

M.S.P. Mandal's

Yeshwantrao Chavan College, Ambajogai Dist. Beed



**Integrated Library Management System
(ILMS)**

M.S.P. Mandal's

Yeshwantrao Chavan College, Ambajogai Dist. Beed

Sr. No.	Particulars
1.	Software Agreement
2.	Screen Shots of the Software Used in Library



मराठवाडा शिक्षण प्रसारक मंडळ

Web: www.mspmandal.in Email: mspmandal@gmail.com

प्रकाश मोळके
आराध्य

सेरीअल नं. एच - ३० (औरंगाबाद)

श्रीश्री राव्हाना
संचालिनी

PC: Maharashtra Sahiksha Prasarak Mandal

प्रा. एफ.सी. माळी प्रशासकीय अधिकारी

प्रा.अ.प्रशासन/२०१३ - २०१४ / ३३३३

दिनांक ०७ / ०२ / २०१४

प्रति,
एनएसएम कोऑरिनेटर,
४, कलवेश, १२३१/१,
राधाकृष्ण पेठ, पुणे - ४०.

विषय : नवीन इआरपी सॉफ्टवेअर वनविण्या बाबत.

संदर्भ : १) आपल्या दिनांक ११.०१.२०१४ च्या कोटेशननुसार.

२) मा.सरचिटणीस, म.शि.प्र.मंडळ, औरंगाबाद यांच्या मान्यतेनुसार.

महोदय,

वरील विषयी संदर्भानुसार आपणास कळविण्यात येते की, आपल्या दि.११.०१.२०१४ च्या कोटेशननुसार मराठवाडा शिक्षण प्रसारक मंडळ संचालित सर्व महाविद्यालये व शाळांसाठी लागणारे Centralize ERP System वनविण्याचे काम आपणास देण्यात देत आहे.

आपल्या कोटेशननुसार नवीन इआरपी सॉफ्टवेअर वनविण्याचे दर रु.१४ लाख (Tax Extra) राहिल. जरी एकूण रु.१५,३३,०४०/- दर राहिल, तरी या दरप्रमाणे नवीन इआरपी सॉफ्टवेअर वनविण्याचे काम लवकरात लवकर सुरू करावे. आपण दिलेल्या कोटेशननुसार नवीन इआरपी सॉफ्टवेअर वनविण्यासाठी अटी व शर्ती लागू राहिल.

सोबत :- आपण दिलेल्या कोटेशनच्या अटी व शर्ती.

प्रशासकीय अधिकारी
मराठवाडा शिक्षण प्रसारक मंडळ,
औरंगाबाद.



NSM Solutions

<http://www.nsm solutions.com>

ERP System for Marathwada Shikshan Prasarak Mandal

Quotation

DG01 13-14

Rev6

Date – 11 January 2014


Administrative Officer
Marathwada Shikshan Prasarak Mandal
Aurangabad.

CONTENTS

EXECUTIVE SUMMARY	3
A. PRIMARY OBJECTIVE	4
B. SOLUTION OVERVIEW	5
C. SCOPE OF WORK	6
D. EXCLUSION FROM SCOPE	13
E. EXECUTION ORGANOGRAM	14
F. TIME FRAME	15
G. IMPACT STATEMENT	15
H. ROLES AND RESPONSIBILITIES	16
I. ASSUMPTIONS	18
J. RISKS & MITIGATIONS	19
K. COMMERCIAL DETAILS	20


Administrative Officer
Marathwada Shikshan Prasarak Mandal
Aurangabad.

EXECUTIVE SUMMARY

This ERP system will be developed for 'Marathwada Shikshan Prasarak Mandal' (MSPM) and it will be developed In-house with the help of NSM.

All junior, Senior, engineering, law, polytechnic colleges and schools will come under the scope of this development. MSPM will be able to manage entire transactions of all its institutes through this system.

This software will be developed collaboratively by NSM and MSPM.

MSPM will appoint a Full time programmer (Per NSM's ID) for solution development.

