

**NATIONAL BANK STAFF COLLEGE**  
**LUCKNOW**

**TENDER FOR REPAINTING OF ACADEMIC BUILDING, HOSTEL BLOCKS,**  
**SUB-STATION AND GUARD ROOM**

**AT**

**NATIONAL BANK STAFF COLLEGE, LUCKNOW**

**NAME OF TENDERER** \_\_\_\_\_

**ADDRESS**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**THE PRINCIPAL**  
**NATIONAL BANK STAFF COLLEGE**  
**SECTOR 'H', LDA COLONY**  
**KANPUR ROAD**  
**LUCKNOW - 226 012**

**This Tender consists of 43 pages.**

## TENDER NOTICE

Sealed tenders are invited for **Repainting of Academic building, Hostel Blocks, Sub-station, Guard room at National Bank Staff College, Lucknow** which is estimated to cost **Rs.8,98,262/-**(Rupees Eight Lakh Ninety Eight Thousand Two Hundred and Sixty Two Only) and to be completed within 90 days from 10th day of date of issue of work order.

Contractors having experience in undertaking similar nature of work and having executed works individually costing as per NIT of the Tender document only need tender for the work.

Tender forms will be issued from **01/12/2011 to 14/12/2011** from the office of the Principal, National Bank Staff College (NBSC), Sector 'H', LDA Colony, Kanpur Road, Lucknow- 226012 on payment of Rs. 150.00 per set which is not refundable under any circumstances. Tenders in prescribed forms alongwith EMD of **Rs.18,000/-** (Rupees Eighteen Thousand only) superscribing the description of the work on sealed envelope and addressed by name to Shri R. Amalorpavanathan, Principal, National Bank Staff College, Sector 'H', LDA Colony, Kanpur Road, Lucknow 226 012 will be received by the National Bank Staff College upto 03.00 pm on **14/12/2011** and will be opened on the same day at 03.30 pm in the presence of the authorized representative of the tenderers, who choose to be present. The Bank reserves the right to accept the lowest or any tender or to reject all of them. Validity of tendered rates shall be for 90 (Ninety) days from the date of opening.

D.D.Garg  
Assistant General Manager

**NATIONAL BANK STAFF COLLEGE,LUCKNOW**

**FORM OF TENDER**

Place : Lucknow

Date : \_\_\_\_\_

The Principal

National Bank Staff College

Sector 'H', LDA Colony

Kanpur Road

**Lucknow 226 012**

Dear Sir,

Having examined the specifications and schedule of quantities relating to the works specified in the memorandum hereinafter set out and having visited and examined the site of the works specified in the said memorandum and having acquired the requisite information relating thereto as affecting the tender, I/We hereby offer to execute the works specified in the said memorandum within the time specified in the said memorandum at the rates mentioned in the attached schedule of quantities and in accordance in all respects with the specifications and instructions in writing referred to in conditions of tender, the Articles of Agreement, Special Conditions, Schedule of Quantities and Conditions of Contract and with such materials as are provided for, and in all other respects and in accordance with such conditions so far as they may be applicable.

**MEMORANDUM**

(a) Description of works : Repainting of Academic building, Hostel Blocks, Sub-station, Guard room at National Bank Staff College, Lucknow

(b) Estimated Cost : **Rs.8,98,262/-** (Rupees Eight Lakh Ninety Eight Thousand Two Hundred Sixty Two only)

(c) Earnest money : **Rs.18,000/-**(Rupees Eighteen Thousand Only)

(d) RMD : 5% as retention money deposit (RMD) will be deducted from each Running Account bill.

(e) Time allowed for completion : 90 days from tenth day of written order to commence work or from the date the site is handed over, whichever is later.

5 Should this tender be accepted, I/We hereby agree to abide by the terms and provisions of the said conditions of Contract annexed hereto so far as they may be applicable or in default thereof to forfeit and pay to the National Bank Staff College the amount mentioned in the said conditions.

6 I/We have deposited a sum of **Rs.18,000/-** (Rupees Eighteen Thousand only) as Earnest Money with the National Bank Staff College, Lucknow, which is not to bear any interest. Should

I/We fail to execute the contract when called upon to do so. I/We do hereby agree that this sum shall be forfeited by me/us to the National Bank Staff College, Lucknow.

7 Our bankers are :

(i)

(ii)

The names of partners of our firm are

(i)

(ii)

Name of the partner of the firm authorized to sign

OR

Name of person having Power of Attorney to sign the contract.

(Certified true copy of the Power of Attorney should be attached)

Yours faithfully

\_\_\_\_\_  
( Signature of Contractor )

(Signature and addresses of witness)

(1) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(2) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## ARTICLES OF AGREEMENT

ARTICLES OF AGREEMENT made this \_\_\_\_\_ day of \_\_\_\_\_  
between the National Bank Staff College (NBSC) having its Head Office at Mumbai (therein after called “ the Employer”) of the one part and

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(hereinafter called “the Contractor”) of the other part.

WHEREAS the Employer is desirous of carrying out the work of **Repainting of Academic building, Hostel Blocks, Sub-station, Guard room at National Bank Staff College, Lucknow** and has caused specifications describing the work to be done at National Bank Staff College, Sector ‘H’, LDA Colony, Kanpur Road, Lucknow.

AND WHEREAS the said specifications and the Schedule of quantities have been signed by or on behalf of the parties hereto.

AND WHEREAS the Contractor has agreed to execute the work/s subject to the Condition set forth herein and to the Conditions set forth in the Special Conditions and the Schedule of Quantities and Condition of Contract (all of which are collectively hereinafter referred to as “the said Conditions”) the works shown upon and/or described in the said Specifications and included in the Schedule of Quantities at the respective rates therein set forth amounting to the sum as therein arrived at or such other sum as shall become payable thereunder (hereinafter referred to as “the said Contract Amount”).

### **NOW IT IS HEREBY AGREED AS FOLLOWS :**

1. In consideration of the said Contract amount to be paid at the time and in the manner set forth in the said conditions, the Contractor shall upon and subject to the said conditions execute and complete the work shown upon the said location and described in the said specifications and the schedule of quantities.
2. The employer shall pay the Contractor the said Contract amount, or such other sum as shall become payable, at the times and in the manner specified in the said Conditions.
3. In the said conditions herein before mentioned, the Principal/ Officer In-Charge of NBSC shall act on behalf of the Employer.
4. The said conditions and Appendix thereto shall be read and construed as forming part of this Agreement, and the parties hereto shall respectively abide by, submit themselves to the said Conditions and perform the agreements on their part respectively contained in the said conditions.
5. The agreement and documents mentioned herein shall form the basis of this Contract.
6. This Contract is neither a fixed lump sum Contract nor a piece work Contract but is a Contract to carry out the work in respect of **Repainting of Academic building, Hostel Blocks, Sub-station, Guard room at National Bank Staff College, Lucknow** to be paid for according to actual measured quantities at the rates contained in the Schedule of Rates and probable quantities or as provided in the said Conditions.
7. The Contractor shall make good, as per existing, any damages caused to walls, floors, etc. on account of repainting work after completion of such works.

8. The Employer reserves to himself the right of altering the nature of the work by adding to or omitting any items of work or having portions of the same carried out without prejudice to this Contract.

9. Time shall be considered as the essence of this Contract and the Contractor hereby agrees to commence the work from the date site is handed over to him or from tenth day of the date of issue of formal works order as provided for in the said conditions whichever is later and to complete the entire work within 90 days subject nevertheless to the provisions for extension of time.

10. All payments by the Employer under this contract will be made only at Lucknow.

11. All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen at Lucknow and only Courts in Lucknow shall have jurisdiction to determine the same.

12. That the several parts of this contract have been read by the Contractor and fully understood by the Contractor.

IN WITNESS WHEREOF the Employer and Contractor have set their respective hands to these presents and two duplicates hereof, the day and year first herein above written.

IN WITNESS WHEREOF the Employer has set its hand to these presents through its duly authorized official and the Contractor has caused its common seal to be affixed hereunto and the said two duplicates hereof to be executed on its behalf, the day & year first herein above written.

**SIGNATURE CLAUSE:**

SIGNED AND DELIVERED BY the National Bank  
Staff College by the hand  
of Shri \_\_\_\_\_

(name and designation)

\_\_\_\_\_ in the presence of

(1) \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_

(2) \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_

If the party is a partnership firm or an individual should be signed by all or on behalf of all the partners

SIGNED AND DELIVERED BY \_\_\_\_\_  
in the presence of

(1) \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_

(2) \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_

Witnesses

THE COMMON SEAL of \_\_\_\_\_

If the contractor signs under its common seal, the signature clause should tally with the sealing clause in the articles of association

was hereunto affixed pursuant to the resolutions passed by its Board Of Directors at the meeting held on \_\_\_\_\_ in the presence of

(1) \_\_\_\_\_

(2) \_\_\_\_\_

Directors, who have signed these presents in token thereof in the presence of

(1) \_\_\_\_\_

(2) \_\_\_\_\_

Signed and sealed by the contractor by the hand of Shri \_\_\_\_\_ and duly constituted attorney.

If the contractor is signing by the hand of power of attorney, whether a company or individual

**GENERAL INSTRUCTIONS TO CONTRACTORS**  
**AND SPECIAL CONDITIONS**

1. Sealed Item Rate Tenders in duplicate shall be addressed to The Principal, National Bank Staff College, Lucknow and superscribed "Tender for Repainting of Academic building, Hostel Blocks, Sub-station, Guard room at National Bank Staff College, Lucknow" and send so as to reach him not later than 03.00 PM on 14 December 2011.
2. No tender will be received after 03.00 PM on 14 December 2011 under any circumstances whatsoever.
- 3.(a) Tenders will be opened at 03.30 pm on the same day at his office by The Principal, National Bank Staff College, Lucknow or any other officer designated for this purpose by him in the presence of the Contractors or their representatives, should they choose to be present.  
  
(b) Tenders shall remain open to acceptance by the Bank for a period of 90 days from the date of opening the tender which may be extended by mutual agreement and the tenderer shall not cancel or withdraw the tender during the period.  
  
(c) The Contractor must use only the forms issued by the Employer to fill in the rates.
4. (a) The tender form must be filled in English and all entries must be made by hand and written in ink. If any of the documents is missing or unsigned the tender may be considered invalid by the Bank at its discretion.  
  
(b) Rate should be quoted both in figures & words in the columns specified. The Contractors should quote the rates for each item. All erasures and alterations made while filling the tender must be attested by initials of the Contractors. Overwriting of figures is not permitted, failure to comply with either of these conditions will render the tender void at the Bank's option. No advice of any change in rate or conditions after the opening of the tender will be entertained.  
  
(c) Each of the tender documents should be signed by the person or persons submitting tender in token of his/their having acquainted himself/themselves with the general conditions of Contract specifications, special conditions etc. as laid down. Any tender with any of the documents not so signed may be rejected.  
  
