Dr. SUDHA SESHAYYAN, M.S.,
REGISTRAR (FAC). **Ph.No.22353572**

Rc.No.SI(1)/40580/2011 **Dated: 12.10.2011.**

TENDER NOTICE No. SI(1)/40580/2010.

The Registrar(FAC) The Tamil Nadu Dr. M.G.R. Medical University, Chennai -32, invites Tender for the work of Construction of Fourth Floor and Fifth Floor ('B' Block) over the Existing Administrative Building in the Rear Wing of this University.

SL.No.	Name of the Work	EMD AMOUNT	COST OF TENDER FORM
1.	Construction of Fourth Floor and Fifth Floor ('B' Block) over the Existing Administrative Building in the Rear Wing of this University **VAT @ 4%**	Rs. 1,96,000.00	Rs. 15,000.00 750.00
Total		Rs.1.96,000.00	Rs.15,750.00

1.	Date of issue of Tender Form from	24.10.2011
2.	The last date for the issue of Tender Form	09.11.2011
3.	The last date and time of receipt of Tender Form	10.11.2011 4.00 P.M.
4.	Date and time of opening of tenders	10.11.2011 5.00 P.M.

The cost of tender document is to be paid in the form of demand draft on any Nationalized Bank drawn in favour of the Registrar , The Tamil Nadu Dr. M.G.R. Medical University, Chennai. The Tender document can be obtained from the Registrar (FAC), The Tamil Nadu Dr. M.G.R. Medical University at the above address between 11.00 a.m and 4.00 p.m. on any working days from **24.10.2011** on requisition in writing along with a demand draft towards the cost of Tender document. The Registrar (FAC) reserves the right to reject or cancel any or all the tenders received without assigning any reasons. The Tender document can be down loaded from the University Website www.tnmgrmu.ac.in and www.tenders tn gov.in

For REGISTRAR(FAC)

THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY, CHENNAI 600 032.

TENDER DOCUMENT

CONSTRUCTION OF FOURTH AND FIFTH FLOOR ('B' BLOCK) OVER THE EXISTING BUILDINGS IN THE REAR WING OF THE TAMIL NADU DR.M.G.R. MEDICAL UNIVERSITY

Tender No. SI(1)/40580/2011, Dated :. 12.10.2011

THE TAMIL NADU Dr. M.G.R. MEDICAL UNIVERSITY,
No. 69 ANNA SALAI, GUINDY, CHENNAI 600 032.

TENDER FORM NUMBER	
DATE OF ISSUE	
SIGNATURE OF THE OFFICER	

Name of the work	Construction of Fourth and Fifth Floor ('B' Block) over the Existing Administrative Building in the Rear Wing of the Tamil Nadu Dr. M.G.R. Medical University

01. The rate should be quoted for each items of work clearly both in words and figures. Any scoring or overwriting should be attested by the Tenderers with full signature. Tenders having corrections/alterations without attestations, will be rejected summarily. The rate quoted should be firm and should not be subjected to any variation clauses.

02. Tenders should be addressed to the Registrar (FAC), The Tamil Nadu Dr. M.G.R. Medical University, 69 Anna Salai, Guindy, Chennai - 600 032 by designation and should be sent only in a sealed cover by Registered Post with Acknowledgement due or in person duly superscribing on the cover containing the Tender for a Construction of Fourth and Fifth Floor ('B' Block) over the Existing Administrative Building in the Rear Wing of the Tamil Nadu Dr. M.G.R. Medical University on **10.11.2011.** The Tenders received in ordinary covers without seal and superscribing and the Tenders received after the due date will not be considered.

03. The sealed tenders should reach the Registrar (FAC), The Tamil Nadu Dr. M.G.R. Medical University, No. 69, Anna Salai, Guindy, Chennai 600 032 on or before **10.11.2011** upto 4.00 p.m. Tenders received after the due date and time will be summarily rejected.

Each tenderer must also send a current certificate of income tax clearance from the appropriate income tax authority in the form prescribed therefore. The certificate will be valid for one year from the date of issue for all tenders submitted during the period.

3.1. In the case of proprietary or partnership firm, it will be necessary to produce the certificate afore mentioned for the proprietors and for each of the partner as the case may be.

3.2. The current certificate for Registration of contractor in Public Works Department, Government of Tamilnadu is to be produced.

3.3. All tenders received without a certificate as afore mentioned will be summarily rejected.

3.4. The following particulars shall also be furnished by the contractor with value.

a. List of details of works executed by the contractor with the value.

b. Annual turn over of the contractor for the last five years. Necessary certificates to the effect issued by the respective bank shall be attached.

4. Each tender must pay Earnest money deposit a sum of **Rs.1,96,000/- (Rupees One Lakh and Ninety Six Thousand Only)** in the form of a Demand Draft in favour of **The Registrar (FAC), The Tamil Nadu Dr. M.G.R. Medical University, Guindy, Chennai – 600 032** in any nationalized Bank**.** The Earnest money will be refunded to the unsuccessful tenderer on application after intimation is sent on rejection of the tender or at the expiration of Sixty days from the date of tender whichever is earlier. However the earnest money for the first three lowest tenderers will be retained till the final decision is taken on tender. However refund of the first three lowest tender will be considered only by the tender accepting authority. If any additional EMD is required after tender, it should be paid before acceptance of agreement.

The earnest money will be retained in the case of successful Tender and will not carry out on any interest. It will be dealt with as provided in the tender.

5. (i). The tender will remain valid for a period of Sixty days from the last date of receipt of tender. The validity period can be extended further if the contractor gives his consent in writing, specifying the period of extension.

5. (ii). On receipt of written communication of acceptance of tender, if the tenderer falls to pay the requisite security deposit within the specified in the written communication or back out from the tender, or withdraw his tender, the EMD shall be forfeited and credited to the University account.

5(iii). If the contractor falls to carryout the contract after paying the requisite security deposit then he will be liable for the excess expenditure if any, incurred to complete the work, as contemplated in the general conditions of contract.

6. The tenderers attention is directed to the requirements for materials under the materials and workmanship in the General conditions of the contract, conforming to the Indian standard specification shall be used on the work and shall quote his rates accordingly.

7. Every tenderer is expected before quoting his rates to inspect the sites of the proposed work. He should also inspect the quarries and satisfy himself about the quality and availability materials. The best class of materials to be obtained from the quarries or other sources be used on the work. In every case, the materials must comply with the relevant standard specification. Samples of materials as called for in the standard specification or in this tender notice or as required by the Assistant Executive Engineer of this University in any case shall be submitted to the Registrar approval before the supply to the site of work is begun.

8. The University will not however after acceptance of contract, rate, pay any extra charges for lead or for any other reasons in case, the contractor is found later on to have misjudge materials available. Attention of the contractor is directed to the general condition of the regarding payment of Seigniorage, tolls etc.

8.1. The tenderer's particular attention is drawn to the section and clauses in the general conditions to the contractor dealing with.

i) Test inspection and rejection of defective materials on work.
ii) Carriage
iii) Construction plant
iv) Water and lighting
v) Cleaning up during progress and for delivery
vi) Accidents
vii) Delays
viii) Particulars of payment

9.1. The contractor should closely peruse all the specification clauses for items of works for which he is tendering his rates.

