

JIWAJI UNIVERSITY, GWALIOR

TENDER DOCUMENT

FOR

CCTV SURVEILLANCE SYSTEM

REVISED

.....
JIWAJI UNIVERSITY, GWALIOR (M. P.)

PRICE – Rs.1000/- Only

Tel: (0751) 2442823

Website: www.jiwaji.edu

JIWAJI UNIVERSITY, GWALIOR

TENDER NOTICE

FOR

SUPPLY ,Installation & Commissioning of CCTV Surveillance System(Revised)

Tender No./Stores//2016/925Dated:-22/03/2016

1. Wax-sealed tenders are invited from the reputed and professional manufactures or their authorized dealers, who have the annual turn-over of minimum of Rs. 1 Crore each year during the financial year 2012-13,2013-14 and 2014-15, for the supply, installation and commissioning of CCTV Surveillance System in the University Campus, Jiwaji University, Gwalior(M.P.)

Name of the Work	Earnest Money Deposit	Last Date and Time for Receiving Tender (Revised Date)	Date of Tender Opening
Supply, Installation & Commissioning of CCTV Surveillance System	50,000/-	05/4/2016 3:30 P.M.	11/4/2016

2. A set of Tender document can be obtained from the Office of the Registrar(Store Section), Jiwaji University , Gwalior_474011 (M.P.), on any working day from 22/03/2016to 05/04/2016 during the office hours at cost of Rs. 1000/.(Rupees One Thousand) (non refundable) by Demand Draft from any scheduled bank drawn in favour of the “Registrar, Jiwaji University, Gwalior(M.P.) payable at Gwalior.
3. The tender shall be accompanied with EMD of Rs. 50,000/- in the form of Demand Draft drawn on any nationalized scheduled bank in favor of the “Registrar Jiwaji University Gwalior” otherwise, the tender will not be accepted.
4. Details of the Tender Document can be seen at website www.jiwaji.edu. The tender document can also be downloaded from ‘Tender Section’ the website orf the University. In such case, the Tenders must enclose cost of bid document mentioned above in form of Demand Draft along with its Technical Bid. Tenders found without tender fee shall be rejected.
5. Complete wax-sealed tender may be send by Registered Post/Speed Post only to the Registrar, Jiwaji University, Gwalior (M.P.) As to reach the office on or before the due date. Alternatively, the University has also made provision of a ‘Sealed Drop Box’ kept in the Office of the Registrar (Store Section), Jiwaji University, Gwalior for the said purpose. The wax-sealed tenders may also dropped in the drop box on or before the due date After expiry of deadline for receiving the tenders, the mouth of the drop box will be sealed. Tenders received by any other means shall not be accepted.
6. The Registrar, Jiwaji University, Gwalior (M.P.) reserves the right to accept or reject the tender without assigning any reason thereof.

Registrar

JIWAJIUNIVERSITY, GWALIOR
TENDER FOR CCTV SURVEILLANCE SYSTEM
CHECK LIST OF ENCLOSURES
(To Be Submitted In Envelope No. – 2)

The tenderer should write enclosure No. as given below on each document of the enclosures of Technical bid envelope-2 and arrange them in the following order :(Please write enclosure no. on the cover page of each document with ink.)

- Enclosure-1** Technical bid form and terms & conditions duly signed by the tenderer with seal of the firm on each page.
- Enclosure-2** Compliance sheet duly filled by the tenderer to prove that all the items quoted are in accordance with the specifications laid down in the tender document.
- Enclosure-3** Copy of PAN No. issued by Income tax department
- Enclosure-4** Copy of VAT/ TIN/CST No. Registration issued by commercial tax department.
- Enclosure-5** Copy of Service Tax Reg. No. issued by central excise & custom dept.
- Enclosure-6** Copy of authorized dealer certificate with Tender No. issued by the Manufacturer of the equipments.
- Enclosure-7** Copy of registration as registered firm or Company.
- Enclosure-8** Copy of Audited Balance Sheet of the firm along with Audit Report for the last three financial years 2012-13,2013-14 and 2014-15 .
- Enclosure-9** Copy of Income Tax Return of the firm for the last three assessment years 2012-13,2013-14 and 2014-15.
- Enclosure-10** Copy of work orders along with installation report for proving the execution of minimum Signal projects CCTV of not less than 40 Lakh with completion certificate during last Two years in Govt./Semi Govt.
- Enclosure-11** Copy of ISO 9000:2008 Certificate.
- Enclosure-12** Copy of brochures or relevant documents for the equipments to prove that the equipments quoted are in accordance with the specifications laid down in the tender document.
- Enclosure-13** Declaration stating that the bidder has not been Black-Listed/De-listed or are put to any holding by any Indian Institutional Agency / Government Department / Public Sector Undertaking in last three years. In case they have been black listed by any of the Institutions, details of same be Furnished.

Note: All pages including the enclosures shall be numbered and signed with seal by the tenderer.