(d) The tender submitted on behalf of a firm shall be signed by all the partners of the firm or by a partner who has the necessary authority on behalf of the firm to enter into the proposed contract. Otherwise the tender may be rejected by the Bank.
5. The National Bank Staff College, Lucknow does not bind itself to accept the lowest or any tender and reserves to itself the right to accept or reject any or all the tenders either in whole or in part, without assigning any reasons for doing so.
6. (a) Intending Contractors shall pay as earnest money a sum of **Rs.18,000/-** (Rupees Eighteen Thousand only) by way of demand bank draft drawn on a Scheduled Bank and payable at Lucknow in favour of the National Bank Staff College. The earnest money will be returned to the Contractor if his tender is not accepted but without any interest, after finalization of work order.

(b) Under no circumstances earnest money deposit will be accepted in the form of fixed deposit receipts or Bank or Insurance guarantee or cheque.

7. The Earnest Money Deposit by the successful Contractor shall be held by the National Bank Staff College as security for the execution and due fulfillment of the Contract. No interest shall be paid on the said deposit.

8. On receipt of intimation from the Employer of the acceptance of his/their tender, the successful Contractor shall be bound to implement the contract and within fourteen days thereof the successful tenderer shall sign an agreement on the lines of draft agreement but the written acceptance by the National Bank Staff College, of a tender will constitute a binding contract, between the National Bank Staff College and the person so tendering, whether such formal agreement is or is not subsequently executed.

9. (a) In addition to the Earnest Money Deposit under clause 7 and as further security for the due fulfillment of the Contract by the Contractor, 5% of the value of work done will be deducted by the Employer from each running account bill to be raised by the Contractor, until the retention money and the earnest money deposit together amount to 5% of contract value. Subject to what is contained in the provision of Clause 23, the employer will release this 5% amount after rectification of defects pointed out during the defects liability period. The amount retained by the employer shall not bear any interest.

(b) All compensation or other sums of money payable by the Contractor to the Employer under the terms of this Contract may be deducted from his earnest money and the retention money if the amount so permits and the Contractor shall, unless such deposit has become otherwise payable, within ten days after such deduction make good in cash the amount so deducted and such amount where the earnest money and the retention money falls short.

10. The Contractor shall not assign the Contract. He shall not sublet any portion of the Contract except with the written consent of the Employer. In case of breach of these conditions, the Employer may serve a notice in writing on the Contractor rescinding the contract whereupon the security deposit shall stand forfeited to the Employer, without prejudice to his other remedies against the Contractor.

11. The Contractor shall submit alongwith his tender a list mentioning the names of manufacturers of materials which he proposes to use in the work if his tender is accepted.

12. A schedule of quantities in respect of each item and specifications accompany these special conditions. The schedule of quantities is liable to alternation by omissions, deductions or additions at the discretion of the Employer. Each tender should contain not only the rates but also the value of each item of work entered in a separate column and all the items should be totaled in order to show the aggregate value of the entire tender.

13. The Contractor must obtain for himself on his own responsibility and at his own expense all the information which may be necessary for the purpose of making a tender for entering into a contract and must examine the specification and must inspect the site of the work and acquaint himself with all local conditions, means of access to work and nature of the work and all matters pertaining thereto.

14. The rates quoted in the tender shall include all charges for double scaffolding, centering, hire charges for any tools and plants, labours, materials, marking out and clearing of site etc. as mentioned in the specifications. The rates quoted shall be deemed to be for the finished work to be measured at site. The rates shall also be firm and shall not be subject to exchange variations, labour conditions, fluctuations in railway freights or any conditions whatsoever. The Contractors must include in their rates, service tax, excise duty, octroi and any other tax and duty or other levy levied by the Central Government or any State Government or local authority, if applicable. No claim in respect of sales tax, excise duty, octroi or other tax duty or levy shall be entertained by the Employer.

15. The Contractor should note that unless otherwise stated, the tender is strictly on item rate basis and his attention is drawn to the fact that rates for each and every item should be correct, workable and self-supporting. The quantities in the schedule of quantities approximately indicate the total extent of work but may vary to any extent and may even be omitted thus altering the aggregate value of the Contract. No claim shall be entertained on this account.

16. Time allowed for carrying out the work as mentioned in the Memorandum shall be strictly observed by the Contractor and it shall be reckoned from the 10th day of written order to commence the work is issued or from the date the site is handed over, whichever is earlier. The work shall throughout the stipulated period of the contract, be proceeded with all due diligence and if the Contractor fails to complete the work within the specified period he shall be liable to pay compensation as defined in clause 27 of the conditions of contract. The Contractor shall before commencing work prepare a detailed work programme, which shall be approved by the Employer.

17. Tenders will be considered only from recognised bonafide Contractors in the trade.

18. Special attention of the Contractor is drawn to the items in the schedule of quantities; the rates and amounts for these items shall be duly filled in and Contractor is informed that his tender will not be considered unless the rates are given for these items. The Employer reserves to himself the right to adopt any of the items either in scrutinizing and deciding upon the tender or later when the works are being executed.

19. The Contractor shall not be entitled to any compensation for any loss suffered by him on account of delay in commencing or executing the work, whatever the cause of delay may be, including delay arising out of modification to the work entrusted to him or in any sub-contract connected therewith or delay in awarding contracts for other trades of the project or in commencement or completion of such works or in procuring Government controlled or other building materials or in obtaining water and power connections for construction purposes or for any other reason whatsoever and the Employer shall not be liable for any claim in respect thereof. The Employer does not accept liability for any sum besides the tender amount, subject to such variations as are provided for herein.

20. The successful Contractor is bound to carry out any items of work necessary for the completion of the contract even though such items are not included in the schedule of quantities and rates. Schedule of instructions in respect of such additional items and their quantities will be issued in writing by the Employer.

21. The successful Contractor must co-operate with the other Contractors appointed by the employer so that the work shall proceed smoothly with the least possible delay and to the satisfaction of the Employer.

22. The Employer will provide water and power required for the work free of cost at a suitable point and the Contractor shall make his own arrangement to carry the same as required. The Contractor should ensure that the water and power facility provided by the employer are not wasted.

23. The Employer will also provide suitable space for storage, if available of materials etc. required for the work free of cost. The Contractor should ensure that the space provided by the employer is used for execution of the works only.

24. The security deposit of the successful Contractor will be forfeited if he fails to comply with any of the conditions of the contract.

I/We hereby declare that I/we have read and understood the above instructions for the guidance to tenderers.

Signature of Contractor.....

Address .....  
.....  
.....

Date .....

## ANNEXURE `A`

### SAFETY CODE

1. There shall be maintained in a readily accessible place first aid appliances including adequate supply of sterilised dressings and cotton wool.
2. An injured person shall be taken to a public hospital without loss of time, in case where the injury necessitates hospitalisation.
3. Suitable and strong scaffolds should be provided for workmen for all works that cannot safely be done from ground.
4. No portable single ladder shall be over 8 meters in length. The width between the said rails shall not be less than 30 cm (clear) and the distance between two adjacent rungs shall not be more than 30 cm. When a ladder is used an extra mazdoor shall be engaged for holding the ladder.
5. The excavated material shall not be placed within 1.5 metres of the edge of the trench or half of the depth of trenches whichever is more. All trenches and excavations shall be provided with necessary fencing and lighting.
6. Every opening in the floor of a building or in working platform be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be one metre.
7. No floor, roof or other part of the structure shall be so over loaded with debris or materials as to render it unsafe.
8. Workers employed on mixing and handling material such as asphalt, cement, mortar or concrete and lime mortar shall be provided with protective footwear and rubber hand-glove.
9. Those engaged in welding works shall be provided with welder's protective eye-shields and gloves.
10. i) No paint containing lead or lead products shall be used except in the form of paste or ready made paint.  
ii) Suitable face masks should be supplied for use by the workers when the paint is applied in the form of spray or surface having lead paint is being dry rubbed and scrapped.
11. Overalls shall be supplied by the Contractor to the painters and adequate facilities shall be provided to enable the working painters to wash during the periods of cessation of work.
12. Hoisting machines and tackle used in the works, including their attachments anchorage and supports shall be in perfect condition.
- 13.** The ropes used in hoisting or lowering material or as a means of suspension shall be of durable quality and adequate strength and free from defects.

#### **14. THE CONDITIONS HEREIN BEFORE REFERRED TO**

1) In construing these conditions, the specifications, schedule of quantities and contract agreement, the following words shall have the meanings herein assigned to them except where the subject or context otherwise requires :-

- a. Employer shall mean National Bank Staff College and shall include its assigns and successors.
- b. Contractor shall mean ..... and shall include his/their legal representative, assigns or successors.
- c. Site shall mean the site of the contract works / including any building and erections thereon and any other land (inclusively) as aforesaid allotted by the Employer for the contractor's use.
- d. This Contract shall mean the articles of agreement, the special conditions, the conditions, the appendix, the schedule of quantities and specifications attached here to and duly signed.
- e. Notice in writing; Written notice shall mean a notice in written, typed or printed characters sent (unless delivered personally or otherwise proved to have been received) by registered post to the last known private or business address and shall be deemed to have been received when in the ordinary course of post it would have been delivered.
- f. Act of insolvency : shall mean any act of insolvency as defined by the Presidency Towns Insolvency Act, or the Provincial Insolvency Act or any Act amending such original.
- g. The works shall mean **Repainting of Academic building, Hostel Blocks, Sub-station, Guard room at National Bank Staff College, Lucknow** as provided herein.

Words importing persons include firms and corporations. Words importing the singular only also include the plural and vice versa where the context requires.

2) The Contractor shall carry out and complete the said work in every respect in accordance with the contract and with the directions of and to the satisfaction of the Employer. The Employer may, in his absolute discretion and from time to time issue further written instructions, details, directions and explanations which are hereafter collectively referred to as "Employer's instructions' in regard to :-

- a. The variations or modifications of the quality or quantity of works or the addition or omission or substitution of any work.
- b. Any discrepancy in the drawing or between the schedule of quantities and/or drawing and/or specifications.
- c. The removal from the site of any materials brought thereon by the Contractor and the substitution of any other material therefor.
- d. The removal and/or re-execution of any works executed by the Contractor.
- e. The dismissal from the works of any person employed thereupon.
- f. The opening up for inspection of any work covered up.
- g. The amending and making good of any defects under clause 23.

The Contractor shall forthwith comply with and duly execute any work comprised in such Employer's instructions provided always that verbal instructions, directions and explanations given to the contractor or his representatives upon the works by the Employer shall, if involving a variation, be confirmed in writing by the Contractor within seven days, and if not dissented from in writing within a further seven days by the Employer, they shall be deemed to be Employer's instructions within the scope of the contract.

3) The contract shall remain in the custody of Employer and shall be produced by him at his office as and when required by the Contractor. The contractor on the signing thereof shall be furnished free of cost with a certified copy of the agreement.

4) The Contractor shall provide everything necessary for the proper execution of the works according to the intent and meaning of the schedule of quantities and specification taken together whether the same may or may not be particularly shown or described therefrom, and if the contractor finds any discrepancy in writing, refer the same to the Employer who shall decide which is to be followed.