10 The tender should also show the total of each item and the grant total of the whole contract and quote in the tender a lumpsum for which he will undertake t do the whole work subject to the condition of contract such lumpsum agreeing with the total amount of schedule (a) This schedule accompanying the lumpsum tender shall be written legibly and free from erasures over writing or condition of the figures. Correction where unavoidable should be made by crossing out, initialing dating and rewriting.

11. The tenderer offering a percentage deduction from or increase on the estimate amount except in the case of tender called for specifically under the percentage the tender system and those not submitted in prescribed form or in due time will be rejected. Rates or lumpsum amounts for item not called for all not be included in the tender. No alterations which is made by the tenderer in the contract form the conditions or contract, the drawings, specifications or quantities accompanying the same will be recognized and, if any such alternations are made the tender will be void.

12. The tender should work out his own rates without reference being made to the rates prescribed by the Assistant Executive Engineer of this University. However in case tenders called for under the percentage tender system the tenderer should work out his own rate but quote his percentage rate above or below the total estimate cost of work of the department indicated in the tender schedule.

13. The price at which and the source from which the contractor shall obtain certain particular materials are given at the end of the schedule accompanying the tender form. Tenderers must accept the materials at these prices and shall quote their price for finished work accordingly. Not withstanding any subsequent charge in the market value for these materials the charge to the contractor will remain as originally entered in the written contract. No centage or incidental charges will be borne by the University in connection with this supply.

14. The attention of the tenderer is directed to the contract requirements at the time of beginning work, the rates of progress and the datas for the completion of the whole work and its several parts. The following rate of progress and of proportionate value of work done from time to time as will be indicated by the Assistant Executive Engineer of this University and certificates of the work done will be required. Date of commencement of this programme will be made on which the site (or) premises is handed over to the contractor.

Period after date of commencement (1)	**Percentage of work to be complete based on contract lumpsum amount (2)**
First Month	**10%**
Second Month	**20%**
Third Month	**20%**
Fourth Month	**20%**
Fifth Month	**20%**
Sixth Month	**10%**

Total for Six Months	**100%**
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15. No part of the contract shall be sub-let without written permission of the Registrar of the Tamil Nadu Dr. M.G.R. Medical University, Chennai, nor shall transfer be made by power of attorney, authorizing others receive payment on the contractor's behalf.

16. Employment of Technical Personal One Retired Assistant Executive Engineer and also with two Retired Assistant Engineer / Junior Engineer, should be appointed to supervise the above said work.

17. The tenderers who are themselves not professional qualified shall undertake to employ qualified men at their cost to look after the work. The tenderers should state in clear terms whether they are professionally qualified or whether they undertake to employ technical men required by the University, specified in the schedule below for the work. In case the selected tenderer is professionally qualified or has undertaken to employ technical men under him, he should see that one of the technically qualified men is always at the site of the work during working hours , personally checking all items of works and paying extra attention to such works as may demand special attention (e.g) Reinforcement concrete works etc.

18. A tenderer submitting a tender which the tender accepting authority considers excessive and or indicative in sufficient knowledge of current prices or definite attempt at profiteering will trended himself liable to be debarred permanently from tendering or for such period as the tender accepting authority may decide. The tender rates should be based on the controlled price for materials, if any fixed by Government or the reasonable price permissible for the tenderer to charge 3 private purchaser under the provisions of clause 8 of the Hoarding profiteering Preventions ordinance 1943, as amended from time to time on similar principles in regard to labour and supervision in the construction.

19. The contractor should offer employment to ex-toddy lappers as far as possible. The number of ex-toddy lappers to whom he can so offer employment should be mentioned in the tender and he should undertake in the agreement to offer such employment to such number.

20. The contractors shall comply with the provisions of the Apprentices, Act 1961 and the rules and orders issued there under from time to time. If he falls to do so, his failure will make breach of contract and the competent authority, may at his discretion, cancel the contract, of invoke any of the penalties for the breach of contract provided in the conditions of the contract. The contractor shall also be liable for any peoundary liability arising on account of any violation by him of the provision of the Act.

Without prejudice to the above clause the contractor shall during the period of the contract when called upon by the Engineer, incharge engage and also ensure engagement by the sub-contractors and other employees by the contractor in connection with the work, such number of apprentices in all categories for such period as may be required by the Engineer-in-Charge.

21. In the case of contracts for construction of buildings, either permanent of semi permanent buildings a sum of equivalent to 2 ½ % of the value of work done will be retained for the period of one year from the date of completion of work in order to enable the Assistant Executive Engineer or University Officials to watch the effect of all seasons on the work done by the Contractor. The amount so retained with the University will be refunded only on the expiry of one year period referred to above and on execution of indemnity bond by the contractor for a further period of four years. The contractor shall be liable to set right all defects arising out of this faulty execution or substandard work noticed during the above five years period at his cost.

22. A movement register should be opened and maintained, for technical Assistants by the contractor of for the technical qualified contractor. The technical assistance or technically qualified contractor should note the arrival and the departure timing every day along with initials. Such register should be produced during inspection of the inspecting officers.

23. The fact of submitting the tender implies that the tenderers have actually inspected the site of work and have examined before tendering the nature and extent of various kinds of soils at various depth and have based their tender in such examination by them and no future representation in this regard will be considered.

24. A statement giving brief particulars of equipment and resources that will be put at the disposal of the work under the following classifications should accompany the tender.

A. Equipment (Transport for materials viz. Lorries and carts, concrete mixtures)

B. Organisation (i). Technical, (ii). Unskilled.

C. Resources of materials like teakwood etc. and extent to which department help is required top procurement of materials and transport of the same.

D. Methods that will be adopted to speed up the work to ensure completion within or less than the time fixed for completion.

25. The tenderer of the contract who agree to employ the maximum number of ex-service men (Number to be specified in the tender) will receive preferential consideration. The tenderers are requested to report on their covering letter.

26. All rates quoted in the tender shall be inclusive of sales tax payable under the General sales tax act as amended from time to time (including amendment, Act 28/84) and that the contractor is responsible to file the sales tax return and pay the amount as amended by the C.T. Department. No request for payment of sales ax separately in addition to tendered rates due to any plea of subsequent levy increase in tax will be entertained vide clause 38 (2) of General contains to contract.

SALES TAX REGISTRATION & DEDUCTION OF SALES TAX FROM BILLS

The tenders could be required to indicate their registration number under the Tamilnadu General Sales tax Act 1959 in the tender form and produce sales tax clearance certificate issued by the Commercial Tax department before final settlement of bills.

According to the notification issued by the Commissioner of sales tax Chennai with regard to "Deduction of Sales tax at source in respect of works contractor in the TAMILNADU GOVERNMENT GAZETTE CHENNAI, dated 31.05.1999, a new provision under 7F for deduction of tax at sources is introduced in the Tamilnadu General Sales tax Act 1959 by Tamilnadu Act 15 of 1999 with effect from 10.06.99. as per this new section, 7F of this act at the time of payment of such sum deduction @ 2% (Two percent) in respect of civil works and 4$ (Four percent) in respect of all other works contractor from the total amount payable to the contractors and the amount so deducted shall be deposited to the Assessing officer concerned with in "SEVEN" days.