Total Negotiated Price of this project is Rs.14, 00, 000/- (Taxes extra)


Administrative Officer
Marathwada Shikshan Prasarak Mandal
Aurangabad

A. PRIMARY OBJECTIVE

A enterprise solution is required in which colleges, institutes and schools can be added and following functions will be performed –

- Admission and Fees
- Exam Marks module
- Student Attendance
- Staff Attendance
- Library Automation
- SMS Module (Alerts & Reminders)

Centralized Report List (List not complete. Additions will be done later per need) –

- Admission report – Branch wise, College wise, Year wise, category wise, district wise.
- Fees Report – Branch wise, College wise, Year wise, category wise, class wise
 - o Total fees charged report
 - o Pending fees report
- Overall Students & Staff attendance report
- Library automation –
 - o Instant smart search from anywhere
 - o Pending books report – Student wise
 - o Library dues report
 - o Language based smart search

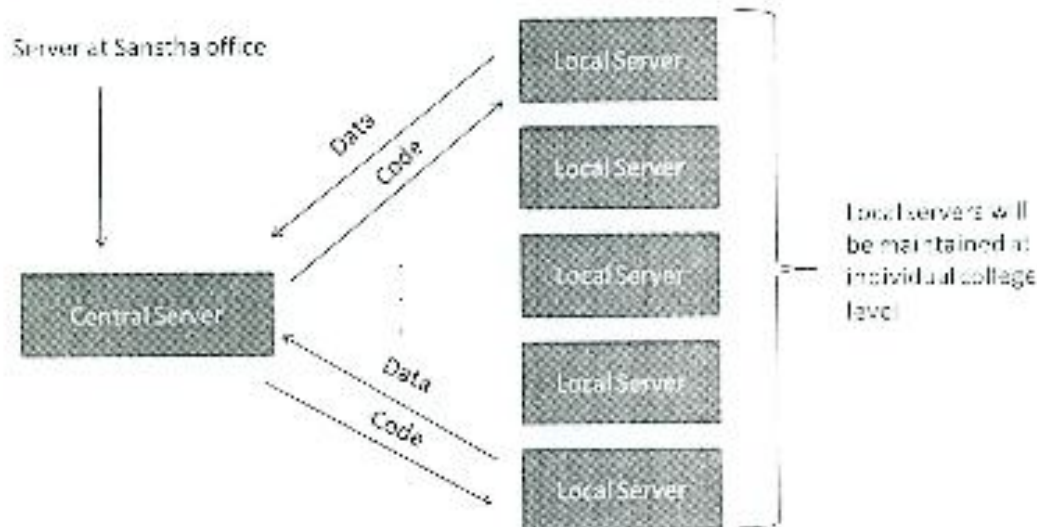
This solution is for Marathwada Shikshan Prasarak Mandal and later on, will be maintained by Deogiri staff. This software will be property of "Marathwada Shikshan Prasarak Mandal, Aurangabad", and we, the Developer Company, will not possess any rights or claims on the same. With this system, MSPM's all junior, senior, engineering, law, polytechnic colleges and schools will come under the Centralized ERP system.

B. SOLUTION OVERVIEW

Considering that internet connectivity will not be available 24x7 across all the schools and colleges spread over Maharashtra, We offer the following solution.

It will be PHP-MySQL based system in which two types of servers will be there.

1. Central Server
2. Local Server



Whole source code and database will be maintained at Central server.

Local server will synchronize with central server periodically or manually, on command initiation.

Upon synchronization, Local server will upload its data on Central server and also look for latest version of software and download it, if available. In this way, local server will always run the latest stable code and it will be very easy to manage all the servers at clicks.

Since complete data of all institutes is stored in Central server, Management can view global reports and dashboards instantly.

C. SCOPE OF WORK

This system will be Multi-User and Multi-User-Group system. I.e. there is a Super Admin user and he can create sub user groups like clerk, staff, HOD, accountant etc. He can also create user and assign user group and accordingly control their access to the system.

Access restrictions will be by institute with few roles having global access.

As this is a web based/ browser based system, any user can login and do his task from any node in the campus which is connected in network. Here, all its activities are logged in database with its user id, computer IP, Host/ Terminal name, date, time etc.

All the coding will be done as per the VAPT norms.

Institute Management –

'Super Duper Admin' can create institutes and assign a section to it. Give it a proper name etc. He will also create a 'Super Admin' for that institute, who will fill institute relates Master tables mentioned in each module below.

When user logs in the system, respective institute details will be fetched and shown in the page header dynamically.

Admission and Fees –

There will be broadly following Masters.