5) The Contractor shall conform to the provisions of any act of the legislature relating to the works, and to the Regulations and Bye-Laws of any authority and of any water, lighting and other companies, and shall before making any variations from the specification that may be necessitated by so conforming, give to the Employer written notice, specifying the variation proposed to be made and reason for it, and apply for instructions thereon. In case the contractor shall not within ten days, receive such instructions he shall proceed with the work, conforming to the provisions, Regulations, Bye-laws, in question and any variation so necessitated shall be dealt with under clause No.16.

The contractor shall bring to the attention of the employer all notices required by the said acts, regulations or bye-laws to be given to any authority and pay to such authority, or to any public office all fees that may be properly chargeable in respect of the works, and lodge the receipts with the employer.

The contractor shall indemnify the employer against all claims in respect of patent rights, and shall defend all actions arising from such claims and shall himself pay all royalties, license fees, damages, cost and charges of all and every sort that may be legally incurred in respect thereof.

6) The contractor shall maintain in a readily accessible place, first-aid appliances including an adequate supply of sterilized dressings and cotton wool. In case of injury, arrangements should be made by the contractor to take the injured person to the nearest hospital without loss of time.

7) Suitable and strong scaffoldings should be provided for workmen for all works that cannot safely be done from ground or from solid construction. When a ladder is used, an extra mazdoor shall be engaged by the contractor for holding the ladder. No portable single ladder shall be over 8 metres in length. The width between the said rails shall not be less than 30 cm (clear) for length upto 3 metres, for every additional metre, 5 cms. increase in width shall be provided. The distance between two adjacent rungs shall not be more than 30 cms.

8) Adequate precautions shall be taken to prevent danger from electrical equipments. No material on the site of work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defence of every suit, action or other proceeding at law that may be brought by any person for injury sustained owing to neglect of the above precaution and to pay any damages and costs which may be awarded in any such suit, action or proceedings to any such person.

9) i) No paint containing lead or lead products shall be used except in the form of paste and ready made paint.

ii) Suitable face masks should be supplied for use by the workers when the paint is applied in the form of spray or surface having lead paint dry rubbed and scraped.

10) The contractor shall set out the works and shall be responsible for **Repainting of Academic building, Hostel Blocks, Sub-station, Guard room at National Bank Staff College, Lucknow.**

11) All materials and workmanship shall so far as procurable be of the respective kinds described in the schedule of quantities and/or specifications and in accordance with the Employer's instructions, and the contractor shall, upon the request of the Employer, furnish him with all invoices, accounts, receipts and other vouchers to prove that the materials comply therewith. The contractor shall, at his own cost, arrange for and/or carry out any test of any materials which the Employer may require.

12) The Contractor shall give all necessary personal superintendence during the execution of the work, and as long thereafter as the Employer may consider necessary until the expiration of the "Defects Liability Period" stated in the appendix hereto. The contractor shall also during the whole time the works are in progress employ a competent representative who shall be constantly in attendance at the works while the men are at work. Any directions, explanation, instructions or notice given by the employer to such representative shall be held to be given to the contractor.

13) The Contractor shall on the request of the Employer immediately dismiss from the works any person employed thereon by him who may, in the opinion of the Employer, be incompetent or misconducts himself, and such person shall not be again employed on the work without the permission of the Employer.

14) The Employer and their respective representatives shall at all reasonable times have free access to the works and/or to the workshop, factories or other places where materials are lying or from which they are being obtained, and the contractor shall give every facility to the employer, and their representatives necessary for inspections and examination and test of the materials and workmanship. No unauthorised person shall be allowed on the works at any time.

15) The whole of the works included in the contract shall be executed by the contractor and the contractor shall not directly or indirectly transfer, assign or underlet the contract or any part, share thereof or interest therein without the written consent of the employer; and no undertaking shall relieve the contractor from the full and entire responsibility of the contract or from active superintendence of the works during their progress.

16) No alteration, omission or variation shall vitiate this contract but in case the employer think proper at any time during the progress of the works to make any alterations in or addition to or omissions from the works or any alteration in the kind or quality of the materials to be used therein and shall give notice thereof in writing and under his hand to the contractor, the contractor shall alter, add to or omit from as the case may require, in accordance with such notice, but the contractor shall not do any work extra to or make any deviations from any of the provisions of the contract, stipulation, specification without the previous consent in writing of the employer and the value of such extras, alterations, additions or omissions shall in all cases be determined by the

employer in accordance with the provisions of clause 20 hereof, and the same shall be added to or deducted from the contract amount accordingly.

17) The schedule of quantities, unless otherwise stated shall be deemed to have been prepared in accordance with the standard method of measurement.

Any error in description or in quantity or in omission of items from the schedule of quantities shall not vitiate this contract but shall be rectified and the value thereof ascertained under clause 20 hereof shall be added to or deducted from the contract amount (as the case may be) provided that there shall be no rectification of error in the contractor's schedule of rates.

18) The contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the prices stated in the schedule of quantities and/or the schedule of rates and prices which rates and prices shall cover all his obligations under the contract, and all matters and things necessary for the proper completion of the works.

19) The employer may from time to time intimate to the contractor that he requires the works to be measured; and the contractor shall forthwith attend or send a qualified agent to assist the employer in taking such measurements and calculations and to furnish all particulars or to give all assistance required by either of them. The mode of measurements shall be as detailed out under para 'mode of measurement' in the chapter specifications in this tender.

Should the contractor not attend or neglect or omit to send such agent then the measurement taken by the employer or a person approved by him shall be taken in accordance with the standard method of measurements.

The Contractor or his agent may at the time of measurement take such notes and measurements as he may require.

20) Should it be found after the completion of the works from measurements taken (in accordance with the previous paragraph) that any of the quantities or amounts of works thus ascertained are less or greater than the quantities or amounts specified for the works in the Priced Schedule of Quantities and/or tender or that any variation is made, the valuation of such Quantities, amounts or variations, unless previously or otherwise agreed upon, shall be made in accordance with the following rules :

(a) (i) The net rates or prices in the original Tender shall determine the valuation of the extra work where such extra work is of similar character and executed under similar conditions as the work priced therein.

(ii) Rates for all items, wherever possible, should be derived out of the rates given in the priced schedule of quantities.

(b) The net prices of the original Tender shall determine the value of the items omitted provided if omissions vary, the conditions under which any remaining items of works are carried out the prices for the same shall be valued under sub clause (c) hereof.

(c) Where the extra works are not of similar character and/or executed under similar conditions as aforesaid or where the omissions vary, the conditions under which any remaining items of works are carried out or if the amount of any omission or additions relative to the amount of the whole of the Contract works or to any part thereof shall be such that in the opinion of the Employer the net rate or price contained in the Priced Schedule of Quantities or Tender or for any item of the works involves loss of expense beyond that reasonably contemplated by the Contractor, is by reason of such omission or addition rendered unreasonable or inapplicable, the Employer shall fix such other rate or price as in the circumstances he shall think reasonable and proper.

(d) Where extra work can not be properly measured or valued, the Contractor shall be allowed day work prices as the net rates stated in the Tender or the Priced Schedule of Quantities or; if not so stated then in accordance with the local day work rates and wages for the district provided that in either case vouchers specifying the daily time and materials employed be delivered for verifications to the Employer or his representative at or before the end of the week following that in which the work has been executed. The measurement and valuation in respect of the Contract shall be completed within the "period of final measurements" stated in the Appendix or if not stated then within 6 months of the completion of the Contract works as defined in Clause 23 hereof.

21) Where in any Certificate (of which the Contractor has received payment) the Employer has included the value of any unfixed materials intended for and/or placed on or adjacent to the works, such materials shall become the property of the Employer and they shall not be removed, except for use upon the works, without the written authority of the Employer. The Contractor shall be liable for any loss or damage to such materials.

22) The Employer shall, during the progress of the works, have power to order in writing from time to time, removal from the works within such reasonable time or times as may be specified in the order, of any materials which in the opinion of the Employer are not in accordance with the specification or the instructions of the Employer, the substitution of proper materials, and the removal and proper re-execution of any work executed with materials or workmanship not in accordance with the specification or instructions; and the Contractor shall forthwith carry out such order at his own cost. In case of default on the part of the Contractor to carry out such order, the Employer shall have the power to employ and pay other persons to carry out the same; and all expenses consequent or incidental there to shall be borne by the Contractor, or may be deducted by the Employer from any moneys due or that may become due to the Contractor.

23) Any defects, such as peeling of, fading of paint or other faults which may appear within the "Defects Liability Period" stated in the appendix hereto or, if none stated, then within **12 months** after the virtual completion of the work arising in the opinion of the Employer from materials or workmanship not in accordance with the Contract, shall upon the directions in writing from the Employer, and within such reasonable time as shall be specified therein, be rectified and made good by the Contractor at his own cost and in case of default the Employer may employ and pay other person to rectify and make good such defects, or other faults, and all damages, loss and expenses consequent thereon or incidental thereto shall be made good and borne by the Contractor and such damages, loss and expenses shall be recoverable from him by the Employer or may be deducted from the retention/ earnest money and/or any other amount which may become due to the Contractor or the Employer may in lieu of such amending and making good by the Contractor, deduct from such moneys a sum equivalent to the cost of amending such work. In the event of the

said amount being insufficient, the Employer may recover the balance from the Contractor, together with any expense the Employer may have incurred in connection therewith. Should any defective work have been done or material supplied by any Sub-Contractor employed on the works who has been nominated or approved by the Employer as provided in Clause 15, the Contractor shall be liable to make good in the same manner as if such work or material had been done or supplied by the Contractor and been subject to the provisions of this Clause and Clause 2 hereof.

24) The works shall not be considered as completed until the Bank's Engineer has certified in writing that they have been virtually completed and the Defects Liability Period shall commence from the date of virtual completion mentioned in such certificate.

25) The Contractor shall be responsible for all injury to person, animals or things, and for all structural and decorative damages to property which may arise from the operation or neglect of himself or damages arising from carelessness, accident or any other cause whatever in any way connected with the carrying out of the Contract. This clause shall be held to include, inter alia, any damages to roads, streets, footpaths, bridges or ways as well as all damage caused to buildings and work forming the subject of this Contract, by frost or other inclemency of weather. The Contractor shall indemnify the Employer and hold him harmless in respect of all and any expenses arising from any such injury or damages to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any Acts of Government or otherwise and also in respect of any Award of compensation of damages consequent upon such claims.

The Contractor shall reinstate all damages of every sort mentioned in this Clause, so as to deliver up the whole of the contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property or third parties.