FOR CONTRACTORS SPECIAL ATTENTION

1. Clean river sand shall be used in all cases.

2. Only clean fresh water shall be used on the work. The contractor shall make his own arrangements for water and shall meet all charges therefore. The special attention of the Contractor is drawn to clause 39 of preliminary specification of the T.N.B.P. regarding water and lighting.

3. The broken stone for concrete and RCC work shall be granite and passed by the Assistant Executive Engineer of this University.

4. All iron work or steel work of every kind such as to be embedded in concrete shall immediately on arrival at the site be properly scrapped and wire brushed and given priming coat of approved lead painting without claims for extra.

5. The iron holdfasts shall be buildup on the walls in cement mortar 1:3 at the time of construction of walls. No extra claim shall be due for the same wherever the holdfasts are to be provided to 9" thick wall. Those should be fixed with cement concrete 1:3:6 using 20mm gauge broken granite stone jelly for proper anchorage and proper biding. No separate for such pockets of concrete filling at masonry along with adjacent masonry.
6. The Teakwood shall be best Indian Teakwod only and shall be subject to inspection and approval by the Assistant Executive Engineer before use on work. Country wood where specified shall be "Karimarudhu" or "Kongu" for scantling "Aiyini" for planks.

7. Holes for Electric, wiring, water supply and drainage's etc. shall be provided as directed during progress of work without any claim for extra.

8. The work will be carried out with the lest hindrance to the adjoining building and the contractor will be responsible for the damages caused to the existing fixtures, electric fittings etc. the course of execution and the contract shall make good nay damages without any claim for extra.

9. In the case of "T" beams and "L" beams the quantity given in the schedules is the quantity for rib portion only. The top flange portion will be always measured with the general slab portion and paid for a the slab rate only.

For all RCC works, the rate shall be include the treatment of bearing as per TAMILNADU BUILDING PRACTICE.

10. Concrete works : All exposed concrete surfaces will be required to be finished by cement plaster as detailed in Schedule “A”.

11. Plastering all external corners, edges of beams, edges of doors and windows openings etc. shall be finished sharp using richer mortar and also finished truly vertical or horizontal as the case may be. The rate for plastering shall include the cost of finishing as above and no separate extra for the corners, edges beams etc shall be paid.

12. If rates are not separately called for, for similar items of works in difference floors, the contractor should not that one rate is applicable for all floors indicated in the detailed plans. Any claims for extra for such items floor war will not be entertained under any circumstances.

13. The project if any to the masonry will be measured under the relevant items and non extra will be paid for finishing the same.

14. (i). the work in the University by the contractor under the contract shall be maintained by the contractor until the work is taken over by the Registrar / Assistant Executive Engineer of this University. The contractor shall accordingly arrange his own insurance against fire, flood, volcanic eruption, earth quake other convention of nature and all other natural calamities risk arising out of acts of God during such period and that the Government shall not be liable for any loss or damages occasioned by or arising out of any such acts of God.

14.(ii). Provided, however that the contract shall not be liable for all or any loss or damages occasioned by or arising out of act of foreign enemies, invasion hostilities or war like operation (before or after declaration of war) rebellion, military or Usurped power.

RETENTION OR WITHHELD AMOUNT

14.(iii). 21/2% of the total value of the work will be retained in the final bill of the work for the period one year reckoned from the date of completion of the work in the order to enable the department to watch the effect of all seasons of the work. The contractor should furnish an indemnity bond for further period of four year. If any defects are notified in the above said period the defects should be rectified by the contractor at his own costs as directed by the University Officials and no extra payment be made for the rectification of such work.

REVENUE RECOVERY ACT

14.(iv). Whenever any amount has to be paid by the contractor in lieu of determination of the contract by virtue of clause 57 (4) any amount that may be due or may be come due from the contractor under the presence and the contractor is not responding to the demands for the payment of said amount, then the University shall be entitled to recover the said amount under the provision of the Revenue Recovery Act.

RISK INSURANCE

14 (v). The work executed by the contractor or under this contract shall be maintained by the contractor's risk until the work is taken over by the Assistant Executive Engineer. The University should not be liable to pay for any loss or damages occasioned by (or) arising out of fire, flood, volcanic eruptions, earth quake, other conclusion of nature and all other natural calamities, risk arising cut of act of God during such period and that the option whether to take insurance coverage (or) not to care such risks is left to the contractor.

The contractor shall not be liable for all or any loss of damages occasioned by or arising out of acts for foreign enemies, invasions, hostilities or war like operation (before or after declaration of war) rebellion military or usurped power.

14 (vii). If at any subsequent to the execution of this agreement, University materials other than those specified in the agreement are supplied to the contractor for use of the work, they will be charged at the market value prevailing at the time of writing of the charge and the should intimate in writing the rate which he demands for finish the work in view of the fact that he is to use Government materials. No centage of incidental charges will be borne by the University in connection with the supply of the materials referred to in this paragraph.

ADDITIONAL SPECIFICATION

1. The arrangements of M.S. rods for all RCC works shall be in accordance with the working drawing supplied.

2. (i). Payments for centering works for all RCC items shall be made only after the concrete is laid, even though separate items for centering works are included in the schedule. The centering and form shall be provided to the extent and area ordered by the Assistant Executive Engineer during execution.
   (ii). all cement concrete for RCC works shall be machine mixed and vibrated.
   (ii). All lime mortar shall be ground in mortar will be as per TNBP

3. M.S. steel rods should be cut and placed as reinforcement with proper care according to the available rods at site, so as to ensure the minimum possible wastage. The maximum percentage of wastage of permissible in any size of reinforcement rods shall be of 5% which will be charged on at the issue rate of Steel.

Note : A penalty of Rs.2000/- (Rupees two thousand only) per month for diploma holder and Rs.5000/- (Rupees five thousand only) per month for degree holder will be levied in case of default of the part of contractor as per the norms specified regarding appointment of Technical Assistant with tender notice.

5.1. Cement :

The contractor has to make his own arrangements for the procurement of Cement of required specifications for the works subject to the followings :-

(A). The contractor shall procure cement required for the works only from reputed cement factories (main produced of their authorised agents, manufacturing cement to ISI standard) acceptable to the Engineer-in-Charge. The contractor shall be required to furnish to the Engineer-in-Chief bills of payment and cost certificates issued by the manufactures or their authorised agents to authenticate procurement of quality cement from the approved cement factory. The contractor shall make his own arrangements for safe haulage and adequate storage of cement.

(B). The contractor shall procure in stand packing of 50Kg per bag from the authorised manufacturer. The contractor shall make necessary arrangement at his own cost to the satisfaction of Engineer-in-Charge for actual weightment of random sample from the available stock and shall confirm with the specification laid down by the Indian Standards Institutions or other standard foreign intuitions as the case may be. Cement shall be got tested for all the tests as directed by the Engineer-in-Charge atleast one month in advance before the use of cement bags brought and kept at site godown.