1. Master Section – e.g. Junior, Senior, School, Engg. etc.
2. Master Class (Child of Master Section) – e.g. B.A. I, B.A. II, B.COM, BE CIVIL, BE CS, BE E&TC, etc.
3. Master Category (Child of Master Class) – e.g. EBC, FREESHIP, OBC, etc.
4. Master Fee Heads (Child of Master Category) – e.g. administrative fees, Gymkhana fees, hostel fees, etc.
5. Master Subjects (Child of Master Class) – English, Geography etc.



Flow –

- "Short Form" will be filled by student/ clerk. These are minimum fields required to apply for any admission in the institute. Application ID will be generated and given to user. Here, User will fill the required Class and previous marks.

Based on this, A List can be generated based on sorting criteria. E.g. General Merit wise, Cast wise, Subject wise etc. This list will be displayed on Notice board. Students will see this list and come for Admission.

- Once student approaches the admission clerk, he will fill "Long form" to enroll the student, give him "Provisional Admission" and give him PRN number. Then, Depending on the Class and Subjects student has applied for, Clerk will generate his Fee Challan on which all fee details will be mentioned. Part payment is also possible. In such case, Part payment challan will be generated.

Student will take this Challan to Bank and Pay the fees. (Provision to work around this step, in case of engineering, will be provided)

- After paying the fees in Bank, Student will submit its copy in college and get the "Payment Receipt" from college. This is acknowledgement that his paid fees challan has been accepted.

In case of "Direct Admission", Challan process is bypassed. Payment is directly accepted in College and payment receipt is given to student.

While accepting the payment receipt, Student's photo will be taken by webcam and used for further processing like I Card etc.

- Now, based on "Provisional Admission", Student list can be sorted based on various filters and divisions and subsequently roll numbers can be generated. But still, Student admission is "Provisional" and not "Confirmed". Admission Clerk has to set it to "Confirmed" Manually.

This is where Engineering Admission Procedure and Junior/Senior Admission procedure has been clubbed. Provisional Admission is needed only for Engineering. Hence, Junior and Senior College will give Provisional admission and Confirm it at the same time where as 'Engineering people' will confirm it later.

- Admission Cancellation is also possible and fee will be refunded after specific amount deduction. This deduction is to be filled by admission clerk manually.

Some Details –

- During Challan generation, Clerk will be shown a list of bank account from which he will select a bank and generate challan. This list will be populated based on 'Master Bank' table which will be linked to 'Master Section' and 'Master Class'.

e.g.

Junior -> BA I Grant -> Bank of Maharashtra

Junior -> BA I Non-Grant -> Cosmos Bank

- List of original documents accepted from students will be entered in the system during admission confirmation. And those documents can be returned back too from the system.
- Following certificates can be issued to students

Bonafid Certificate, Leaving Certificate, Transfer Certificate

Following data will be stored in the system

- Which certificates are issued to particular student?
- How many times that certificate has been issued?
- Challan number & Payment receipt numbers will not be generated section wise. They will be generated unique at local server.
- Admission form number will be generated automatically at local server after filling "Long form".
- Every generated challan/ payment receipt will have a barcode, so that process will be speedy.

Access Modules –

- Short Form filling
- Merit List generation
- Long form filling & give provisional admission
- Chellan generation

- Payment clearance
- Admission confirmation
- Division assignment & Roll no. assignment
- Fees Refund
- Admission Cancellation

“Super Administrator” can create various user groups and assign the above modules to them for access control.

Library Module –

Barcode Technology will be implemented. i.e. Every book will have a barcode (scope of that barcode will be only for the local server). And every student will also have Barcode I-Card.

Briefly following Masters will be there

- Master Department
- Master Subject
- Master Configuration – Fine per day, no. of days for fine,

Access Modules –

- Book Entry – Department, Subject, Title, Author, Edition, Publisher, Keywords, Brief Text, Language
- Book Issue – To issue a particular book to student
- Book return – To accept the book from student
- I-Card generation and Printing
- Book Search, Book Issue status, Student Book status

Following data will be stored in the system.

Person ‘A’ has issued book ‘B’ to student ‘C’ on ‘D’ date at ‘T’ time.

Marathwada Shikshan Prasarak Mandal (MSPM) ERP system – Quotation – Rev6

As this is web based portal, anybody in the campus having access to network can search the book and check their availability instantly, i.e. from HDD room, from individual departments etc.

Marathi typing will be possible and reports can be obtained in Marathi if that particular font is installed.

Book purchase procedures are not considered.