JIWAJI UNIVERSITY, GWALIOR
TERMS AND CONDITIONS
(To Be Submitted In Envelope No. – 2)

1. The sealed offers should be addressed to the Registrar Jiwaji University Gwalior, and to be submitted on or before **05 APRIL 2016 Till 03:30 P.M.**
2. The offer received after 05 APRIL Till 03:30 P.M.. shall not be accepted in any case.

Tenders received within the specified time shall be opened on **11/4/2016** at 03.0 P.M. at room no.16 Administrative Block, Jiwaji University, Gwalior in presence of the tenderers or their authorized representatives who choose to remain present.
3. The tender shall be accompanied with EMD of **Rs. 50,000/-** in the form of Demand Draft/BG/FDR/NSIC Certificate drawn on any Nationalized Scheduled Bank in favour of The Registrar, Jiwaji University, Gwalior . In case of the tender document downloaded from the website, the cost of tender document Rs.1000/- should also be submitted by DD in favour of The Registrar, Jiwaji University, Gwalior.
4. Those exempted for payment of EMD, must enclose necessary documents like SSI / NSIC / DGS&D / MPLUN Registration.
5. M.P. Laghu Udyog Nigam Ltd. and the Small Scale Industries registered with the Director of Industries, MP or National Small Industries Corporation Ltd (NSIC) or with the D.G.S.&D., are exempted from payment of earnest money/Security deposit under the explicit order(s) of the government Tenders from such units whose competency is certified by the Director of Industries, MP or NSIC or D.G.S.& D. can be accepted without security deposit and can be eligible for price preference as may be prescribed by the State Government of MP, from time to time. In such case a competency certificate issued by the Director of Industries, MP or NSIC or D.G.S.& D. valid for the period of tender must accompany the tender in support of each item.
6. The tenderer must be a Total System Integrator for supplying, installation and commissioning of hardware, software and services for CCTV surveillance system as required in the tender.
7. The tenderer must be a manufacturer or authorized dealer from the manufacturers for the equipments as specified in the tender document. If the certificates of authorized dealer for the equipments will not be found attached with the Technical Bid then the tender will be summarily rejected.
8. ISO certificate. Tenderer should enclose copy of ISO certificate with technical bid.
9. The tenderer should have equipped after sales service center (SSC) with a minimum of one center in Gwalior city.
10. The tenderer must have executed minimum Single CCTV projects of not less than 40 Lakh during last Two years in Govt. Public Sector./Semi Govt./undertakings/Police, Military Department. Please enclose copy of work order along with installation report with the technical bid.
11. The tenderer firm should have annual turnover at least of Rs. 2 Crore each year during last three financial years 2012-13, 2013-14 and 2014-15. Copy of Audited Balance Sheet of the firm along with Audit Report for the last three financial years 2012-13, 2013-14 and 2014-15 should be enclosed with technical bid.
12. The tenderer should enclose copy of PAN issued by income tax department with technical bid. Copy of Income Tax Return of the firm for the last three assessment years 2012-13, 2013-14 and 2014-15 should also be enclosed with technical bid.
13. The tenderer should have VAT/TIN/CST registration No. issued by department of commercial taxes and Service Tax registration No. Issued by central excise & custom department. (Please enclose copy of registration with technical bid)
14. The tenderer should be registered under MP Shop & Establishment Act/Company Act or other

applicable Act.(Please enclose copy of registration with technical bid.)

15. Conditional Tenders shall not be accepted in any case. A copy of the terms and conditions signed by the tenderer with seal on each page should be submitted along with technical bid as token of acceptance of the terms and conditions. In case of non-receipt of terms and conditions duly signed with the tender form the tender will be rejected.
17. Payment: Payment shall be released by University as per the following terms:
Payment for 80% of the value of goods successfully supplied shall be released against proof of delivery of consignment to the destination places as per dispatch instructions on submission of bills in triplicate. Balance 20% shall be released after successful installation and commissioning of equipment, subject to the condition of payment receipt from concern deptt. The bills for the purpose of payment shall be submitted to University Gwalior. No interest shall be payable on delayed payments due to what so ever reason.
18. Technical bid shall be opened only of those who have submitted the EMD and cost of tender form as specified.
19. Financial bid shall be opened only of those who are selected in Technical Bid evaluation.
20. The list of items required for CCTV surveillance system and their specifications are mentioned in the chart given below:

Technical Evolution will be on following Technical Evaluation Chart.

S.NO.	Parameters	Max Marks	Basis of Marks to be awarded	
			Criteria	Marks
1	Turnover	15	>12Crore (15 Marks)	15
			8-10 Crore	12
			3-5 Crore	10
2	ISO Certificate	15	ISO9001:2008	15
3	Own Processing Software	15	Processing Software	15
4	No. of Projects completed worth more than 40 Lakh during last Two year	15	> 5	15
			3-5	12
			2	10
5	Project Presentation/ Demonstration	40	Based on Presentation	

For Technical Qualification Bidding should score minimum 75 marks. Financial Bid of only those bidders will be opened who will score minimum 75 marks.