The Contractor shall indemnify the Employer against all claims which may be made against the Employer by any member of the public or other third party in respect of anything which may arise in respect of the works or in consequence thereof and shall at his own expense arrange to effect and maintain, until the virtual completion of the Contract, with an approved office a Policy of Insurance in the joint names of the Employer and the Contractor against such risks and deposit such Policy or Policies with the Employer from time to time during the currency of this Contract. The Contractor shall also similarly indemnify the Employer against all claims which may be made upon the Employer whether under the Workmen's Compensation Act or any other statute in force during the currency of this Contract in respect of any employee of the Contractor or any Sub-Contractor and shall at his own expense effect and maintain, until the virtual completion of the Contract, with an approved office a Policy of Insurance in the joint names of the Employer and the Contractor against such risks and deposit such policy or policies with the Employer from time to time, during the currency of the Contract.

The Contractor shall be responsible for anything which may be excluded from the Insurance Policies above referred to and also for all other damages to any property arising out of or incidental to the negligent or defective carrying out of this Contract. He shall also indemnify the Employer in respect of any costs, charges or expenses arising out of claim or proceedings and also in respect of any award of or compensation of damages arising therefrom.

The Employer shall be at liberty and is hereby empowered to deduct the amount of any damages, compensation, costs, charges and expenses arising or accruing from or in respect of any such claims or damages, from any or all sums due or to become due to the Contractor.

26) The Contractor shall be allowed admittance to the site on the "Date of Commencement" stated in the Appendix, and he shall thereupon and forthwith begin the works and shall regularly proceed with and complete the same (except such painting or other decorative work as the employer may desires to delay) on or before the "Day of Completion" stated in the Appendix subject nevertheless to the provisions for extension of time hereinafter contained.

27) If the Contractor fails to complete the work by the date stated in the Appendix or within any extended time under Clause 28 hereof the Contractor shall pay or allow the Employer the sum named in the Appendix as "Liquidated Damages" and the Employer may deduct such damages from any moneys due to the Contractor.

28) If in the opinion of the Employer the works be delayed (a) by force majeure or (b) by reason of any exceptionally inclement weather or (c) by reason of proceedings taken or threatened by or dispute with adjoining or neighbouring owners or public authorities arising otherwise than through the Contractor's own default or (d) by the works or delays of other Contractors or Tradesman engaged or nominated by the Employer and not referred to in the Schedule or Quantities and/or Specification or (e) by reason of civil commotion or workmen on strike or lockout affecting the execution of the work, the Employer may make a fair and reasonable extension of time for completion of the Contract works. In case of such strike or lock-out the Contractor shall as soon as may be, give written notice thereof to Employer, but the Contractor shall nevertheless constantly use his endeavours to prevent delay and shall do all that may reasonably be required to the satisfaction of the Employer to proceed with work.

29) If the Contractor after receipt of written notice from the Employer requiring compliance within ten days fails to comply with such instructions the Employer may employ and pay other person to execute any such work whatsoever that may be necessary to give effect thereto, and all costs incurred in connection therewith shall be recoverable from the Contractor by the Employer on the Certificate of the Bank's Engineer as a debt or may be deducted by him from any moneys due or to become due to the Contractor.

30) If the Contractor being an individual or a firm commits any "act of insolvency" or shall be adjudged an insolvent or being an Incorporated Company shall have an order for compulsory winding up made against it or pass an effective resolution for winding up voluntarily or subject to the supervision of the Court and of the Official Assignee of the Liquidator in such acts of insolvency or winding up shall be unable within seven days after notice to him requiring him to do so to show to the reasonable satisfaction of the Employer that he is able to carry out and fulfil the Contract and to give security therefor, if so required by Employer.

OR if the Contractor (whether an individual, firm or Incorporated Company) shall suffer execution to be issued.

OR shall suffer any payment under this Contract to be attached by or on behalf of any of the creditors of the Contractor,

OR shall assign or sublet this Contract without the consent in writing of the Employer first obtained.

OR shall charge or encumber this Contract or any payment due or which may become due to the Contract or thereunder.

OR if the Contractor

I. has abandoned the Contract, or

ii. has failed to commence the works, or has without any lawful excuse under these Conditions suspended the progress of the works for 14 days after receiving from the Employer Notice to proceed, or

iii. has failed to proceed with the works with such due diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or

iv. has failed to remove materials from the site or to pull down and replace work for seven days after receiving from the Employer written notice that the said materials or work were condemned and rejected by the Employer under these Conditions, or

v. has neglected or failed persistently to observe and perform all or any of the acts, matters or things by this Contract to be observed and performed by the Contractor within seven days after written notice shall have been given to the Contractor requiring the Contractor to observe or perform the same, or

vi. has in defiance of the Employer's instructions sublet any part of the Contract.

Then and in any of the said cases the Employer may notwithstanding any previous waiver after giving seven days' notice in writing to the Contractor, determine the Contract. And further, the Employer by his Agents or servants may enter upon and take possession of the works and all plant, tools, scaffoldings, sheds, machinery steam and other power utensils and material lying upon the premises or the adjoining lands or roads, and use the same as his own property or may employ the same by means of his own servants and workmen in carrying on and completing the work or by employing any other Contractors or other person or persons to complete the works and the Contractor shall not in anyway interrupt or do any act, matter or thing to prevent or hinder such other Contractor or other person or persons employed for completing and finishing or using the materials and plant for the works. When the works shall be completed the Employer shall give a notice in writing to the Contractor to remove his surplus materials and plants and should the Contractor fail to do so within a period of 14 days after receipt thereof by him the Employer shall sell the same by public auction, and shall give, credit to the Contractor for the amount realised.

31) The Contractor shall be paid by the Employer from time to time by installments on account of the works executed when in the opinion of the Employer work to the approximate value named in the Appendix as "Value of work for interim Payments" (or less at the reasonable discretion of the Employer) has been executed in accordance with this Contract subject however, to a retention of the percentage of such value named in the Appendix hereto as "Retention percentage for Interim Payments" until the total amount retained shall reach the sum named in the Appendix as "total Retention Money" after which time the installments shall be up to the full value of the work subsequently so executed and fixed in the Building. And the Contractor shall be entitled to the payment of the Final Balance in accordance with the Final Certificate to be issued in writing by the Bank's Engineer at the expiration of the period referred to as "the Defects Liability period" in the Appendix hereto from the date of Virtual Completion or as soon after the expiration of such period as the works shall have been finally completed and all defect made good according to the true

intent and meaning thereof whichever shall last happen, provided always that 'on account' payments during the progress of the works or at or after their completion shall not relieve the Contractor from his liability in cases of fraud, dishonesty or fraudulent concealment relating to the works or materials or to any matter dealt with in the Certificate, and in case of all defects and insufficiencies in the works or materials which a reasonable examination would not have disclosed.

The Employer shall have power to withhold any payment if the works or any parts thereof are not being carried out to his satisfaction.

32) The decision, opinion, direction, Certificate (except for payment) of the Employer with respect to all or any of the matters under Clauses insert hereof (which matters are herein referred to as the excepted matters) shall be final and conclusive and binding on the parties hereto and shall be without appeal.

### 33) **ARBITRATION**

If any dispute, difference or question shall at any time arise between the parties as to the construction of this Agreement or concerning anything or as to the rights, liabilities and duties of the parties hereunder except in respect of matters for which it is provided hereunder that the decision of the Employer or its Chief Engineer is final and binding, the same shall be referred to conciliation or arbitration after giving at least 30 days notice in writing to the other (hereinafter referred to as the "Notice for Conciliation/Arbitration") clearly setting out the items of dispute to a Conciliator or Sole Arbitrator who shall be appointed as hereinafter provided. For the purpose of appointing the conciliator or the sole arbitrator referred to above, the Employer shall send to the Contractors within thirty days of the Notice for Conciliation/Arbitration a panel of three names of persons who shall be presently unconnected with the organisation of the Employer or the Contractors.

The Contractors shall on receipt of the names as aforesaid select any one of the persons so named to be appointed as the Conciliator or Sole Arbitrator, as the case may be, and communicate his name to the Employer within 15 days of receipt of the names. The Employer shall thereupon without any delay appoint the said person as the Conciliator or the Sole Arbitrator.

If the Employer fails to send to the Contractor the panel of three names as aforesaid within the period specified, the Contractor shall send to the Employer a panel of three names of persons who shall be unconnected with either party. The Employers shall on receipt of the names as aforesaid, select anyone of the persons and appoint him as the Conciliator or the Sole Arbitrator. If the Employer fails to select the person and appoint him as the Conciliator or Sole Arbitrator within 30 days of receipt of the panel and inform the Contractor accordingly, the Contractor shall be entitled to appoint one of the persons from the panel as Conciliator or the Sole Arbitrator and communicate his name to the Employer.

If the person so appointed is unable or unwilling to act or refuses his appointment or vacates his office due to any reason whatsoever another person shall be appointed as aforesaid.

The conciliation/Arbitration shall be governed by the Conciliation and Arbitration Act, 1996 as in force from time to time. Where the parties do not agree with the Conciliator and appoint an Arbitrator(s) the award of the Arbitrator(s) shall be binding and final on the parties. It is hereby

agreed that in all disputes referred to the Arbitration, the Arbitrator shall give a separate award in respect of each dispute or difference, in accordance with the terms of reference and the award shall be a reasoned award.

The fees, if any, of the Conciliator or the Arbitrator shall initially be paid in equal proportion by each of the parties.

The cost of the Conciliation/Arbitration including the fees, if any, of the Conciliator or the Arbitrator shall be directed to be finally borne and paid by such party or parties to the dispute in such manner or proportion as may be directed by the Conciliator or the Arbitrator as the case may be in the award.

The Employer and the Contractor also hereby agree that the Arbitration under this clause shall be a condition precedent to any right of action under the contract with regard to the matters hereby expressly agreed to be so referred to arbitration.

34) The Employer shall have a right to cause a technical examination of the works and the final bill of the Contractor including all supporting vouchers abstracts etc. to be made at the time of payment of the final bill, if as a result of this examination or otherwise any sum is found to have been overpaid or over certified, it shall be lawful for the Employer to recover the sum.

35) If, for any reason, the Employer is obliged, by virtue of the provisions of sub-section(1) of Section 12 of the workmen's Compensation Act, 1923 to pay compensation to a workman employed by the Contractor, in execution of the works, the Employer will recover such amount or any part thereof by deducting it from the security deposit or from any sum due by the Employer to the Contractor under this contract or otherwise. The Employer shall not be bound to contest any claim made against it under subsection (1) of Section 12 of the said Act, except on the written request of the contractor and upon his giving to the Employer full security for all cost for which the Employer might become liable in consequence of contesting such claim.

36) Without prejudice to any of the rights of remedies under this contract, if the contractor dies, the Employer shall have the option of terminating the contract without compensation to the Contractor.

#### **Excepted Matters**

37) The decision of the Employer in respect of conditions described in para 2, para 4, para 11, para 15, para 23, para 28, schedule of quantities, rates and percentage approved by bank shall be final and binding on the contractor. These matters will not be subject of arbitration under any circumstances.