Exam Marking –

Following masters will be there

- Master Exam – This will be linked to 'Master Class' and 'Master Subject'. User will fill its details like total marks, minimum required marks, Academic year etc.

Flow –

- Staff will create exams in 'Master exam'
- They will conduct exam manually and give marks.
- Now, they will enter marks for every valid student manually for that exam.
- Valid student – These are the students having at least provisional admission.
- That's it. Reports & mark sheets can be generated.
- Engineering class test marks entry module

Student Attendance –

There will be two types of attendances.

- At every lecture
- Applicable for Junior, Senior, Engg colleges
- At everyday
- Applicable for schools


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Aurangabad.

Flow –

At every lecture – Lecturer has to enter the attendance immediately after his lecture. He will enter following details – Lecturer, Date, Time, Class, Division, Students' presence.

At everyday – Class teacher has to enter attendance only once in a day. He will just enter – date, Class, Division, Students' presence. Corresponding reports can be generated.

Staff Attendance –

Monthly attendance will be imported from an Excel file which will be generated by BioMetric machine.

Flow –

As per observation, BioMetric machine is generating excel file having id, name, present/ leave status for each date.

We will maintain a Master which will Map "Id from BioMetric machine" and "Staff Id from our system".

After linking this, User just has to browse a file and click on "Import button". System will automatically understand and store attendance for staff in database.

Some details –

- Attendance data is only imported in the system. So that it can be seen from Mandal office. No calculations with it are considered.

SMS Module –

Individual and Group SMS can be sent to students.

e.g.

- Admission SMS (Individual type)
- Holiday notices (Group type)

Purchases required for sending SMS (e.g. SMS gateway, SMS pack etc) will be purchased by MSPM. NSM team will only integrate the ERP software with the SMS gateway.

User will be able to create custom templates with <cup holders>. This cup holder will be replaced dynamically by respective data and sent to selected group of students.

Central Server related details –

People sitting at Central server can only view the data and generate appropriate reports as per their need. They can not modify anything remotely. They can only manage 'Super Admin' account remotely. E.g. resetting its password etc.

They can generate reports of individual institute as well as consolidated report of all institutes.

Technicalities –

In Central Server, Every Institute will have separate database.

e.g. If there are 4 schools, 3 colleges linked to the system. Central server will have total $7+1 = 8$ databases.

1 database is for its internal use and other 7 are just copies of local server database maintained locally at individual institute campus.

Every local server will have a table for its internal use and will contain credentials required for synchronizing with central server. This table needs to be managed locally.

In case of some database structure change, 'Super Duper Admin' will place some stored procedures. While synchronizing local servers will download this stored procedure and run the same.

Data Migration –

NSM will migrate maximum data of 21 colleges. For this if some data entry work is required, MSPM will take care of it.



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Documentation & Training –

Following documents will be provided by NSM.

- Data flow diagram document
- Data base design document
- Master table flow document
- Transactions table flow document
- Functional specification document
- Technical specification document
- Training manual
 - a. User manual
 - b. Admin manual

For training, NSM will use “Train the Trainer” approach.