Signature of tenderer with Seal

21. The tenderer should enclose brochures or relevant documents for the equipments to prove that the equipments quoted are in accordance with the specification laid down in the tender documents.
22. Compliance sheet duly filled by the tenderer to prove that all the items quoted are in accordance with the specifications laid down in the tender document should be enclosed with technical bid.
23. On-site warranty and post warranty maintenance and spare parts support of all hardware, software, equipments for three years after User Acceptance Test will be provided by bidder.
24. The tenderer may visit the site before quoting for ascertaining the exact nature of Work, its quantity, location etc.
25. **A - Submission of the Tender Document**

The tender shall be submitted under TWO BID system in **three different sealed envelopes**:

ENVELOPE No.1 :- EMD and cost of tender document, if downloaded from the website.

ENVELOPE No.2:- Technical Bid and Terms & Conditions containing all certificates, documents, compliance sheet along with duly filled in check list, as set out in the tender document and in the order as given in the check list.

ENVELOPE No.3:- Financial Bid, containing the rates quoted by the tenderer.

ENVELOPE No.1

- (i) This envelope will consist of the Earnest Money Deposit (EMD) of Rs.50,000/- in the form of DD/FDR/Bank Guaranty from any nationalized scheduled bank, in favour of the Registrar Jiwaji University Gwalior. In case of the tender document downloaded from the website, the cost of tender document Rs.1000/- should also be included in this envelope by DD in favour of the Registrar Jiwaji University Gwalior.
- (ii) Those tenders not containing the EMD and the cost of tender document will be summarily rejected. (iii) This envelope will be super scribed as “**ENVELOPE**
- (iii) M.P. LaghuUdyog Nigam Ltd. and the Small Scale Industries registered with the Director of Industries, MP or National Small Industries Corporation Ltd (NSIC) or with the D.G.S.&D., are exempted from payment of earnest money/Security deposit under the explicit order(s) of the government Tenders from such units whose competency is certified by the Director of Industries, MP or NSIC or D.G.S.& D. can be accepted without security deposit and can be eligible for price preference as may be prescribed by the State Government of MP, from time to time. In such case a competency certificate issued by the Director of Industries, MP or NSIC or D.G.S.& D. valid for the period of tender must accompany the tender in support of each item.
- (iv) Those exempted for payment of EMD, must enclose necessary documents like SSI / NSIC / DGS&D / MPLUN Registration

No.1 – EMD” and should be addressed to the Registrar, Jiwaji University, Gwalior.

ENVELOPE No.2 (i) All technical information in Technical bid along with Terms and Conditions, certificates, etc., to be submitted in Envelope No.2 duly sealed. The tenderer should write enclosure No. as given below on each document of the enclosures of Technical bid envelope and arrange them in the following order:

- | | |
|--------------------|---|
| Enclosure-1 | Technical bid form and terms & conditions duly signed by the tenderer with seal of the firm on each page. |
| Enclosure-2 | Compliance sheet duly filled by the tenderer to prove that all the items quoted are in accordance with the specifications laid down in the tender document. |
| Enclosure-3 | Copy of PAN No. issued by Income tax department |
| Enclosure-4 | Copy of VAT/ TIN/CST No. Registration issued by commercial tax department.. |
| Enclosure-5 | Copy of Service Tax Reg. No. issued by central excise & custom dept. |

- Enclosure-6** Copy of authorized dealer certificate issued by the Manufacturer for the equipments.
- Enclosure-7** Copy of registration certificate issued under MP shop & establishment act/Company Act or other applicable act.
- Enclosure-8** Copy of Audited Balance Sheet of the firm along with Audit Report for the last three financial years 2012-13 and 2013-14 and 2014-15.
- Enclosure-9** Copy of Income Tax Return of the firm for the last three assessment years 2012-13 and 2013-14 and 2014-15.
- Enclosure-10** Copy of work orders along with installation report for proving the execution of minimum two CCTV projects of not less than 40 Lakh during last Two years in Govt./Semi Govt./PSU.
- Enclosure-11** Copy of ISO Certificate.
- Enclosure-12** Copy of brochures or relevant documents for the equipments to prove that the equipments quoted are in accordance with the specifications laid down in the tender document. (ii) All pages including the enclosures shall be signed with seal by the tenderer. (iii) This envelope will be super scribed as “**ENVELOPE No.2 – “TECHNICAL BID”**” and should be addressed to the Registrar Jiwaji University, Gwalior.

ENVELOPE No.3 (i) **FINANCIAL BID** shall be in the third envelope containing the filled up schedule of rates duly sealed.

(ii) This envelope should be super scribed as “**ENVELOPE No.3 – “FINANCIAL BID”**” and should be addressed to The Registrar, Jiwaji University, Gwalior.