(C). The employer will furnish air recreating agents and admixtures required to the contractor free of cost at the employer stores. The use of such admixtures and agents shall be made as per the instructions of the Engineer-in-Charge. The cost of cartage / storage, handling, batching mixing shall be borne by the Contractor and shall be included by him to unit officers tendered for concrete

(d). The contractor should store the cement of 60 days requirement atleast one month in advance to ensure the quality of cement to brought to site and shall not remove the same without the written permission of Engineer – in – Charge.

The contractor shall forthwith remove from the works area, and the cement that the Engineer-in-Charge may disallow for use on account of failure to meet with required quality and standard.

(E). The contractor will have to construct sheds for storing cement having capacity not less than the cement required for 9 days use, at approved locations. The Engineer – in – Charge or the representative shall have free access to such store at all times.

(F) The contractor shall further at all times satisfy the Engineer-in-Charge on demand by production of records and test books or by submission of returns and other profs as directed that the cement is being used as tested and approved by the Engineer – in – Charge for the purpose and the contractor shall at all times, keeps his record upto date and enable the Engineer-in-Charge to apply such checks as he may desire.

(G) Cement which has been unduly long in storage with the contractor or alternatively has deteriorated due to inadequate storage and thus become unfit for use on the works will be rejected by the Department and no claim will be entertained. The Contractor shall forth with remove from the work are any cement the Engineer – in – Charge may disallow for use of work and replace it by cement complying with the relevant Indian Standards

5.2. STEEL

The contractor shall provide mild steel (MS) reinforcement basis, High Yield strength deformed (HYSD) bars, rods and structural steel etc., required for the works only from the main and secondary producers manufacturing steel or other authorized agents to the prescribed specifications. Bureau of Indian Standards requirements and licensed to affixing ISI test certificate issued by the Government approval laboratory certification marks and acceptable to the Engineer – in – Charge. Necessary ISI test certification are to be produced to Engineer – in – Charge before use on works.

The contractor should use steel centering sheets over sites as to obtain the required finish to the under site of the slab centering steel sheets must be made smooth and perfectly level and to give smooth and even finish to the RCC ceiling centering and form work shall be provided to the and area ordered by the Executive Engineer during execution.
The contractor shall at his own expenses provide arrangements for this provision of footwear for any labour during cement mixing work all other similar type of work involving the use of tar mortar etc. to satisfaction of the Engineer – in – charge and no his failure to do so, the Government shall be entitled to provide same and recover the cost from the contract.

When there are complaints of non-payment of wages to he labourers bills of the contractor may be with held pending a clearance of certificate from the labour department.

Rules for the provision of health and sanitary arrangements for workers employed by the PWD and his contractors.

The contractor's special attention is invited to clause 37, 38, 39 and 51 of the Tamilnadu Building Practice and he is requested to provide at his own expense the following amenities to the satisfaction of the Executive Engineer.

FIRST AID

1. At the work site there shall be maintained a readily accessible place, first aid appliances and medicines including adequate supply sterilized dressings and sterilized cotton wool. The appliances shall be kept in a good order. They shall be under the charge of responsible person who shall be readily available during working hours.

DRINKING WATER

2. (a) Water of good quality fit for drinking purposes shall be provided for the work people on a scale of not less than three gallon head per day.

   (b). Where drinking water is obtained from an intermittent Public Water Supply each work place shall be provided with the storage tanks where such drinking water shall be stored.

   (c). Every water supply and storage shall be at a distance not less than 50 feet from any latrine / drain or other existing well which is within such

proximity of latrine, drain on any other source of pollution, the well shall be properly closed. If water is drawn from it for drinking. All such wells shall be entirely closed and be provided with a trap door, which shall be dust and waterproof.

(d). A reliable pump shall be fitted to each covered well. The trap door shall be kept locked and opened only for cleaning or inspection which shall be done atleast once in a month.

WASHING AND BATHING PLACES

3. Adequate washing and bathing places shall be provided separately for men and women. Such places shall be kept clear and drained condition. Bathing or washing should not be allowed in or near the drinking water well.

LATRINES AND URINALS

4. There shall be provided within the premises of every work place latrines and urinals in an accessible place and the accommodation separately for each of them shall be on the following scale or on the scale so directed by the Executive Engineer in any particular area.

1. Where the number of persons employed does not exceed 50-3 seats.

2. Where the number of persons employed exceed 50 but does not exceed 100-3 seats.

3. For every additional 100 persons 3 seats.

If women are employed, separate latrines and urinals screened from those for men shall be provided on the same scale. Except in work places provide with water flushed latrine connected with a water borne sewage system, all latrines shall be provided with actable dry earth system which will be cleared atleast four times daily and atleast twice during working hours and kept in a strictly sanitary condition. The latrines and urinals shall be tarred inside and outside atleast once a year.

The excreta from the latrines shall be disposed off at the contractor's expense, in outside pits approved by the local public health authority. The contractor shall also employ adequate number of scavengers, conservancy staff to keep the latrines and urinals in a clean condition.

SHELTER DURING REST

At the work site, there shall be provided at free of cost two suitable sheds one for meals and another for rest separately for men and women for the use of labourers.

CRECHES

2. At every work place at which 50 or more women are working there shall be provided tow huts of suitable size for the use of children under the age of 6 years belonging to such women. One hut shall be used for infants, games and play and the other as their bedroom. The huts shall not be constructed and a lower standard than the following.

i. Thatched roofs

ii. Mud floors and walls

iii. Planks spread over the mud floor and covered with matting

The size of the crech or creches should vary according to the number of women workers. The creches should be properly maintained and necessary equipment like toys etc, should be provided and huts shall be provided with suitable and sufficient sweepers to keep the place clean. There shall be two ayahs in attendance. Sanitary utensils shall be provided to the satisfaction of the health officer of the area concerned.

The number of huts shall be restricted to children and their attendants of the children.

CANTEEN

3. A cooked food canteen on a moderate scale shall be provided for the benefits of the workers if it is considered expedient.

SHEDS FOR WORKMEN

The contractor should provide at his own expenses shed for housing the workmen. The sheds shall be on a standard not less than the cheap shelter type, to live in which the work pertaining to locality area accustomed to. A floor area of about 1.80 metre X 1.5 metre for 2 persons shall be provided. The sheds to he in rows with 1.3 metres clear work people's camp shall be laid out in units of 400 persons each. Each unit to have clear space of 12 meter around.

PART – I

ARTICLES – 1

1. Suitable scaffolds shall be provided for workmen for all work that cannot be safely done from ladder or by any other means.

2. A scaffold shall not be constructed, taken down or subsequently altered except,

a). Under the supervision of a competent and responsible person and

b). by competent workers possessing adequate experience in this kind of work.

3. Scaffolds shall be so constructed that no part thereof can be displaced in consequent of normal use.

4. scaffolds shall not be over loaded so far as practicable and shall be evenly distributed.

5. Before installing lifting gear on scaffolds special precautions shall be taken to ensure the strength and stability of the scaffolds.