**APPENDIX**

**SCHEDULE OF FISCAL ASPECTS**

<b>S.No.</b>	<b>Items</b>	<b>Particulars</b>
1	Earnest Money Deposit	<b>Rs.18,000/-</b> (Rupees Eighteen Thousand only) to be deposited with tender
2	Possession of site	Immediately on award of work
3	Time of completion	Within 90 days from the date of the site is handed over or from the 10th day of the work order to commence work is issued whichever is later
4	Liquidated damages	0.25% of the contract value per week subject to a maximum of 5% of value of contract
5	Minimum value of work for interim bill	Rs.3,00,000.00 (Rupees Three Lakh only)
6	Payment of interim bill	Within one month from the date of receipt of bill
7	Payment of final bill	Within three months from the date of receipt of bill
8	Minimum interval between submission of interim bills	30 (thirty) days
9	Retention money/security deposit bills	05 (Five) percent of value of work shown in bills
10	Release of retention money	Subject to what is stated in Clause 23, the retention amount shall be refunded after twelve months from the date of virtual completion
11	Defects liability period	12 (Twelve) months from the date of virtual completion
12	<b>Insurance Policies</b>	
a)	Workmen Compensation Policy	As per Workmen Compensation Act
b)	Third Party liability policy	Sum Assured minimum Rs.2 lakh
c)	Works insurance	Sum Assured : 125% of contract value
d)	Duration of the above policies	From date of commencement of work to end of Defect Liability Period
13	Indemnity Bond	To be furnished on non-judicial stamp paper of Rs.100/-

**EMPLOYER**

**CONTRACTOR**

## SPECIFICATIONS

### General

I. The entire repainting work shall be done in first-class manner. The Contractor shall use ready made paints of best quality and of approved manufacturers such as Shalimar Paints, Berger, Jenson & Nicholson, British Paints, Garware Paints, Goodlass Nerolac, Asian Paints, I.C.I. paints, sigma paints, Bombay Paints, Killick Nixon Co. etc. of appropriate grade as per CPWD Specifications. The Contractor will not be permitted to carry out any mixing at site except for addition of thinners for thinning the paint which shall be carried out in the presence of Employer staff. **The contractor shall deposit with the Bank's Engineer at his own cost, sample of paints for approval prior to commencement of work. The colour shades of the paint approved by the Bank's competent authority only shall be used. For outside painting, sample area shall be prepared and the shall be got approved by the Bank's Engineer.**

ii. Rates shall be inclusive of doing plaster patch work (not exceeding 0.1 sq.m. for each patch) and also making up the broken edge of walls, columns, beams, sills, ceilings, etc. so as to match the existing surface.

iii. Special care shall be taken by providing suitable covers tarpaulins etc. to prevent dust nuisance and for protecting furniture and costly equipment from stains. The work shall be carried out without any inconvenience to the occupants. The rates quoted shall include covering of furnitures and for handling and re-arranging the furniture etc. and any damage to property caused by the Contractor, shall be made good by the Contractor at his cost. The internal painting work in residential buildings, shall be done in sequence to complete all works required to be done, in shortest time as possible, in each flat. The Contractor has to wash and clean the floors after his work in that area has been completed.

iv. Surface prepared for painting shall be got approved from Bank's Engineer before proceeding with painting work. Similarly, work for each coat shall also be got approved from the Bank's Engineer before proceeding to next coat.

v. No further coat shall be applied, till previous coat has completely dried.

vi. Additional coats shall have to be given without any extra cost, if instructed by the Bank's Engineer, over and above the number of coats prescribed till the surface presents smooth and uniform finish.

vii. After day's work is over, stains of paint over floor, fittings, furniture, glass panes etc. shall be thoroughly removed.

viii. The contract should include the cost of erecting scaffoldings for painting the building from inside and outside, centering, hire charges for any tools, materials, labors, marking out and clearing of site, etc.

ix. Care should be taken to paint electric wirings on batten for which no extra payment will be made.

## Mode of Measurements

All measurements shall be in metric units. Length and breadth to be measured correct to a centimeter. Deductions in measurements to be regulated as follows:

FOR WHITE-WASH, COLOUR-WASH OIL BOUND DISTEMPER Oil Paints, Snowcem, French Polish and Flat Paint/Plastic Emulsion Paint.

- a. No deduction shall be made for opening less than 0.5 sq.m. and no addition made for jambs, sills, reveals therein etc.
- b. Openings exceeding 0.5 sq.m. shall be deducted for doors, windows, ventilators openings etc by half on either side if reveals are there

## **CO-EFFICIENTS TO BE APPLIED TO OTHER SURFACES TO GET PLAIN AREAS OF PAINTING**

### a) Measured flat including frame

- |    |   |                      |
|----|---|----------------------|
| 1. | Panelled doors and windows etc.                                     | 1.3 (for each side)  |
| 2. | Flush doors   | 1.2 (for each side)  |
| 3. | Fully glazed doors and windows etc.                                 | 0.8 (for each side)  |
| 4. | Carved or enriched work   | 2 (for each side)    |
| 5. | Partly, panelled and partly glazed<br>Doors, windows and partitions | 2 (for both side)    |
| 6. | Fully ventilated or louvered<br>(not with glazing)                  | 1.8 (for each side)  |
| 7. | Low railing with vertical balustrade<br>and bracing                 | 0.50 (for each side) |

### b) Steel doors, windows etc. (Measured flat including frame)

- |    |   |                                 |
|----|---|---------------------------------|
| 1. | Plain sheet doors and windows                                     | 1.10 (for each side)            |
| 2. | Fully glazed doors and windows                                    | 1.5 (for both side)             |
| 3. | Collapsible gates, steel gates,<br>railings etc.                  | 1.10<br>(for painting all over) |
| 4. | Rolling shutters  | 1.00 (for each side)            |
| 5. | Partly glazed & partly panelled/<br>louvered doors and windows    | 2.00 (for both sides)           |
| 6. | M.S. Grill/W.I. Grill and expand<br>metal/weld mesh/crimpnef mesh | 2.00 (for both sides)           |

### c) General Work

- |  |                                 |
|--|---------------------------------|
| Expanded metal, grills,<br>gratings etc. | 1.00<br>(for painting all over) |
|--|---------------------------------|

## **Specification Index**

NB1	Repairs to Plaster
NB2	White Washing with Lime :
NB5	Acrylic distemper :
NB6	Cement Primer Coat:
NB7	Cement paint:
NB8	Painting :
NB9	Painting priming coat on wood, iron or plastered surfaces :
NB11	Painting with Synthetic enamel paint :
NB12	Painting with Anticorrosive Bitumastic paint :
NB15	Cement Plastering :

### **NB1 : Repairs to Plaster**

NB1.0 The work includes cutting the patch and preparing the wall surface. Patches of 2.50 square meters and less in area shall be measured under item of 'Repairs to Plaster' under this sub-head.

#### **NB1.1 : Scaffolding**

Scaffolding as required for the proper execution of the work shall be erected. If work can be done safely with the ladder or jhoola these will be permitted in place of scaffolding.

#### **NB1.2 : Cutting**

The mortar of the patch, where the existing plaster has cracked, crumbled or sounds hollow when gently tapped on the surface, shall be removed. The patch shall be cut out to a square or rectangular shape at position marked on the wall as directed by the Employers Engineer. The edges shall be slightly under cut to provide a neat joint.

#### **NB1.3 : Preparation of Surface**

The masonry joints which become exposed after removal of old plaster shall be raked out to a minimum depth of 10 mm in the case of brick work and 20 mm in the case of stone work. The raking shall be carried out uniformly with a raking tool and not with a basuli, and loose mortar dusted off. The surface shall then be thoroughly washed with water, and kept wet till plastering is commenced.

In case of concrete surfaces projecting burrs of mortar formed due to the gaps at joints in shuttering shall be removed. The surface shall be scrubbed clean with wire brushes. In addition concrete surfaces to be plastered shall be pock marked with a pointed tool, at being made not less than 3 mm deep. This is to ensure a proper key for the plaster. The mortar shall be washed off and surface cleaned of all oil, grease etc and well wetted before the plaster is applied.

#### **NB1.4 : Application of Plaster**

Mortar of specified mix with the specified sand shall be used. The method of application shall be as described for single coat plaster work of the specified mix and under item "cement plaster". The surface shall be finished even and flush and matching with the old surrounding plaster. All rounding necessary at junctions of walls, ceilings etc. shall be carried out in a tidy manner as specified in item "cement plaster".

All dismantled mortar etc. shall be disposed of as directed by the Engineer-in-charge.

### **NB1.5 : Protective Measure**

Doors, windows, floors, articles of furniture etc. and such other parts of the building shall be protected from being splashed upon. Splashings and droppings, if any, shall be removed by the contractor at his own cost and the surface cleaned. Damages, if any, to furniture or fittings, and fixtures shall be recoverable from the contractor.

### **NB1.6 : Curing**

Curing shall be done as for plaster work with special reference to the particular type of plaster mix as described under Item 'Cement plaster'.

### **NB1.7 : Finishing**

After the plaster is thoroughly cured and dried the surface shall be white washed or colour washed to suit the existing finishing as required unless specified otherwise.

### **NB1.8 : Measurements**

Length and breadth shall be measured correct to a cm. The area shall be calculated in square meter correct to two places of decimal. Patches below 0.05 square meter in area shall not be measured for payment.

Pre measurements of the patches to be plastered shall be recorded after the old plaster has been cut and wall surface prepared.

### **NB1.9 : Rate**

The rate includes the cost of all the materials and labour involved in all the operations described above including lead for disposal of old dismantled plaster.

## **NB2 : White Washing with Lime**

### **NB2.1 : Scaffolding**

**NB2.1.1** \_\_\_\_\_ Wherever scaffolding is necessary, it shall be erected on double supports tied together by horizontal pieces, over which scaffolding planks shall be fixed. No ballies, bamboos or planks shall rest on or touch the surface which is being white washed.

**NB2.1.2** \_\_\_\_\_ For all exposed brick work or tile work, double scaffolding having two sets of vertical supports shall be provided. The supports shall be sound and strong, tied together with horizontal pieces over which scaffolding planks shall be fixed.

**Note** : In case of special type of brick work, scaffolding shall be got approved from Engineer-in-charge in advance.

**NB2.1.3** \_\_\_\_\_ Where ladders are used, pieces of old gunny bags shall be tied on their tops to avoid damage or scratches to walls.

**NB2.1.4** \_\_\_\_\_ For white washing the ceiling, proper stage scaffolding shall be erected.

### **NB2.2 : Preparation of Surface**

Before new work is white washed, the surface shall be thoroughly brushed free from mortar droppings and foreign matter.

In case of old work, all loose particles and scales shall be scrapped off and holes in plaster as well as patches of less than 50 cm area shall be filled up with mortar of the same mix. Where so specifically ordered by the Engineer-in-charge, the entire surface of old white wash shall be thoroughly removed by scrapping and this shall be paid for separately. Where efflorescence is observed the deposits may be brushed clean and washed. The surface shall then be allowed to dry for at least 48 hours before white washing is done.