B. All the above three envelopes are to be inserted in a larger envelope and duly sealed before submitting the tender document. This envelope should be addressed to the Registrar Jiwaji University Gwalior – 474011 (M.P.) and super scribed as ~ “TENDER FOR CCTV SURVEILLANCE SYSTEM”

All tenderers are required to read tender document carefully before quoting rates and submission of tender.

26. **RATES** : (i) Only net rates should be quoted in financial bid against the specified column of the items.. No Separate free goods or cash discounts should be offered.

(ii) Delivery should be given to Jiwaji University, Gwalior. The University will pay no cartage or transportation charges and the rates must be quoted inclusive F.O.R. Gwalior accordingly.

(iii) The net rate must be inclusive of all charges by way of packing, forwarding, incidental of transit charge including transit insurance, octroi and any other levies or duties, lift, labour charges etc. charge on the product except Sales Tax (VAT/CST). If rates are quoted giving any free goods quantity or cash discounts the same shall not be considered.

(iv) Only Sales Tax (VAT/CST) and surcharge if applicable will be paid over net rate.

(v) The rates must be written both in words and figures in financial bid, in case of discrepancy between the prices quoted in words and in figures, lower of the two shall be considered. There should not be errors and/or overwriting. Corrections if any should be made clearly and signed by the tenderer with date. Element of the Madhya Pradesh Sales Tax (VAT) or Central Sales Tax should be mentioned separately.

(vi) The tenderer should clearly state regarding charges for installation of the equipments if any, in the commercial bid excluding service tax etc. . Service tax if applicable will be paid extra.

- (vii) The tenderer should clearly state regarding charges for Comprehensive Annual Maintenance Contract(AMC) of the entire CCTV Surveillance System in the commercial bid excluding service tax etc.. Service tax if applicable will be paid extra.
27. **EMD amount Rs. 50000/-** of the successful tenderer will be converted as part of performance guarantee after supply, installation & commissioning of CCTV Surveillance system, so as to ensure proper maintenance and satisfactory working of the items. The successful tenderer may choose to adjust EMD as part of performance guarantee otherwise after submission the required performance bank guarantee the EMD amount will be refunded back to the tenderer. No interest shall be paid on the EMD/Performance Guarantee.
28. **PERFORMANCE BANK GUARANTY:** The performance bank guarantee for the entire CCTV Surveillance System will be 10% of the total approved cost of the equipments excluding installation and commissioning charges & taxes. After the successful supply, installation and commissioning of the CCTV surveillance system the successful tenderer should submit a performance bank guarantee issued by a nationalized scheduled bank valid for 13 months for the percentage amount as mentioned above in favour of the Registrar, Jiwaji University, Gwalior,. The payment of the successful tenderer should be released only after submission of the required performance bank guarantee.
29. **WARRANTY:** Warranty for the entire CCTV surveillance System shall be for a period of **36 months** from the date of installation, commissioning and shall include free maintenance service, free provision of spare parts, as and when necessary. This condition shall also apply towards the system software delivery by successful tenderer along with the system.
30. **INSURANCE:** The vendor will undertake adequate insurance cover for the equipment and other accessories during the period of transit and installation and up to acceptance. The insurance shall be for an amount equal to 110% of CIF value of goods delivered at the University covering all risks (fire, burglary, SRCC, Natural calamities such as earthquake, flood, etc.) for a period of **2 months** from the date of delivery covering the transit period.
31. **MAINTENANCE SERVICE:** (i) The vendor will provide to the University 36 (Thirty Six) months free maintenance service from the date of installation & commissioning of CCTV surveillance system and such service include repair and replacement of all kits or parts and spares as and when required. After the completion of warranty period it is compulsory for the successful tenderer to furnish one year Comprehensive annual rate contract with the university on the approved rates.
- (ii) The tenderer shall provide required support services by way of actual maintenance by their engineers and/or arrange for supply of kits or parts and spare on terms to be mutually agreed upon.

BASIC REQUIREMENTS:

1. **24 x 7 service on site support**
 2. **Any technical call should be attend within 2 -3 hrs.**
 3. **Immediate availability of spares at local office**
 4. **Down time should not be more than 24 hrs.**
 5. **In case of any major damage and defect in any equipment, a standby same equipment should be immediately provided by the tenderer for regular & continuous functioning of system.**
32. In case of any delay in maintenance & service the Registrar, Jiwaji University, Gwalior may impose a penalty of suitable amount which may be deducted from the performance bank Guarantee. Decision of the Registrar, Jiwaji University, Gwalior in this matter will be final and binding to the tenderer.
33. The cost of three Year Comprehensive Annual Maintenance Contract quoted by the tenderer and approved by the university shall be paid in advance in equal yearly installments within 30 days of receipt of claim submitted by tenderer at the start of each year, after completion of warrantee/maintenance obligation of the previous year.