6. A competent person shall periodically inspect scaffolds.
7. Before allowing a scaffold to be used by his workmen every employer shall satisfy as to whether the scaffold has been executed by his workmen or not be should taken step to ensure that it functions fully with the requirements of this article.

ARTICLE – 2

1. Working platform gangways and staircase shall be so constructed that no part thereof can sag unduly or unequally.

a). Be so constructed and maintained to obviate from risks of persons tripping or slipping and

b). be kept free from any unnecessary obstruction.

c). Every working platform gangway working place and staircase shall be suitably forced.

ARTICLE – 3

1. Every opening in the building or in a working platform shall except for the time to the extent required to allow the excess of persons or the transport or shirting of materials be provided with suitable means to prevent the fall of persons or materials.

2. When persons are employed on a roof where there is danger of falling from the height exceed that to be prescribed by national laws of regulations, suitable precautions shall be taken to prevent the fall of persons of materials.

3. Suitable precautions shall be taken to prevent persons being struck by articles which might fall from scaffolds or other working places :

ARTICLE – 4

1. Safe means of access shall be provided, to all working platforms and other working places.

2. Every ladder shall be securely fixed and of such length as to provide secure hand hold and foot held at every position at which it is used.

3. Every place where work is carried on and the means of approach there to shall be adequately lighted.

4. Adequate precautions shall be taken to prevent persons danger from electrical equipment.

5. No materials on the site shall be so attached or placed as to cause danger to any persons.

PART – II

GENERAL RULES AS TO HOISTING APPLIANCES

ARTICLE – 5

1. Hoisting machines and tackle including their attachments enhotages and supports shall.

a) be of good mechanical condition sound material and adequate strength and free from patient defects and

b) be kept in good repair and in good working order.

2. Every rope used in hoisting or lowering materials or as a means of suspension shall be of suitable quality and adequate strength and free from patient defects.

ARTICLE-6

1. Hoisting machines and tackle shall be examined and adequately tested after erection on the site and before use and be reexamined in position at intervals to be prescribed by national law or regulation.

2. Every chain ring, hook shackle, swivel and pulley block used in hoisting or lowering materials or as a means of suspension shall be periodically examined.

ARTICLE – 7

1. Every crane driver or hoisting appliances operator shall be properly qualified.

2. No persons under an age to be prescribed by national law regulations shall be in control of nay hoisting machinery including any scaffold which or gives signals to the operator.

ARTICLE – 8

1. In the case of very hoisting machine and every chain ring hook, shackle swivel and pulley block used in hoisting or lowering or as a means of suspension, the safe working load shall be ascertained by adequate means/

2. Every hoisting machine and all gear referred to in the proceeding paragraphs shall be plainly marked with the safe working load.

3. In the case of hoisting machine having a variable safe working load, each safe working load and the conditions under which it is applicable shall be clearly indicated.
4. No part of any hoisting machine or of any gear referred to in the paragraph (i) of this article shall be loaded beyond the safe working load except for the purpose of testing.

ARTICLE – 9

1. Motor gearing, transmission, electric wiring and other dangerous parts of hoisting appliances shall be provided with sufficient safe guards.

2. Hoisting appliances shall be provided with such means as well reduce the risk of the accident descent of the load.

3. Adequate precautions shall be taken to reduce the risk of any part of suspended load becoming accidentally displaced.

PART – III

GENERAL RULES TO SAFETY EQUIPMENT AND FIRST AID

ARTICLE – 10

1. All necessary personal safety equipment shall be kept available for the use of the persons employed on the site and be maintained in a condition suitable for immediate use.

2. The workers shall be required to use the equipment thus provided and the employer shall take adequate steps to ensure proper use of the equipment by those concerned.

ARTICLE – 11

When work is carried on in proximity to any place where there is risk of drawing all necessary equipment shall be provided an kept ready for use and all necessary step shall be taken for the prompt reduce of any person in danger.

ARTICLE – 12

Adequate provision shall be made for prompt first aid treatment of all injuries pixely to be sustained during the course of the work.

ARTICLE – 13

Where large work place are situated in cities, towns or in their sub-urban and no beds are considered necessary owing to the proximity of city or town hospital, suitable transport shall be provided to facilitate removal of urgent cases to the Hospitals, at their work places some conveyance facilities such as car shall be kept ready available to the injured person or persons suddenly taken seriously ill to the nearest hospital.

MOSAIC FLOORING

1. Cement concrete flooring tillers shall be manufactured from a mixed cement natural aggregates and colour materials where required by pressure process. During manufacture the tiles shall be subject to a pressure of not less than 140 Kg per sq.m. (or 2000 lbs per sq.m.)

2. Proportion of cement to aggregate in backing of the tiles shall not be less than 1.5 by weight.

3. On removal from mould, the tiles shall be kept in moist condition continuously for atleast 7 days and subsequently if necessary kept moist for such a longer period that would ensure their conformity to the requirements of Transfers strength, resistance to wear and tear absorption and would minimize shrinkage and cracking, tillers shall be stored under cover.

4. Tolerance : Tolerance on length and breath shall be plus or minus one millimeter. Tolerance on thickness shall be plus 5mm that the range of dimensions if any of one delivery of tiles shall got exceed 1mm of length and breadth and 3mm on thickness.

5. Colours and appearance : The colour and texture of the wearing layer shall be uniform through out its thickness.

6. When specifying the tiles, the contractor should specifically indicate whether the chips to be used are from the smallest units 6mm or from the smallest upto 12mm or from the smallest upto 20mm size. The offers of the department shall also specify size of chips by referring the approximate photograph given in figures upto figures 4 to 6 in Indian Standard 1237 / 1959

GENERAL QUALITY OF TILES

10. The average wear of not less than 12 specimens shall not exceed 2mm and wear on any individual specimen shall not exceed 2.5cm when tested in an vibration machine.

11. The average percentage of water absorption shall not be less than six full tiles shall not exceed ten in the case of water absorption test.

12. The density of the tiles shall be in the order of about 2.4 gms. The tiles shall be laid with the minimum possible width of joint and not exceeding 1/32 inch. The joints shall be filled with gray cement to match the finish of the tiles and shall be made almost invisible when the floors is given the final polish. The polishing shall be done by means of electric polisher wherever possible and hand polish to other places like vertical faces or walls covered and other areas where the machines can have no access and to a highly degree so as to present a perfectly smooth and glossy surface as even as possible.

13. All angles at junctions of vertical faces shall be rounded off to 11/2" radius with same quality of materials and colour of the tiles of the floor. But laid in situ and these cover shall be measured as part of flooring and laid for at the same rates as the flat floors. The colours of the tiles shall be match other coloured face adjacent or as may be directed by Executive Engineer.

14. The dadooing and skirting have to be finished by giving necessary races in the brick wall itself so that the projections does not exceed ¾" from the face of the wall i.e. the finish plastered surfaces.