### **NB2.3 : Preparation of Lime wash**

**NB2.3.1** The lime wash shall be prepared from fresh stone white lime (narnaul or Dehradun quality). The lime shall be thoroughly slaked on the spot, mixed and stirred with sufficient water to make a thin cream. This shall be allowed to stand for a period of 24 hours and then shall be screened through a clean coarse cloth. 40 gm of gum dissolved in hot water, shall be added to each 10 cubic decimeter of the cream. The approximate quantity of water to be added in making the cream will be 5 litres of water to one kg of lime.

**NB2.3.2** Indigo (Neel) upto 3 gm per kg of lime dissolved in water, shall then be added and stirred well. Water shall then be added at the rate of about 5 litres per kg. Of lime to produce a milky solution.

### **NB2.4 : Application**

**NB2.4.1** The white wash shall be applied with moonj brushes to the specified number of coats. The operation for each coat shall consist of a stroke of the brush given from the top downwards, another from the bottom upwards over the first stroke, and similarly one stroke horizontally from the right and another from the left before it dries.

**NB2.4.2** Each coat shall be allowed to dry before the next one is applied. Further each coat shall be inspected and approved by the Engineer-in-charge before the subsequent coat is applied. No portion of the surface shall be left out initially to be patched up later on.

**NB2.4.3** For new work, three or more coats shall be applied till the surface presents a smooth and uniform finish through which the plaster does not appear. The finished dry surface shall not show any signs of cracking and peeling nor shall it come off readily on the hand when rubbed.

**NB2.4.4** For old work, after the surface has been prepared as described in para NB2.2 a coat of white wash shall be applied over the patches and repairs. Then a single coat or two or more coats of white wash as stipulated in the description of the item shall be applied over the entire surface. The white washed surface should present a uniform finish through which the plaster do not appear. The washing on ceiling should be done prior to that on walls.

**Note** : In case of Hessian ceiling, on no account, lime shall be used as it rots cloth and hessian.

### **NB2.5 : Protective Measures**

Doors, windows, floors, articles of furniture etc. and such other parts of the building not to be white washed, shall be protected from being splashed upon. Splashings and droppings, if any shall

be removed by the contractor at his own cost and the surfaces cleaned. Damages if any to furniture or fittings and fixtures shall be recoverable from the contractor.

**NB2.6 : Measurements**

**NB2.6.1** Length and breadth shall be measured correct to a cm. and area shall be calculated in sqm corrected to two places of decimals.

**NB2.6.2** Measurements for Jambs, Soffits and fills etc., for openings shall be as described in NB15.8.

**NB2.6.3** Corrugated surfaces shall be measured flat as fixed and the area so measured shall be increased by the following percentages to allow for the girthed area.

Corrugated asbestos cement sheet	20%
Semi corrugated asbestos cement sheet	10%

**NB2.6.4** Cornices and other such wall or ceiling features, shall be measured along the girth and included in the measurements.

**NB2.6.5** The number of coats of each treatment shall be stated. The item shall include removing nails, making good holes, cracks, patches etc. not exceeding 50 sq.cm each with material similar in composition to the surface to be prepared.

**NB2.6.6** Work on old treated surfaces shall be measured separately and so described.

**NB2.7 : Rate**

The Rate shall include all material and labour involved in all the operations described above.

**NB5 : Acrylic Washable Distempering**

**NB5.1 : Materials**

Acrylic washable distemper of approved brand and manufacture shall be used. The primer where used as on new work shall be cement primer or distemper primer as described in the item. These shall be of the same manufacture as distemper. The distemper shall be diluted with water or any other prescribed thinner in a manner recommended by the manufacturer. Only sufficient quantity of distemper, required for day's work shall be prepared.

The distemper and primer shall be brought by the contractor in sealed tins in sufficient quantities at a time to suffice for a fortnight's work, and the same shall be kept in the joint custody of the contractor and the Engineer-in-charge. The empty tins shall not be removed from the site of work, till this item of work has been completed and passed by the Engineer-in-charge.

**NB5.2 : Preparation of Surface**

**NB5.2.1** For new work the surface shall be thoroughly cleaned of dust, old white or colour wash by washing and scrubbing. The surface shall then be allowed to dry for at least 48 hours. It shall then be sand papered to give a smooth and even surface. Any unevenness shall be made good by applying putty, made of plaster of paris mixed with water on the entire surface including filling up the undulations and then sand papering the same after it is dry.

**NB5.2.2** In the case of old work, all loose pieces and scales shall be removed by sand papering. The surface shall be cleaned of all grease, dirt etc.

Pitting in plaster shall be made good with plaster of paris mixed with the colour to be used. The surface shall then be rubbed down again with a fine grade sand paper and made smooth. A coat of the distemper shall be applied over the patches. The patches surface shall be allowed to dry thoroughly before the regular coat of distemper is applied.

### **NB5.3 : Application**

#### **NB5.3.1 : Priming Coat**

The priming coat shall be with distemper primer or cement primer, as required in the description of the item. The application of the distemper primer shall be as described in NB5.2.2.

#### **Note**

If the wall surface plaster has not dried completely, cement primer shall be applied before distemping the walls. But if distemping is done after the wall surface is dried completely, distemper primer shall be applied.

Acrylic washable distemper is not recommended to be applied, within six months of the completion of wall plaster. However, newly plastered surfaces if required to be distemped before a period of six months shall be given a coat of alkali resistant priming paint conforming to IS : 109 and allowed to dry for atleast 48 hours before distemping is commenced.

#### **NB5.3.2 : Distemper Coat**

For new work, after the primer coat has dried for at least 48 hours, the surface shall be lightly sand papered to make it smooth for receiving the distemper, taking care not to rub out the priming coat. All loose particles shall be dusted off after rubbing. One coat of distemper properly diluted with thinner (water or other liquid as stipulated by the manufacturer) shall be applied with brushes in horizontal strokes followed immediately by vertical ones which together constitutes one coat.

The subsequent coats shall be applied in the same way. Two or more coats of distemper as are found necessary shall be applied over the primer coat to obtain an even shade. A time interval of at least 24 hours shall be allowed between successive coats to permit proper drying of the preceding coat.

For old work the distemper shall be applied over the prepared surface in the same manner as in new work. One or more coats of distemper as are found necessary shall be applied to obtain an even and uniform shade.

15 cm double bristled distemper brushes shall be used. After each days work, brushes shall be thoroughly washed in hot water with soap solution and hung down to dry. Old brushes which are dirty and caked with distemper shall not be used on the work.

**NB5.4** The specifications in respect of scaffolding, protective measures and measurements shall be as described under NB2

**NB5.5 : Rate**

The rate shall include the cost of all labour and materials involved in all the above operations (including priming coat) described above.

**NB6 : Cement Primer Coat**

**NB6.0** Cement primer coat is used as a base coat on wall finish of cement, lime or lime cement plaster or on asbestos cement surfaces before oil emulsion distemper paints are applied on them. The cement primer is composed of a medium and pigment which are resistant to the alkalies present in the cement, lime or lime cement in wall finish and provides a barrier for the protection of subsequent coats of oil emulsion distemper paints.

Primer coat shall be preferably applied by brushing and not by spraying. Hurried priming shall be avoided particularly on absorbent surfaces. New plaster patches in old work should also be treated with cement primer before applying oil emulsion paints etc.

**NB6.1 : Preparation of the Surface**

The surface shall be thoroughly cleaned of dust, old white or colour wash by washing and scrubbing. The surface shall then be allowed to dry for at least 48 hours. It shall then be sand papered to give a smooth and even surface. Any unevenness shall be made good by applying putty, made of plaster of paris mixed with water on the entire surface including filling up the undulations and then sand papering the same after it is dry.

**NB6.1.1 : Application**

The cement primer shall be applied with a brush on the clean dry and smooth surface. Horizontal strokes shall be given first and vertical strokes shall be applied immediately afterwards. This entire operations will constitute one coat. The surface shall be finished as uniformly as possible leaving no brush marks. It shall be allowed to dry for at least 48 hours, before oil emulsion paint is applied.

**NB6.3** The specifications in respect of scaffolding, protective measures, measurements and rate shall be described under NB2.

**NB7 : Cement paint****NB7.1 : Material**

The cement paint shall be (conforming to IS:5410) of approved brand and manufacture. The cement paint shall be brought to the site of work by the contractor in its original containers in sealed condition. The material shall be brought in at a time in adequate quantities to suffice for the whole work or at least a fortnight's work. The materials shall be kept in the joint custody of the Contractor and the Engineer-in-charge. The empties shall not be removed from the site of work till the relevant item of the work has been completed and permission obtained from the Engineer-in-charge.

**NB7.2 : Preparation of Surface**

**NB7.1** For New work, the surface shall be thoroughly cleaned of all the mortar dropping, dirt dust, algae, grease and other foreign matter by brushing and washing. Pitting in plaster shall be made good and a coat of water proof cement paint shall be applied over patches after wetting them thoroughly.

### **NB7.3 : Preparation of Mix**

Cement paint shall be mixed in such quantities as can be used up within an hour of its mixing as otherwise the mixture will set and thicken, affecting flow and finish. Cement paint shall be mixed with water in two stages. The first stage shall comprise of 2 parts of cement paint and one part of water stirred thoroughly and allowed to stand for 5 minutes. Care shall be taken to add the cement paint gradually to the water and not vice versa. The second stage shall comprise of adding further one part of water to the mix and stirring thoroughly to obtain a liquid of workable and uniform consistency. In all cases the manufacturers' instructions shall be following meticulously.

The lids of cement paint drums shall be kept tightly closed when not in use, as by exposure to atmosphere the cement paint rapidly becomes air set due to its hygroscopic qualities.

In case of cement paint brought in gunny bags, once the bag is opened, the contents should be consumed in full on the day of its opening. If the same is not likely to be consumed in full, the balance quantity should be transferred and preserved in an airtight container to avoid its exposure to atmosphere.

### **NB7.4 : Application**

**NB7.4.1** \_\_\_\_\_ The solution shall be applied on the clean and wetted surface with brushes or spraying machine. The solution shall be kept well stirred during the period of application. It shall be applied on the surface which is on the shady side of the building so that the direct heat of the sun on the surface is avoided. The method of application of cement paint shall be as per manufacturer's specification. The completed surface shall be watered after the day's work.

**NB7.4.2** \_\_\_\_\_ The second coat shall be applied after the first coat has been set for at least 24 hours. Before application of the second or subsequent coats, the surface of the previous coat shall not be wetted.

**NB7.4.3** \_\_\_\_\_ For new work, the surface shall be treated with three or more coats of water proof cement paint as found necessary to get a uniform shade.

**NB7.4.4** \_\_\_\_\_ For old work, the treatment shall be with one or more coats as found necessary to get a uniform shade.

### **NB7.5 : Precaution**

Water proof cement paint shall not be applied on surfaces already treated with white wash, colour wash, distemper dry or oil bound, varnishes, paints etc. It shall not be applied on gypsum's, wood and metal surfaces.