34. The successful tenderer should submit a Bank Guarantee for Project Cost @10% of the cost of equipments of CCTV surveillance system at least 15 days before the expiry of performance bank guarantee. The Project Cost Bank Guarantee should be valid for the period of 1 Year from the date of completion of the warranty period with 3 months grace period
35. The Bank Guarantee submitted towards performance guarantee taken during warranty period will be released only after submission of the bank guarantee for Project Cost as mentioned in clause No. 34. Non-submission of Project Cost Bank Guarantee at least 15 days before the expiry of Performance Bank Guarantee will be sufficient reason for invoking the performance guarantee. No separate AMC Agreement needs to be executed. **However, all the systems shall be properly maintained irrespective of Non-claiming/Non-renewal of Project Cost by the Tender in time.**
36. The work should commence within 15 days from the date of issue of university work order.
37. Completion time for supply, installation and commissioning of CCTV Surveillance System shall be **60 days from the date of work Order.**
38. The work orders will be placed to the approved tender through registered post only and the date of registration at the post office will be treated as the date of order for calculating the period of execution. The approved tenderer will execute the order within specified time.
39. The successful Tenderer should take insurance coverage to cover the following: (a) Workman compensation. (b) Third party liability. (c) All risk insurance policy.
40. **Important Clause:** It will be the sole responsibility of the successful tenderer to design, supply all the material required for successful completion of the work, erect them as per our requirement and commissioning the same. The entire system shall be tested and the same will be taken over by the Jiwaji University, Gwalior. *41. Rate finalized under this tender process will be applicable for a period of one year from the date of the first work order.*
42. Remittance charges on payment made to the firm will be borne by the firm.
43. The requirement shown in the Tender Document is tentative and may vary as per actual requirement at the time of placing the order.
44. The quantity of equipments indicated in the tender is mere estimates and is intended to give an idea to the prospective tenderers to enable them to decide whether they will undertake to supply & install the equipments to this University on most competitive rates. The figures indicated in the tender do not constitute any commitment on the part of the university to purchase equipments in the quantity shown therein. It is further made clear that the University does not bind itself to purchase all quantity mentioned in the tender and no objection against the quantity of the indent of equipments being more or less than the approximate quantity will be entertained and shall not be acceptable as a ground for non-supply on the quantity indented.
45. If there is any DGS&D rate contract or MPLUN rate contract, the same should be quoted enclosing the copy of rate contract, which will get preference.
46. The tenderer should avoid the use of vague terms such as „extra as applicable“ otherwise such tenders will be rejected.
47. If any dates of receipt/opening of tender happen to be declared as holiday, the schedule will be shifted to the next working day automatically.
48. Earnest money shall be forfeited in case the selected firm does not supply the items within specified time as mentioned in the supply order by the Registrar, Jiwaji University, Gwalior.
49. The Tenderer may be disqualified, banned or suspended from the work allotted if:-
 - A. The firm is suspected to be doubtful loyalty to state.
 - B. The state bureau of investigation moral turpitude in relation to business dealings, which if established would result in business dealing with it banned.

- C. Registrar, Jiwaji University, Gwalior is prima-facie of the view that the firm is guilty of an offence involving moral turpitude in relation to business dealings, which if established would result in business dealing with it banned.
50. If the successful tenderer requests for an extension of time for supply and installation of all or any item due to account of occurrence of any circumstances beyond control of human being than he shall apply in writing to the Registrar Jiwaji University, Gwalior for the same immediately on occurrence of the circumstances. Decision of the Vice Chancellor, Jiwaji University will be final and binding to the tenderer in this regard.
 51. If the tenderer is unable to complete the supply, installation & commissioning of CCTV Surveillance System within the specified or extended period, the Registrar shall be entitled to purchase all the items or any part thereof from the second lowest bidder or elsewhere without notice to the tenderer on his (i.e., Tenderers) account and risk. The tenderer shall be liable to pay any loss or damage which the registrar Jiwaji University may sustain by reasons of such failure on the part of the tenderer.
 52. The supply order shall generally be awarded to the lowest tenderer as per the Bid Evaluation Criteria. However the Registrar Jiwaji University Gwalior does not bind itself to accept the lowest or any other offer and reserves the right to accept or reject any or all the offers either in full or in part without assigning any reason. The Registrar Jiwaji University, Gwalior also reserves the right to reject any bid which in his opinion is violating any of the conditions without any liability to any loss whatsoever it may cause to the tenderer in the process.
 53. Tax deducted at source (TDS) will be deducted by the Registrar Jiwaji University from the bills as per rules enforce from time to time. The firm will have to bear all applicable taxes and duties enforced by the Central / State Government / Local Bodies from time to time.
 54. All the items supplied by the tenderer should be strictly in accordance with the specifications laid down in the tender document.
 55. The tenderer shall be responsible for the proper packing and delivery of the material to the University. In the event of any loss, damage, or breakage or shortage, the tenderer shall make good the loss and shortage found at the checking of the materials by the University. No extra cost on such account shall be admissible.
 56. The prices charged for the items supplied by successful Tenderer shall in no event exceed the lowest price at which the successful Tenderer sells the same items to any other persons during the period of supply to the university. If any time, during the period of supply, the tenderer reduces the sales price chargeable for any item, he shall forth will notify such reduction to the Registrar, Jiwaji University, Gwalior and the price same payable for the items supplied after the date of coming into force of such reduction or sale shall stand corresponding reduced.
 57. Extra stipulation or any other conditions contrary to the above Tender Conditions are not acceptable and may render the tender liable to rejection.
 58. In the event of any dispute, The Vice Chancellor Jiwaji University, shall be the sole Arbitrator and his decision shall be final and binding on both the parties.
 59. After submission of tender no tenderer shall contact Jiwaji University on any matter relating to bid. Any effort on part of a tenderer to influence the Competent Authority in the decision making of bid evaluation or bid comparison may result in rejection of the tenderer's bid.
 60. Legal proceeding if any arising out of the Tender shall have to be lodged in courts situated in Gwalior City only.
 61. It is expected and assumed that all the documents, certificates, declarations made are true and correct on the basis of which technical evaluation will be made. If the information submitted by the tenderer is not correct and subsequently has come to the knowledge of Jiwaji University, then the order of supply for the items may be liable for cancellation at the discretion of jiwaji University and EMD/Performance Guarantee will be forfeited.
 62. The Registrar, Jiwaji University, Gwalior can relax the terms and conditions in the exigency of the department work.

