of my eligibility by the Commission. If subsequently the Commission finds me ineligible for admission to the examination, it may cancel my candidature even after finalization of the results. (d) I have submitted no other application for this examination. *(e) I have informed the Head of my Office/Department in writing that I am applying for this examination (*Strike out if not applicable).

Yours faithfully,

Place : _____

Date : _____

(Full signature of the candidate)
(Full name to be written clearly)
[Not in capital letters]

*** Optional Subjects with Code :**

Subject	Code	Subject	Code
Advanced Accountancy	01	Commercial and Industrial Law	06
Advanced Commercial Geography	02	Costing	07
Auditing	03	Economics	08
Banking	04	Statistics	09
Business Organisation and Methods	05	Taxation Laws and Practice	10