D. EXCLUSION FROM SCOPE

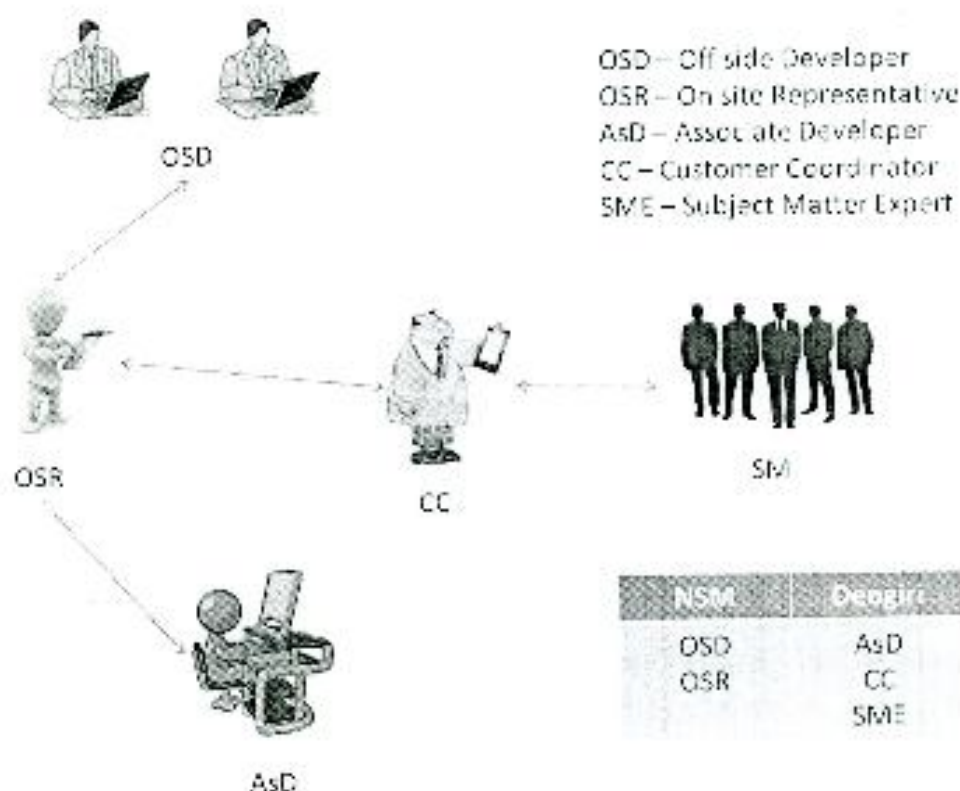
- AMC (Annual Maintenance Contract) – As MSPM people are involved in development of this software. AMC is not considered in this scope & budget. If required, it will be taken care separately in future with separate budget.



Administrative Officer
Marathwada Shikshan Prasarak Mandal
Aurangabad.

E. EXECUTION ORGANOGRAM

NSM will appoint one OSR in Deogiri college, Aurangabad. Providing him place to sit and Computer with Internet is MSPM's responsibility. He will co-ordinate with CR to gather exact requirement and freeze specifications and will convey the same to OSD and AsD.



Weekly review will be taken to check the work progress and for projections of development. The review template will be published within a week of contract awarding.

F. TIME FRAME

Module/ Weeks	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Specification freezing																									
Wire screen diagrams of all modules																									
Architecture designing																									
Database designing & SPS																									
Admission & Fees Programming																									
Library																									
Exam Marks																									
Student Attendance																									
Testing & Verification																									

This is very broad & ideal timeline. Practical timeline will be published after specification freezing.

G. IMPACT STATEMENT

Potential Impact	Systems / Units Impacted
The Method of challan number generation	Challan number will be generated centrally and will not have any section code etc. It will increase serially for that institute.
Payment receipt number	Payment receipt numbers will be generated centrally and serially for all branches in any institute.
"Short Form" and "Long Form" numbers	Form numbers will be generated automatically and can not be entered manually.
Data entered in the old ETH system	By moving over to the new system, Data entered till now in the old ETH system may not be fully available in the new system.

H. ROLES AND RESPONSIBILITIES

Project Owner	
Name	Nishad Manze
Responsibility	Leads in the planning and development of the project; manages the project to scope. Responsibilities include: develop the project plan; identify project deliverables; identify risks and develop risk management plan; direct the project resources (team members); scope control and change management; oversee quality assurance of the project management process; maintain all documentation including the project plan; report and forecast project status; resolve conflicts within the project or between cross-functional teams; ensure that the project's product meets the business objectives; and communicate project status to stakeholders.
Email	mandcom@nsmnsolutions.com
Phone	9975587347

Off site Developer 1	
Name	TBD (To be decided...)
Responsibility	Works toward the deliverables of the project. Responsibilities include: understand the work to be completed; complete research, data gathering, analysis, and documentation as outlined in the project plan; inform the project manager of issues, scope changes, and risk and quality concerns; proactively communicate status; and manage expectations.
Email	TBD (To be decided...)
Phone	TBD (To be decided...)

Off site Developer 2	
Name	TBD (To be decided...)
Responsibility	Works toward the deliverables of the project. Responsibilities include: understand the work to be completed; complete research, data gathering, analysis, and documentation as outlined in the project plan; inform the project manager of issues, scope changes, and risk and quality concerns; proactively communicate status; and manage expectations.
Email	TBD (To be decided...)
Phone	TBD (To be decided...)

On site Representative	
Name	TBD (To be decided...)
Responsibility	Gather data from CR and Subject Masters, freeze the flow and specifications, inform C&I & PM about scope changes, risks, show the deployed module to CR and get it approved.
Email	TBD (To be decided...)
Phone	TBD (To be decided...)