**Registrar
Jiwaji University, Gwalior**

I/We have read the above terms and conditions and I/We agree to abide by the same.

Signature of Tenderer with Seal

Check List

(To be submitted with First Page in Technical Bid Compulsory)

Name of Firm :

Name of Item :

S. No.	Description	Details	Page No.
1	Tin No.		
2	Firm's Registration & Certificate		
3	EMD		
4	(Tender Fee)DD No.		
5	Acceptance of all terms & Conditions of the Tender		
6	Tender Form		
7	Separate Technical Bid & Commercial Bid		
8	Income Tax clearance certificate with copy of I.T. Returns		
9	PAN Number		
10	Service Tax No.		
11	Sale Tax Clearance Certificate		
12	Turnover 2012-13 2013- 14 2014-15	Rs. Rs. Rs.	
13	Balance Sheet Last Three Year		
14	Authorization /OEM Cert. of the item		
15	SSI/NSIC/DGS & D Reg. certificate for exemption		
16	Previous Supply order with work complete certificate.		
17	ISO 9000 Certificate		
18	Declaration Certificate for Black Listed		
19	Spec. Compliance Sheet		

Seal and signature

BILL OF MATERIAL

S.No.	Name Of Equipment	Quantity (tentative)
01	2MP (1080P) IR Fixed Indoor Dome Camera or AHD Camera	50 Nos. or as per requirement
02	IP 2 MP Out Door Bullet Fix Camera or AHD Camera	06 Nos. or as per requirement
03	IP 2 MP Out Door Box Camera	04 Nos. or as per requirement
04	Central Server for VIDEO MANAGEMENT Software	03 Nos. or as per requirement
05	UNIFIED STORAGE with 80 TB	01 Unit
06	NVR 8 Channel Make:- Pelco, Axis, Sony, Bosch, Honeywell, NUUO	As per requirement
07	NVR 16 Channel Make:- Pelco, Axis, Sony, Bosch, Honeywell, NUUO	As per requirement
08	DVR 8/16 Channel	As per requirement
09	Layer 2 Network Switch, Power Cable or other active and passive component	15 Nos. or As per requirement
10	Layer 3 Network Switch	01 Unit
11	Client Workstation with antivirus license	03 Nos.
12	LED Display Unit 47"	03 Nos.
13	Online UPS 1 KVA for outdoor camera with 2 Hr. Backup	10 Nos. or Need Based
14	Online UPS 5 KVA N+1 for Control Room with 2 Hr. Backup	01 Set
15	Integrated Video Management Software for Camera	60 Per Channel
16	Network Cable (OFC) with all terminal equipments	As Per required
17	CAT 6 Cable	As Per required
18	Installation/Civil work of poles and other required accessories should be made of High grade quality with GI Paint, electrification cabling armed wiring and other required job at location	As required at given location(s)
19	Customized furniture for Control Room	01 Lot
20	Network Rack/ outdoor cabinet for all equipment at main control room and remote location with electric fitting	As required at given location(s)
21	Three years Onsite replacement warranty and complete maintenance for Entire systems from the Date of Check Test & handover Of the Systems.	3 Year
22	HDD 5TB	10 or as per requirement