**NB7.6** The specifications in respect of scaffolding, protective measures, measurements and rate shall be as described under NB2.

### **NB8 : Painting**

#### **NB8.1 : Materials**

Paints, oils varnishes etc. of approved brand and manufacture shall be used. Only ready mixed paint (exterior grade) as received from the manufacturer without any admixture shall be used.

If for any reasons, thinning is necessary in case of ready mixed paint, the brand of thinner recommended by the manufacturer or as instructed by the Engineer-in-charge shall be used.

Approved paints, oil or varnishes shall be brought to the site of work by the Contractor in their original containers in sealed condition. The material shall be brought in at a time in adequate quantities to suffice for the whole work or at least of fortnight's work. The materials shall be kept in the joint custody of the contractor and the Engineer-in-charge. The empties shall not be removed from the site of work, till the relevant item of work has been completed and permission obtained from the Engineer-in-charge.

### **NB8.2 : Commencing Work**

Painting shall not be started until the Engineer-in-charge has inspected the items of work to be painted, satisfied himself about their proper quality and given his approval to commence the painting work. Painting of external surface should not be done in adverse weather condition like hail storm and dust storm.

Painting, except the priming coat, shall generally be taken in hand after practically finishing all other building work.

The rooms should be thoroughly swept out the entire building cleaned up, at least one day in advance of the paint work being started.

### **NB8.3 : Preparation of Surface**

The surface shall be thoroughly cleaned and dusted off. All rust, dirt, scales, smoke splashes, mortar droppings and grease shall be thoroughly removed before painting is started. The prepared surface shall have received the approval of the Engineer-in-charge after inspection, before painting is commenced.

### **NB8.4 : Application**

**NB8.4.1** Before pouring into smaller containers for use, the paint shall be stirred thoroughly in its containers, when applying also, the paint shall be continuously stirred in the smaller containers so that its consistency is kept uniform.

**NB8.4.2** The painting shall be laid on evenly and smoothly by means of crossing and laying off, the latter in the direction of the grains of wood. The crossing and laying off consists of covering the area over with paint, brushing the surface hard for the first time over and then brushing alternately in opposite direction, two or three times and then finally brushing lightly in a direction at right angles to the same. In this process, no brush marks shall be left after the laying off is finished. The full process of crossing and laying off will constitute one coat.

**NB8.4.3** Where so stipulated, the painting shall be done by spraying, Spray machine used may be (a) high pressure (small air aperture) type, or (b) a low pressure (large air gap) type, depending on the nature and location of work to be carried out. Skilled and experienced workmen shall be employed for this class of work. Paints used shall be brought to the requisite consistency by adding a suitable thinner.

**NB8.4.4** \_\_\_\_\_Spraying should be done only when dry conditions prevails. Each coat shall be allowed to dry out thoroughly and rubbed smooth before the next coat is applied. This should be facilitated by thorough ventilation. Each coat except the last coat, shall be lightly rubbed down with sand paper or fine pumice stone and cleaned off dust before the next coat is laid.

**NB8.4.5** \_\_\_\_\_No left over paint shall be put back into the stock tins. When not in use, the containers shall be kept properly closed.

**NB8.4.6** \_\_\_\_\_No hair marks from the brush or clogging paint puddles in the corners of panels, angles of moldings etc. Shall be left on the work.

**NB8.4.7** \_\_\_\_\_In painting doors and windows, the putty round the glass panes must also be painted but care must be taken to see that no paint stains etc. Are left on the glass. Tops of shutters and surfaces in similar hidden locations shall not be left out in painting. However, bottom edge of the shutters where the painting is not practically possible, need not be done nor any deduction on this account will be done but two coats of primer of approved make shall be done on the bottom edge before fixing the shutters.

**NB8.4.8** \_\_\_\_\_On painting steel work, special care shall be taken while painting over bolts, nuts, rivets overlaps etc.

**NB8.4.9** \_\_\_\_\_The additional specifications for primer and other coats of paints shall be as according to the details specifications under the respective headings.

### **NB8.5 : Brushes and Containers**

After work, the brushes shall be completely cleaned of paint and linseed oil by rinsing with turpentine. A brush in which paint has dried up is ruined and shall on no account be used for painting work. The containers when not in use, shall be kept closed and free from air so that paint does not thicken and also shall be kept safe from dust. When the paint has been used, the containers shall be washed with turpentine and wiped dry with soft clean cloth, so that they are clean, and can be used again.

### **NB8.6 : Measurement**

**NB8.6.1** \_\_\_\_\_The length and breadth shall be measured correct to a cm. The area shall be calculated in sqm (correct to two placed of decimal), except otherwise stated.

**NB8.6.2** \_\_\_\_\_Small articles not exceeding 10 sq. Decimeter (0.1 sqm) of painted surfaces where not in conjunction with similar painted work shall be enumerated.

**NB8.6.3** \_\_\_\_\_Painting upto 10 cm in width or in girth and not in conjunction with similar painted work shall be given in running meters and shall include cutting to line where so required.

### **Note**

Components of trusses, compound girders, stanchions, lattices and similar work shall, however, be given in sq.meters irrespective of the size or girth of members. Priming coat of painting shall be included in the work of fabrication.

**NB8.6.4** In measuring painting, varnishing, oiling etc. Of joinery and steel work etc. The coefficients as indicated in following tables shall be used to obtain the area payable. The coefficients shall be applied to the areas measured flat and not girthed.

## **NB9 : Painting Priming Coat on Wood, Iron or Plastered Surfaces**

### **NB9.1 : Primer**

**NB9.1.1** The primer for wood work, iron work or plastered surface shall be as specified in the description of item.

**NB9.1.2** Primer for plaster/wood work. Iron & Steel/Alluminium surfaces shall be as specified.

**NB9.1.3** The primer shall be ready mixed primer of approved brand and manufacture.

**NB9.1.4** Where primer for wood work is specified to be mixed at site, it shall be prepared from a mixture of red lead, white lead and double boiled linseed oil in the ratio of 0.7 kg : 1 litre.

**NB9.1.5** Where primer for steel work is specified to be mixed at site, it shall be prepared from a mixture of red lead, raw linseed oil and turpentine in the ratio of 2.8 Kg : 1 litre : 1 litre.

**NB9.1.6** The specifications for the base vehicle and thinner for mixed on site primer shall be as follows :

#### **A) White Lead**

The white lead shall be pure and free from adulterants like barium sulphate and whiting. It shall conform to IS:103.

#### **B) Red Lead**

This shall be in powder form and shall be pure and free from adulterants like bricks dust etc. It shall conform to IS:102.

#### **C) Raw Linseed Oil**

Raw linseed oil shall be lightly viscous but clear and of yellowish colour with light brown tinge. Its specific gravity at a temperature of 30 degree C shall be between 0.923 and 0.928.

#### **Note**

The oil shall be mellow and sweet to the taste with very little smell. The oil shall be of sufficiently matured quality. Oil turbid or thick, with acid and bitter taste and rancid odour and which remains sticky for a considerable time shall be rejected. The oil shall conform in all respect to IS:75. The oil shall be of approved brand and manufacture.

#### **D) Double Boiled Linseed Oil**

This shall be more viscous than the raw oil, have a deeper color and specific gravity between 0.931 and 0.945 at a temperature of 30 degree C. It shall dry with a glossy surface. It shall conform in all respects to IS:77. The oil shall be of approved brand and manufacture.

### **Turpentine**

Mineral turpentine i.e. Petroleum distillate which has the same rate of evaporation as vegetable turpentine (distillate product of oleoresin of conifers) shall be used. It shall have no grease or other residue when allowed to evaporate. It shall conform to IS:533.

NB9.1.7 All the above materials shall be of approved manufacture and brought to site in their original packing in sealed condition.

## **NB9.2 : Preparation**

### **NB9.2.1 : Wooden Surface**

The wood work to be painted shall be dry and free from moisture.

The surface shall be thoroughly cleaned. All unevenness shall be rubbed down smooth with sand paper and shall be well dusted. Knots, if any shall be covered with preparation of red lead made by grinding red lead in water and mixing with strong glue sized and used hot. Appropriate filler material conforming to IS: 345 with same shade as paint shall be used where specified. The surface treated for knotting shall be dry before paint is applied. After obtaining approval of Engineer-in-charge for wood work, the priming coat shall be applied before the wood work is fixed in position. After the priming coat is applied, the holes and indentation on the surface shall be stopped with glazier's putty or wood putty respectively. Stopping shall not be done before the priming coat is applied as the wood will absorb the oil in stopping and the latter is liable to crack.

### **NB9.2.2 : Iron & Steel Surface**

All rust and scales shall be removed by scrapping or by brushing with steel wire brushes. Hard skin of oxide formed on the surface of wrought iron during rolling which becomes loose by rusting, shall be removed.

All dust and dirt shall be thoroughly wiped away from the surface.

If the surface is wet, it shall be dried before priming coat is undertaken.

### **NB9.2.3 : Plastered Surface**

The surface shall ordinarily not be painted until it has dried completely. Trial patches of primer shall be laid at intervals and where drying is satisfactory, painting shall then be taken in hand. Before primer is applied, holes and undulations, shall be filled up with plaster of paris and rubbed smooth.

## **NB9.4 : Treatment on Steel for Aggressive Environment**

**NB9.4.1** A second coat of ready mixed red oxide zinc chromate primer may be applied where considered necessary in aggressive environment such as near Industrial Establishment and Coastal regions where the steel members are prone to corrosion. The second coat (which shall be paid for separately) is to be applied after placing the member in position and just before applying paint. The second coat of primer is not necessary in case of painting with synthetic enamel paint as it is applied over an under coat of ordinary paint.

**NB9.4.2** The specifications described under NB8 shall hold good so far as they are applicable.

## **NB11 : Painting with Synthetic Enamel Paint**

**NB11.1** Synthetic enamel paint (conforming to IS:2932) of approved brand and manufacture and of the required colour shall be used for the top coat and an undercoat of ordinary paint of shade to match the top coat as recommended by the same manufacture as far the top coat shall be used.

### **NB11.2 : Painting on New Surface**

**NB11.2.1** Preparation of surface shall be as specified in NB10.1.1 (a) or (b) as the case may be.

#### **NB11.2.2 : Application**

The number of coats including the undercoat shall be as stipulated in the item.

##### **A) Under Coat**

One coat of the specified ordinary paint of shade suited to the shade of the top coat, shall be applied and allowed to dry overnight. It shall be rubbed next day with the finest grade of wet abrasive paper to ensure a smooth and even surface, free from brush marks and all loose particles dusted off.

##### **B) Top Coat**

Top coats of synthetic enamel paint of desired shade shall be applied after the undercoat is thoroughly dry. Additional finishing coats shall be applied if found necessary to ensure properly uniform glossy surface.