15. Based on the modules of the ruptures of 30 Kg per sq.m. for dry test and two thirds of the value of wet test.

GUIDE LINES FOR ADOPTION OF STRENGTH GARDENING OF CONCRETE

16. Plain and reinforced concrete have been graded according to the cube compressive strength and designation as M100: M150, M200, M250, M300, M350 and M400. In the designation of concrete the letter "M" refers to the mix and the "Number" to the specified 28 days work cube compressive strength of that mix expressed in Kg. Cm sq.m.

17. Approximately the M100, M150, M200, M250 grades of concrete corresponds to 1:3:6, 1:2:4, 1:11/2:3 and 1:2 nominal mixed of ordinary concrete currently used. The national building code gives necessary specification for strength gardening of concrete, proportionately and works control and the same may be followed the extract of the same is enclosed.

18. The proportion of aggregates, cement and water to be used for controlled concrete shall be designed by preliminary tests of the materials to be actually used to obtain the specified strength with the maximum quantity of cements. However, the maximum total quantity of aggregate by weight per 50 Kg of cement shall not normally exceed 450 Kg.

19. For any particular item compressive strength required to be obtained by the concrete at 28 days in the preliminary and work test on the 15cm cubes minimum cement content, required to be used and the approximate proportions approved fine and coarse aggregate shall be specified, in the tender schedule. These particulars will be only for the guidance of the contractor for quoting rates.

20. Immediately upon the receipt of the award of contract, the contractor shall inform the Executive Engineer the exact location of the sources of the materials which he propose to use and get the materials approved. The mix with the actual approved materials to be used shall be got designed in an approved laboratory by the contractor with minimum quantity of cement to give the specified strength in the preliminary tests and the proportions shall be used so long as the materials continue to be of the same quality and the same sources subject only to slight changes in the relative qualities is of fine and coarse aggregate for the purpose of promoting 3ork ability provided the work tests also show the required strength.

21. If during the progress of work, the contractor wishes to change the materials the proportion shall be fixed on the basis of the fresh preliminary tests to give the required strength after the Executive Engineer is satisfied that the materials satisfy the specification. No adjustment of cost shall be made for change of proportions of cement fixed in the original preliminary tests.

The work should be commenced after the receipt of work order and be completed within 180 days.

The quantities furnished in the schedule for various items are only approximate and may wary during the actual execution of work. Payment will be made based on measurement taken by the University Assistant Executive Engineer (Civil) for each and every item of work and as per rate quoted the contractor.

In case, the tender is accepted an agreement will be drawn between the University and the Tenderer.

Additional Security Deposit at a total value of 1% will be recovered from 3 consecutive bills.

The EMD received with the tender and the addition Security Deposit will be returned to the tenderer after the payment of final bill.

In case, any defects is noticed, within the period the contractor should rectify the same at his own cost.

Income Tax, Service Tax and Labour Welfare Fund will be deducted from the bill as per rules in force.

The work executed by the contractor under his control shall be maintained by the contractor's risk until the work is completed. The University shall not be liable to pay for any loss or damage occasioned by arising out of fire, volcano, earth quake other conditions of nature and other natural calamities, risks arising out of act of God during such period and that the option whether to take insurance coverage or not to care such risks is let to the contractor.

During the contract period, if the Tamil Nadu Dr. M.G.R. Medical University is not satisfied with the services of the contractor, or the contract is transferred to the third party by the contractor without the consent of the University, the contract will be terminated and the contractor shall pay back the proportionate amount of the maintenance charges of the University, In such cases, the University shall give an advance intimation of not less than 30 days to the contractor. In the event of unsatisfactory service, the University reserves the right to claim damages for non-fulfillment of contract from the contractor.

The legal Jurisdiction shall be in the court at Chennai city only.

The Registrar (FAC) reserves her right to reject any or all the Tenders without assigning any reasons therefore.

For REGISTRAR (FAC).

SCHEDULE

NAME OF THE WORK : CONSTRUCTION OF FOURTH AND FIFTH FLOOR ('B' BLOCK) OVER THE EXISTING BUILDINGS IN REAR WING IN THIS UNIVERSITY

Sl. No.	Qty	Description	Rate	Per	Amount
1	17 M^3	Dismantling, removing and carefully stacking rain force cement concrete and roughening the surface extra complete complaining with standard specification and as directed by the Departmental officer's.		M^3	
2	38 M^3	Dismantling the brick parapet wall in the third floor open terrace of the existing building in rear wing and clearing the debries away from the building etc complete		M^3	
3	900 M^2	Dismantling the weathering course concrete with pressed tiles over the third floor roof slab to the rear wing and clearing the debries away from the building etc complete		M^2	
4		Providing form work for centering shuttering etc., for all RCC works		M^2	
a	2500M^2	including strutting up to 3.29 m in all floor using mild steel sheets of size 90x60cm of BG 10 stiffened with mild steel angles of size 25 x25 x 3 mm laid over silver oak (country wood) joist of size 10x6.5cm spaced at about 90 cm c/c supported by casurina props of 10 to 13 cm dia (spaced at 75 cm center) complying with standard specification and as directed by the departmental officers and removing the same after specified period without damaging the concrete etc complete rectangular beam slabs waists stab and other plain surface etc complete			
b	1420 M^2	Rectangular column top and bottom slab, sill slab, sun shade, facia, fins etc.		M^2	

5 a b	181.60 RM 181.60 RM	Scafolding Charges to a width of 1.00m initial height of 3 m alround the building upto III rd floor Scafolding Charges to a width of 1.00m initial height of 3 m alround the building IIIrd floor to IV floor		RM RM	
6 a b	 205.50M^2 205.50M^2	Reinforced cement concrete 1:1.5:3 using 20mm HBG stone jelly for all RCC works such as slabs beams roofing, staircase waist slabs steps, landing beams fins, boxing vertical louver drops window sill slabs projection and other similar works including laying curring etc., complete complying with standard specification and as directed by the department officers. IV Floor V Floor		 M^2 M^2	
7	14.50M^3	Reinforced cement Concrete 1:2:4 using 20 mm HBG stone jelly of size 20 mm gauge for fifth floor.		M^3	
8	61.00MT	Supplying and fabricating and placing in position of M.S. rod or R.T.S. rods for all RCC works as per design given and including cost of steel and binding wire But excluding cost of moulding etc complete		MT	
9 a b	 200 M^3 200 M^3	Brick work in C.m1:5 for super structure using second class Ground Moulded chamber burnt brick of size 9” x 4 ⅜“ x 2 ¾“ etc complete IV Floor V Floor		 M^3 M^3	
10 a b	 110M^2 110M^2	Brick Partition wall in C.m1:3 – 11.4 cm using IInd class chamber burnt bricks of 9”x 4 ⅜ “ x 2 ¾ “ including both side plastering in C .m 1:5 –12mm thick and using hoop iron with reinforcement if found necessary. IV Floor V Floor		 M^2 M^2	