TECHNICAL SPECIFICATION

S.NO.	Name Of Equipment	Compliance Yes/NO	Remark
01	<p>2MP IR Fixed Indoor Dome Camera : 50 Nos. or as per need</p> <p>Image sensor : 1/2.8" 2 Megapixel progressive scan Sony Exmor CMOS</p> <p>Electronic Shutter : Auto/Manual, 1/3 - 1/10000s</p> <p>Minimum Illumination 0. 01Lux @ F1.4 (Color), 0 Lux @ F1.4 (IR LEDs on)</p> <p>S/N Ratio More than 50dB</p> <p>Lens : 2.8 - 12mm Vari - focal Motorized</p> <p>Backlight Compensation : BLC / HLC / DWDR</p> <p>White Balance : Automatic / Manual</p> <p>Frame Rate Primary Stream: 1080p</p> <p>Day and Night : Automatic, Color, Mono</p> <p>Max video resolution : 1080p (1920 x 1080)</p> <p>Video Streams : Individually configurable 02</p> <p>Video Compression H.264 / MJPEG</p> <p>Day/Night Auto (ICR) / Color / B&W</p> <p>Primary Stream Resolution 1080p (1920x1080)</p> <p>Privacy Mask : Min.4 Zones or more</p> <p>MJPEG Required, H.264 Required</p> <p>Audio support :As per Required</p> <p>Two-way audio : Required</p> <p>Audio Compression : G.711 or better</p> <p>Input / Output : 01 IN and 01 OUT</p> <p>RJ-45 for 10/100 base-T Ethernet</p> <p>I/OPort: 01 IN, 01 OUT</p> <p>Supported Protocols IPv4/6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS</p> <p>ONVIF : Profile S</p> <p>Security Up to 20 users, multiple user access levels with password protection</p>		

	<p>Housing : IP 66 rated, IK10 Vandal Proof</p> <p>IR Source : Inbuilt minimum 25-30 meter</p> <p>Operational Temperature -30°C to +60°C</p> <p>Relative Humidity Less than or equal to 95%</p> <p>Power Supply 12 V DC, or PoE IEEE 802.3af</p> <p>Certifications : CE , FCC and UL</p> <p>Makes:- Pelco, Axis, Sony, Bosch, LG, Honeywell.</p>		
02	<p>IP 2 MP Out Door IP Fix Camera (Bullet Camera):- 06Nos. or as per requirement</p> <p>Image Sensor 1/2.8" 2Megapixel progressive scan Sony CMOS</p> <p>Electronic Shutter Speed Auto/Manual, 1/3~1/10000s</p> <p>Minimum Illumination 0. 01Lux @ F1.4 (Color), 0 Lux @ F1.4 (IR LEDs on)</p> <p>Backlight Compensation BLC / HLC / DWDRavailable all</p> <p>IRIS Control : DC or Automatic</p> <p>Focus : Automatic / Manual</p> <p>S/N Ratio: More than 50dB</p> <p>Automatic Gain Control : Auto / Manual</p> <p>Frame Rate Primary Stream: 1080p @ 1~25/30 fps</p> <p>Lens : 2.8-12mm vari-focal lens</p> <p>Day/Night Auto (ICR) / Color / B&W</p> <p>IR illuminator : Illuminator may be Internal or external & visibility should be at least 30 m or better</p> <p>Effective Pixels 1920 (H) x 1080 (V)</p> <p>Primary Stream Resolution 1080p (1920x1080)</p> <p>Video Streaming Dual streaming: H.264 / MJPEG</p> <p>Security Up to 20 users, multiple user access levels with password protection</p> <p>Audio support : Required</p> <p>Noise Reduction : 3D DNR</p>		

	<p>Supported Protocols IPv4/6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS</p> <p>Audio Compression : Minimum G.711 or better AAC48KHz or better</p> <p>Two-way audio:Required and should be audible.</p> <p>Exposure Mode :</p> <p>Manual / Low noise / Low motion blur / AutoRanges from 1/3 to 1/10000</p> <p>Input / Output : 01 IN & 01 OUT</p> <p>Power Supply 12 V DC, or PoE IEEE 802.3af</p> <p>Operational Temperature -30°C to +60°C</p> <p>Housing It should be having IP66 rated</p> <p>Certifications : CE , FCC ,UL,EN</p> <p>Makes:-Pelco, Axis, Sony, Bosch, LG, Honeywell.</p>		
03	<p>IP 2 MP Out Door Fix Camera (BOX Camera):04 Nos.</p> <p>Image sensor & Minimum Effective Pixels (Resolution): 1/3” or better CMOS Progressive Scan & Minimum 2 MP or better</p> <p>Electronic Shutter : 1/30 to 1 / 10,000 s or better</p> <p>Min illumination/ light sensitivity (Colour) : Minimum 0.4lux (30 IRE, F 1.2) or better</p> <p>Min illumination/ light sensitivity (B/W) : Minimum 0.02 lux (30 IRE, F 1.2) or better</p> <p>Backlight Compensation : ON/OFF</p> <p>IRIS Control : DC or Automatic</p> <p>Focus : Automatic / Manual</p> <p>Automatic Gain Control : Auto / Manual</p> <p>Colour, Brightness, Contrast functionality Required</p> <p>Frame Rate : 30 FPS for 1920 x 1080 at H2.64 Compression or better</p> <p>Lens : 5– 50 mm varifocal lens</p>		