**NB11.2.3** Other details shall be as specified in NB8 as far as they are applicable.

### **NB11.3 : Painting on Old Surface**

#### **NB11.3.1 : Preparation of Surface**

Where the existing paint is firm and sound it shall be cleaned of grease, smoke etc. And rubbed with sand paper to remove all loose particles dusted off. All patches and cracks shall then be treated with stopping and filler prepared with the specified paint. The surface shall again be rubbed and made smooth and uniform.

If the old paint is blistered and flaked it will be necessary to completely remove the same as described in para NB14. Such removal shall be paid for separately and the painting shall be treated as on new surface.

#### **NB11.3.2 : Painting**

The number of coats of stipulated in the item shall be applied with synthetic enamel paint. Each coat shall be allowed to dry and rubbed down smooth with very fine wet abrasive paper, to get an even glossy surface. If however, the surface is not satisfactory additional coats as required shall be applied to get correct finish.

**NB11.3.3** Other details shall be specified in NB8 as far as they are applicable.

## **NB12 : Painting with Anti-corrosive Bitumastic Paint**

NB12.1 Ready mixed paint (conforming to IS: 158-1981) shall be approved brand and manufacture. It shall be approved brand and manufacture. It shall be black, lead free, acid-alkali-heat-water resistant.

**NB12.2** Preparation of surface and application shall be as specified in NB10 for painting on new or old surfaces as the case may be.

The drying time between consecutive coats, however, shall be not less than 3 hours.

**NB12.3** Other details shall be as specified in NB8 as far as possible.

### **NB15 : Cement Plastering**

NB15.0 The cement plaster shall be 12 mm, 15 mm or 20 mm thick as specified in the item.

#### **NB15.2 : Mortar**

The mortar of the specified mix using the type of sand described in the item shall be used. It shall be as specified in 3.5. For external work and under coat work, the fine aggregate shall conform to grading IV. For finishing coat work the fine aggregate conforming to grading zone V shall be used.

#### **NB15.3 : Application**

Ceiling plaster shall be completed before commencement of wall plaster. Plastering shall be started from the top and worked down towards the floor. All put-log holes shall be properly filled in advance of the plastering as the scaffolding is being taken down. To ensure even thickness and a true surface, plaster about 15 x 15 cm shall be first applied, horizontally and vertically, at not more than 2 metres intervals over the entire surface to serve as gauges. The surfaces of these gauged areas shall be truly in the plane of the finished plaster surface. The mortar shall then be laid on the wall, between the gauges with trowel. The mortar shall be applied in a uniform surface slightly more than the specified thickness. The surface shall be finished off true with trowel or wooden float according as a smooth or a sandy granular texture is required. Excessive troweling or over working the float shall be avoided.

#### **NB15.4 : Thickness**

Where the thickness required as per description of the item is 20 mm the average thickness of the plaster shall not be less than 20 mm whether the wall treated is of brick or stone. In the case of brick work, the minimum thickness over any portion of the surface shall be not less than 15 mm while in case of stone work the minimum thickness over the bushings shall be not less than 12 mm.

#### **NB15.5 : Curing**

Curing shall be started as soon as the plaster has hardened sufficiently not to be damaged when watered.

The plaster shall be kept wet for a period of at least 7 days. During this period, it shall be suitably protected from all damages at the contractor's expense by such means as the Engineer-in-charge may approve. The dates on which the plastering is done shall be legibly marked on the various sections plastered so that curing for the specified period thereafter can be applied.

### **NB15.6 : Finish**

The plaster shall be finished to a true and plumb surface and to the proper degree of smoothness as required. The work shall be tested frequently as the work proceeds with a true straight edge not less than 2.5m long and with plumb bobs. All horizontal lines and surfaces shall be tested with a level and all jambs and corners with a plumb bob as the work proceeds.

### **NB15.7 : Precautions**

Any cracks which appear in the surface and all portions which sound hollow when tapped, or are found to be soft or otherwise defective, shall be cut out in rectangular shape and redone as directed by the Engineer-in-charge.

I. When ceiling plaster is done, it shall be finished to chamfered edge at an angle at its junction with a suitable tool when plaster is begin done. Similarly when the wall plaster is being done, it shall be kept separate from the ceiling plaster by a thin straight groove not deeper than 6 mm drawn with any suitable method with the wall while the plaster is green.

II. To prevent surface cracks appearing between junctions of column/beam and walls, 150 mm wide chicken wire mesh should be fixed with U nails 150 mm centre to centre before plastering the junction. The plastering of walls and beam/column in one vertical plane should be carried out in one go. For providing and fixing chicken wire mesh with U nails payment shall be made separately.

### **NB15.8 : Measurement**

**NB15.8.1** Length and breadth shall be measured correct to a cm and its area shall be calculated in square meters correct to two places of decimal.

**NB15.8.2** Thickness of the plaster shall be exclusive of the thickness of the key i.e. Grooves, or open joints in brick work.

**NB15.8.3** The measurement of wall plaster shall be taken between the walls of partitions (the dimensions before the plaster shall be taken) for the length and from the top of the floor or skirting to the ceiling for the height. Depth of coves or cornices if any shall be deducted.

**NB15.8.4** The following shall be measured separately from wall plaster.

- a. Plaster bands 30 cm wide and under
- b. Cornice beadings and architraves or architraves moulded wholly in plaster.
- c. Circular work not exceeding 6 m in radius.

**NB15.8.5** Plaster over masonry pilasters will be measured and paid for as plaster only.

### **NB15.8.7 : Moulded Cornices and Coves**

A. Length shall be measured at the centre of the girth.

B. Moulded cornices and coves shall be given in square meters the area being arrived at by multiplying length by the girth.

C. Flat or weathered top to cornices when exceeding 15 cm in width shall not be included in the girth but measured with the general plaster work.

D. Cornices which are curved in their length shall be measured separately.

**NB15.8.8** Exterior plastering at a height greater than 10 m from average ground level shall be measured separately in each storey height. Patch plastering (in repairs) shall be measured as

plastering new work, where the patch exceed 2.5 sqm. Extra payment being made for preparing old wall, such as dismantling old plaster, raking out the joints and cleaning the surface. Where the patch does not exceed 2.5 sqm in area it shall be measured under the appropriate item under sub head 'Repairs to Buildings'.

**NB15.8.9** Deductions in measurements, for opening etc. Will be regulated as follows :

A. No deduction will be made for openings or ends of joists, beams, posts, girders, steps etc. upto 0.5 sqm in area and no additions shall be made either, for the jambs, soffits and sills of such openings. The above procedure will apply to both faces of wall.

B. Deduction for opening exceeding 0.5 sqm but not exceeding 3 sqm each shall be made for reveals, jambs soffits sills, sills, etc. of these openings.

I. When both faces of walls are plastered with same plaster, deductions shall be made for one face only.

II. When two faces of walls are plaster with different types of plaster or if one face is plastered and other is pointed or one face is plastered and other is un-plastered, deduction shall be made from the plaster or pointing on the said of the frame for the doors, windows etc. On which width of reveals is less than that on the other side but on deduction shall be made on the other side. Where width of reveals on both faces of wall are equal, deduction of 50% of area of opening of each face shall be made from area of plaster and/or pointing as the case may be.

III. For opening having door frame equal to or projecting beyond thickness of wall, full deduction for opening shall be made from each plastered face of wall.

C) For opening exceeding 3 sqm in area, deduction will be made in the measurements for the full opening of the wall treatment on both faces, while at the same time, jambs, sills and soffits will be measured for payment.

In measurement jambs, sills and soffits, deduction shall not be made for the area in contact with the frame of doors, windows etc.

**NB15.9 : Rate**

The rate shall include the cost of all labour and materials involved in all the operations described above.

## NATIONAL BANK STAFF COLLEGE

### SCHEDULE OF QUANTITIES

#### **Preamble :**

The rates quoted shall include the following :

I. Removal and carting away all the debris from Employer's premises after cleaning the floors etc. with water and removing all paint spots and stains by using any approved paint remover if required to the satisfaction of Employer.

ii. Double scaffolding (Wherever applicable) upto complete height of the building externally and to the floor height in each floor.

iii. All articles or furniture, equipment etc. shall be protected by covering with polythene sheet or tarpaulin etc. and the furniture rearranged and floors cleaned and mopped after the day's work.

iv. The work shall be carried out both during/after working hours and even on holidays if situation so warrants.

v. Painting of hardware fittings wherever directed in case of painting of doors and windows.

vi. Painting all picture hooks, fan hooks, coat hangers, battens, hooks etc.

vii. Curing the items of work involving the use of cement and waterproof paints.

viii. Removal of paint stains on floor, wall, ceilings, glasses etc.

**Schedule of Quantities**

**(Repainting of Academic building, Hostel Blocks, Sub-station, Guard room at National Bank Staff College, Lucknow)**

<b>Sl No</b>	<b>Item description</b>	<b>Qty.</b>	<b>Unit</b>	<b>Rate (Rs.)</b>	<b>Amount (Rs)</b>
1	Removing white wash by scrapping, sand papering and preparing the surface smooth including filling of putty in holes, necessary repairs to scratches etc. complete and White washing with lime & glue to give an even shade on Old work (two or more coats)	3950	Sqm		
2	Removing Oil bound distemper by scrapping, sand papering and preparing the surface smooth including filling of putty in holes, necessary repairs to scratches etc. complete and Distemping with 1st quality Acrylic washable distemper of approved brand and manufacture desired colour to give and even shade - two or more coats over and including priming coat with cement primer.	11400	Sqm		
3	Removing cement paint by scrapping, sand papering and preparing the surface smooth including filling of putty in holes, necessary repairs to scratches etc. complete and Finishing walls with water proofing cement paint on old work (one or more coats applied @ 2.20 kg/ 10 sqm.) over priming coat applied @ 0.80 lts./ 10 sqm complete including cost of priming coat	3500	Sqm		
4	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade one or more coats an old work	5725	Sqm		
5	Finishing walls with Textured exterior paint 'Sandtex Matt' of M/s Snowcem India Ltd. or equivalent of required shade on old work (two or more coats on existing cement paint surface applied @ 3.28 Lt. /10 sqm.	1300	Sqm		
6	Repairs to plaster of thickness 12mm to 20 mm in patches including cutting the patch in proper shape and preparing & plastering the surface of the walls including provision of chicken mesh complete and disposal of rubbish as directed by the Employer - With 1:4 cement mortar (1 cement : 4 coarse sand)	100	Sqm		

SI No	Item description	Qty.	Unit	Rate (Rs.)	Amount (Rs)
7	Painting (one or more coats) on rain water, soil, waste & vent, pipes, fittings, hand railing with synthetic enamel paint of approved brand & manufacture and required colour on old work, including preparation of surface etc. Complete.	650	Runni ng Metre		
8	<b>TOTAL</b>				

SIGNATURE OF THE TENDERER AND SEAL OF THE FIRM

**DATE:**

**PLACE:**

**NOTE : TENDERER SHOULD QUOTE RATES & AMOUNT BOTH IN WORDS & FIGURE**  
Approved Makes for Paint : Berger / Asian / Nerolac / ICI , Cement Paint : Snowcem