11	4300 M^2	Plastering with C.m1:5 -12 mm thick		M^2	
12	3700 M^2	Plastering with C.M 1:3 – 10 mm thick exposed surface of RCC items		M^2	
13	180 M^3	Weathering course using concrete broken brick thick jelly 20mm gauge in pure stacked lime (No sand to be used) over RCC roof slab. The proportion of broken. Brick jelly to slaked lime being 32:12 ½ of well beaten by wooden beaters for giving required slope and thickness require etc complete complying with standard specifications as directed by officers.		M^3	
14	925 M^2	Finishing the top of roof with one course of machine pressed tiles of size 23x23x2 cm of approved quality laid in c.m1:3 (one cement and three sand) mixed with 2% of water proofing compound by weight of cement used and pointed with the same mortar including mixing of red oxide etc complete complying with standard specifications as directed by officers.		M^2	
15	500 M^2	Supply and fixing of Aluminium partition of frame size 2 ½ " X 1½ " power coated alround and 5.5 mm thick plain class at top and 12 mm thick Novopan sheet at bottom. Rate including cost of all materials and labour charges extra.		M^2	
16	83M^2	Supplying and fixing of Aluminium Door of frame size 2 ½ " X 1½ " power coated alround and 5.5 mm thick plain class at top and 12 mm thick Novopan sheet at bottom. Rate including cost of all materials and labour charges extra.		M^2	
17	44 M^2	Supplying and fixing of plastic coated door shutter using laminated medium fibre brand exterior grade board 35mm thick confirmed to I.S. the shutter edges should be covered with 35 mm x 25mm teak wood lipping using necessary		M^2	

		adhesive and nails with necessary furniture fittings such as 2 nos of 300 mm length aluminium tower bolt 12 mm dia one no of 300 mm length alu. Aildrops 16 mm dia two nos of alu ornamental handle 150mm long one no of alu. Door stopper cost including all materials labour etc. complete as directed by officers.			
18	1.00M^3	Providing country wood wrought and put up for frames of doors windows and ventilators and any other similar joinery works including cost of country wood scantlings and labour charges for manufacturing the frames and fixing hold fasts and fixing in position etc.,		M^3	
19	175M^2	Supplying and fixing of Aluminium sliding windows frame size 2½ " X 1½ " power coated alround and 4 mm thick plain class. 1½ " X 1 Aluminium frame to be fixed alround Window shutter necessary locking arrangement east to be made. Rate including cost of all materials and labour charges extra.		M^2	
20	230 M^2	Supplying and fixing of Iron grill for windows rate including cost of grill and labour charges etc complete.		M^2	
21	4.50 M^2	Supplying and fixing of country wood ventilators to a size of 600 x 600 mm with 0.10 x 0.065 size of country wood scantling and lowered glass with 12mm dia M.S. rods etc complete.		M^2	
22	1320 M^2	Paving the floor with plain ceramic of approved quality colour and design joint free of size 305 x305 x 6 mm thick of approval make quality and colour in floor over a base layer of cement mortar 1: 3 one cement three sand) 20mm thick and laid straight alignment and pointed neatly with colour cement at the rate of 0.40 kg /m2 laid without any air gap in the tiles neatly and fixing of position as per standard specification and as directed.		M^2	

23	650 M^2	Supplying and fixing of vitified tiles size 600mm x 600mm thickness 10mm and cera bond with cement paste laying including materials and labour.		M^2	
24	66 M^2	Paving the floor with anti skid tiles of approved quality colour and design joint free of size 305 x305 x6 mm thick of approved quality and colour in all floors over a base layers of cement mortar 1:3 (one cement three sand) 20 mm thick and laid straight alignment and pointed neatly with colour cement at the rate of 0.04 KG/ M^2 laid without any air gap in the tiles neatly and fixing in position as per standard specification as directed by departmental officers the colour and quality of tiles should be got approved by the Assistant executive engineer before use on work.		M^2	
25	210 M^2	Dadooing the walls with glazed tiles of printed design size 300 x200x6mm of best approved quality and colour in all shade of the glazed tiles in all floor over a base layer in cement mortar 1:2 (one cement two sand) 10mm thick and laid in situ, true alignment and pointed neatly with colour cement at the rate of 0.4 kg/ M^2 to suit the colour of the tiles fixed in position without any air gap in the tiles neatly etc complete complying with standard specifications and as directed by the department as directed.		M^2	
26	8000 M^2	Painting the inner walls with 2 coat with best quality cement painting approved colour over priming coat including thorugh scrapping clean removal of dirt. The rate includes cost of brushes sand paper plaster of parries putty whenever required and neat finishing etc complete complying with standard specifications as directed		M^2	
27	140M^2	Painting new wood work with two coat of best synthetics enamel paint of approved quality colour over one coat of primer including ordinary scrapping		M^2	

		and preparation of surfaces (the colour and quality should be got approved by the Executive Engineer before use) the rate includes cost of brushes high scafloding charges finishing neatly etc. complete complying with standard specification and as directed by the departmental officers.			
28	230 M^2	Painting the new iron works two coats with synthetic enamel paint of approved quality and colour including ordinary scraping using brushes and neat finishing etc complete complying with standard specification and as directed by the departmental officers (the colour and quality should be got approved by the Assistant Executive Engineer before use)		M^2	
29	375 M^2	Supply of 2'x2' armstrong false ceiling sheets width outer frame of which is to be fixed in ceiling with outer frame of 1"x1" powder coated 'L' angle and main 'T' angle, which is supported by 1 ½ x 1 ½ zinc coated 'L' angle which is jointed to hanger box and fixed with supporting 8 mm MS rod extra complete. The rate includes cost of all materials and labour charges extra complete.		M^2	
30	125M^2	Supply of Vertical blinds of standard quality with aluminium alloy head rails of 32mm wide 34mm height, with anodized finish of 1.2 mm thick control unit, corner fitted with fitter, bottom weight with cord weight washable fabric with 10 mm width etc. complete. The rate includes cost of all materials and labour charges extra complete.		M^2	
31	1380 RM	Supplying and fixing of PVC rain water down fall pipes of 110 mm dia size 4 kg / . M^2 with necessary shoes specials clamps bends cowl screws nails teakwood blug etc complete complying with standard specification and as directed by the department officers.		RM	

32	8 Nos	Supplying and fixing in position Indian water closet oriya type of size 580 x440mm white glazed earthen ware of approved quality with 'P' trap or 'S' trap conforming to IS 2556 part XII with sand cushion and forming flooring all round the closet using 40mm broken brick jelly in lime concrete 1::5 (one part of lime and five parts of brick jelly) 100mm thick and finishing the top to required slope and including giving necessary connection to cast iron and pipes by dismantling brick masonry reinforced cement concrete roof floor slab and making good the dismantling portion to original condition without leakage etc complete complying with standard specification and as directed by the departmental officers (The water closet should be got approved by the Assistant Executive Engineer before use on work.		No	
33	4 Nos	Supplying and fixing in position white gazed European water closet with P or S trap and double flapped seat over 10 litres capacity low level flushing tank including all internal fittings on CI brackets 12mm brass nipple chromium plated brown headed stop cock 12mm nylon connection connecting with walls and flooring including dismantling masonry and redoing the same to the original conditions etc complete complying with standard specification and as directed by the departmental officer.		No	
34	6 Nos	Supplying and fixing in position of Indian make white glazed earthen ware lipped mouth flat back urinal of best approved quality with GI connection of suitable length 32mm bell mouth PVC connection 15mm dia GM wheel volve fixing the urinal in the wall position with necessary TW plug clamps screws shellac etc. including the dismantling		No	