Customer Coordinator	
Name	TBD (To be decided...)
Responsibility	The person or department requesting the deliverable. Responsibilities include: partner with the sponsor or project manager to create the Project Charter; partner with the project manager to manage the project including the timeline, work plan, testing, resources, training, and documentation of procedures; work with the project team to identify the technical approach to be used and the deliverables to be furnished at the completion of the project; provide a clear definition of the business objective; sign off on project deliverables; take ownership of the developed process and software.
Email	TBD (To be decided...)
Phone	TBD (To be decided...)

Subject Matter Expert 1	
Name	TBD (To be decided...)
Responsibility	Provides expertise on a specific subject. Responsibilities include: maintain up-to-date experience and knowledge on the subject matter; and provide advice on what is critical to the performance of a project task and what is nice-to-know.
Email	TBD (To be decided...)
Phone	TBD (To be decided...)

Associate Developer	
Name	TBD (To be decided...)
Responsibility	Works toward the deliverables of the project. Responsibilities include: understand the work to be completed; complete research, data gathering, analysis, and documentation as outlined in the project plan; inform the project manager of issues, scope changes, and risk and quality concerns; proactively communicate status; and manage expectations.
Email	TBD (To be decided...)
Phone	TBD (To be decided...)

I. TERMS AND CONDITIONS

- All the purchase activities related to hardware and software are taken care by MSPM. E.g. Computers, LAN cabling, barcode scanner, printers, windows server licenses etc.
- MSPM will appoint a full time programmer, with the skills we define, for coding of their required reports and print outs. This person will be on MSPM's payroll and will be their employee.
- Our OSR will be sitting at Deogiri college campus. MSPM will provide them all the logistics like table, chair, telephone, internet connection and PC with required software and connectivity. However food, conveyance, and staying expenses of OSR, will be the responsibility of NSM.
- MSPM will provide / depute their coordinator full time to co-ordinate with OSR for giving requirement, giving data and testing.
- MSPM will depute one responsible person for each module to give requirement and certify the developed function. However, OSR will co-ordinate with Subject master only through CC.
- NSM will provide the developed system along with its source code, and 'how to use' training to MSPM team. MSPM Team will then train their rest of the users.
- Any reports, printouts and statistical data generation are not in the scope of this contract. The AsD of MSPM will take care of it.
- Report and printout development if required to be done by NSM, NSM will study and give estimate. After the approval of estimate, NSM will develop the same.
- Any changes required in developed and approved system, NSM will charge either based on approved estimate or Rs 50,000/- per person per month basis as suitable / acceptable to MSPM.
- MSPM will stick to the specifications and flow mentioned in this document.
- Our OSR will be on site for either 1 year or till the development as per this scope ends (whichever earlier).
- All the reports, print outs and statistical data generation activities will be developed by NSM utilizing AsD (the person on MSPM Payroll).

J. RISKS & MITIGATIONS

Risk	Mitigation
Unclear Flow understanding or misconceptions	Prepare Flow diagrams, screen frame layouts and get it approved from subject master before coding.
Failure of discussed flow during actual admission process	Prepare test cases of admission cycle and simulate the process repeatedly.
Server Crash	MSPM will preserve back up on day to day basis.
Incomplete/ incorrect requirement	MSPM will ensure that the data provided and interpreted correctly through SME.
Delay in User acceptance	NSM and MSPM to decide on the timelines and resources at project startup and adhere to the same. Signoffs to be provided on time by MSPM.

K. COMMERCIAL DETAILS

Negotiated Price – Rs. 14,00,000/- (Fixed bid for above scope of work)

Payment Terms –

Agreement Signing – 30%

After 3 months of Agreement Signing – 20%

6% after User Acceptance to "Library Module"

6% after User Acceptance to "Admission & Fees Module"

6% after User Acceptance to "Staff Attendance Module"

6% after User Acceptance to "Exam Marking Module"

6% after User Acceptance to "Student Attendance Module"

20% after Successful Go Live of whole system.

Note –

The term 'User Acceptance' indicates that the overall flow of the developed module is accepted by SME and they can start running the system. It doesn't include any kind of report generation activity, as it will go parallel by AsD (employed on MSPM's payroll).

Once, the software is delivered, it is assumed that support will not be needed as MSPM's team is already involved in development of the same. However, NSM will be there to give support to MSPM at the rate of Rs.50,000/- per man per month. (Rate valid till year 31 December 2015)