		the masonry if necessary and redoing the same to its original condition fixing the 15mm dia GI pipe and wheel wall painting the pipe two costs of approved colour of synthetic enamel paint over one cost of primer and etc and checked without leakage etc complete complying with standard specifications and as directed by departmental officers.			
35	20 Nos	Supplying and fixing of wash hand basin with new one fixing in position best quality approved make white glazed earthen ware wash hand basin 550 x400 mm with a pair of cast iron brackets including cost of 15mm dia meter brass chromium plated pillar tap 32mm dia meter G.M. wheel valve 15mm dia brass ripple 15mm dia nylon connection etc including fixing the wash hand in the wall in position with pair of CI brackets with Teak wood plugs screws and giving necessary water supply connection and painting the brackets with two coats of paint over a priming coat of anticorrosive paint including testing for leakage etc complete complying with standard specifications . The quality and colour of wash hand basin and specials should be got approved by the Assistant executive engineer before use on work.		No	
36	20 Nos	Supplying and fixing of CP/ Aluminium towel rail 600 mm long and 20mm dia meter with brackets of same materials including cost of teak wood plug and CP screws etc. complete complying with standard specification and as direct by the departmental officers.		No	
37	20 Nos	Supplying and fixing of position mirror of size 600 x 450 mm of approved quality and brand of size with necessary plastic thick PVC frame with bottom stand of approved color with brass screws rowel plugs etc., complete		No	

		complying with standard specification and as directed by the departmental officers The quality of mirror should be got approved by the Assistant executive Engineer before use on work			
38		Supplying and Laying the following size of PVC pipe of approval quality and best verify conforming to ISS and with ISS mark of properly to alignment including cutting threading fixing of PVC specials and fixing of the clamps and screws making holes on the wall or drilling holes in the roof and making good			
a.	70 RM	<u>110 mm dia PVC pipe</u>		RM	
b	70 RM	<u>75 mm dia PVC pipe</u>		RM	
c	168 RM	50 mm dia PVC pipe		RM	
d	284 RM	<u>25mm dia PVC pipe</u>		RM	
e	80 RM	<u>20mm dia PVC pipe</u>		RM	
39	8 Nos	Supplying and fixing of floor trap		No	
40	4 Nos	Supplying and fixing of Health facet for E.W.C.		No	
41		Supplying and fixing of the following PVC special			
a	12 Nos	110 mm dia PVC Elbow		No	
b	24Nos	110 mm dia PVC tee with door		No	
c	8 Nos	110 mm dia 'Y'		No	
d	12 Nos	75 mm dia Elbow		No	
e	12Nos	75 mm dia Tee with door		No	
f	20 Nos	50 mm dia Elbow		No	
g	36 Nos	25 mm dia Elbow		No	

h	20 Nos	25 mm dia Tee		No	
i	20 Nos	25 mm dia GI 'H' Nipple		No	
j	16Nos	20 GI 'H' Nipple		No	
k	12 Nos	110 mm dia PVC cowl		No	
l	8Nos	75 mm dia PVC cowl		No	
42	12 Nos	Supplying and fixing of ½ ' screw down Tap		No	
43	6 Nos	Supply and fixing of 25mm Ball Volve		No	
44 a	294 Nos	Wiring with 2x 1.5 sq mm (22 /0.3) PVC insulated SC unsheathed Cu conductor of 1100V grade in suitable PVC rigid pipe concealed in wall and ceiling with pvc accessories in flush with wall with 3mm thick helium sheet cover with TW switch box and SA F.T switch with continuous earth wire connection of 14 SWG TC wire for making good of t he concealed portion with suitable colour for pvc concealed light point fan point (for electrical regulator)		No	
b	196 Nos	Fan Point		No	
45	140 Nos	Wiring with 2x 4 sq mm (56 /0.3 mm) PVC insulated SC unsheathed Cu. Cable conductor cable of 1100 v grade in suitable heavy gauge MS condut pipe on wall and ceiling with MS accessories with 150mm x 100 mm x 75 mm MS switch box for 15A 3 pin non interlocking cs plug with painting of suitable colour with continous earth wire connection by 14 SWG TC wire for power plug point. 15 A plug point.		No	
46	142 Nos	Wiring with 2x 1.5 sq mm (22/0.3) PVC insulated single core unsheathed copper conductor cable of 1100 v grade in suitable heavy gauge MS condut pipe on wall and ceiling with MS		No	

		accessories in flush with wall with 150mm x 100mm x 75 mm MS switches with 3mm thick hylum sheet cover for 5 A 3 pin non interlocking CS plug with continuous earth wire connection of 14 SWG TC wire and making good of the concealed portion with suitable colour for concealed plug point. 15 A plug point			
47	44 Nos	Wiring with 2x4 sq mm (56/0.3) PVC insulated single core unsheathed copper conductor cable of 1100 v grade in suitable heavy gauge MS condut pipe on wall and ceiling with MS accessories in flush with wall with 150mm x 100mm x 75 mm MS switches with 3mm thick hylum sheet cover for 15 A 3 pin non interlocking CS plug with continuous earth wire connection of 14 SWG TC wire and making good of the concealed portion with suitable colour for concealed plug point. Power plug to A.C.		No	
48	142 Nos 140 Nos 12Nos	<u>Supplying and fixing of tube light</u> <u>(a)Single fitting</u> Supply and fixing of single box type 440 W flu fitting complete with copper choke and condenser with condut pipe suspension from the ceiling with PVC unsheathed copper leads from terminate to the fitting with tube <u>(b) Square fitting</u> Supplying and fixing of 2'x2' box type Philip Tube light fitting (Bulb 4 No) with electronic choke and optical type aluminium frame etc complete. <u>© Double fitting</u> Supply and fixing of 440 W twin box fluffing complete with copper choke condenser with condut pipe suspension from ceiling with PVC unsheathed copper leads from terminate to the fitting		No No No	

49	156Nos	Supply and fixing of 1200 mm (48") ceiling fan complete with electronic 300 w regulator with 300 mm down rod on the existing clamp		No	
50	142 Nos	Supply and fixing of 5A /15A 3 pin combined flush type wall socket with control switches concealed in suitable TW box covered with Hylum sheet in flush with wall with earth connection for computer plug socket . 15 A plug.		No	
51	140 Nos	Supply and fixing of 15 A plug		No	
52	44 Nos	Supply and fixing of power plug		No	
53	4 Nos	Supply and fixing of exhaust fan.		No	
54	6 Nos	Supply and fixing of Urinal partition. The rate including dismantling the existing masonry and fixing the partition and finishing with cement mortar extra complete.		No	
55	190 M^3	Collecting and conveying the bolt dismantled decries the rate including cost of conveying 5 lorry with a lead of 6 km loading and unloading extra complete		M^3	
56	LS	Provision for labour charges for welding the existing column main rod. The including scraping rust in the steel rods with wire brush, cost of electrodes and conveying the message power connection extra complete.		--	
		Total			