	<p>Day and Night functionality : Automatic, Color, Mono</p> <p>IR illuminator : Illuminator may be Internal or external & visibility should be at least 50 m</p> <p>Video Resolution : Minimum 2 MP (1920 x 1080)</p> <p>Video Streams : Individually configurable 02 video streams (H.264, MJPEG)</p> <p>Intelligent Video Motion detection, Object Detection, Tampering Alert, Face Detection (Through VMS)</p> <p>Dual H.264 (Recording & Viewing) Required</p> <p>Audio support : Required</p> <p>Supported Protocols IPv4/6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPOE, DDNS, FTP, IP Filter, QoS</p> <p>Audio Compression : Minimum G.711 or better AAC48KHz or better</p> <p>Two-way audio : Required and should be audible.</p> <p>Input / Output : 01 IN & 01 OUT</p> <p>Operational temperature : -10°C to 50 °C</p> <p>Housing It should be having IP66 rated along with fan & Heater also.</p> <p>Certifications : CE , FCC ,UL,EN</p> <p>Makes:- Pelco, Axis, Sony, Bosch, LG, Honeywell.</p>		
04	<p>2MP IR Fixed Indoor Dome AHD Camera : 50 Nos. or as per requirement</p> <p>Image Sensor 2.0 Megapixel, IMX322 1/3' CMOS</p> <p>Effective Pixels 1920 (H) x 1080 (V)</p> <p>Electronic Shutter 1/25 - 1/10,000 Sec</p> <p>Video Frame Rate 1080P@25fps (PAL);1080@30fps(NTSC)</p> <p>Lens 2.8mm-12mm</p> <p>Synchronization Internal</p> <p>Min. Illumination0.03Lux @(F1.2,AGC ON) ,0Lux with</p>		

	<p>IR</p> <p>Video Output1-channel BNC</p> <p>Day/NightIR cut</p> <p>IR Range30m</p> <p>Power SupplyDC12V±10%</p> <p>Power ConsumptionMax 4.2W</p> <p>Working Environment-10°C~+55°C/ Less than 95%RH</p> <p>Ingress ProtectionIP66</p> <p>Makes: Pelco, Bosch, Panasonic, LG, Samsung</p>		
05	<p>2 MP Out Door AHD Camera (Bullet Camera): 06 Nos. or as per requirement</p> <p>Image Sensor 2.0 Megapixel, IMX322 1/3' CMOS</p> <p>Effective Pixels 1920 (H) x 1080 (V)</p> <p>Electronic Shutter 1/25 - 1/10,000 Sec</p> <p>Video Frame Rate 1080P@25fps (PAL);1080@30fps(NTSC)</p> <p>Lens 3.6mm / 6mm optical</p> <p>Synchronization Internal</p> <p>Min. Illumination0.03Lux @(F1.2,AGC ON),0 Lux with IR</p> <p>Video Output1-channel BNC</p> <p>Day/NightIR cutIR Range20m</p> <p>Power SupplyDC12V±10%</p> <p>Power ConsumptionMax 4.2W</p> <p>Working Environment-10°C~+55°C/ Less than 95%RH</p> <p>Ingress ProtectionIP66</p> <p>Makes:- Pelco, Bosch, Panasonic, LG, Samsung</p>		
06	<p>DVR as per need 8CH/16CHas per requirement</p> <p>Video Compression H.264</p> <p>Video System NTSC/PAL</p> <p>Operation System Linux(embedded)</p> <p>Video-input /output 16CHand / or 8CH inputs / VGA and HDMI</p> <p>Audio input /output 4CH inputs /1CH output(RCA)</p> <p>Display resolution PAL:1920*1080P or1280*720P/ NTSC:1920*1080P or1280*720P</p> <p>Featuresingle/ Quad/Nine/Sixteen/S.E.Q.</p> <p>Record resolution PAL:1920*1080P or1280*720P / NTSC:1920*1080P or 1280*720P</p>		

	<p>Speed 25fps(each ch) Recording Mode Continuous/Manual/Motion detect for 8CH and Continuous/Manual/Motion /Sensor/Alarm recording for 16CH Playback Channel "1/4CH, or Via CMS, Mobile for 1ch playback, laptop for 1/4Ch playback; Local DVR: 1~8CH; PC/MAC: 1~4CH Smart Phones: 1ch (using app)" Playback speed 15fps(each CH) Sensor & Alarm I/O no Network Type LAN, DHCP, Dynamic IP and DDNS</p> <p>E-mail Notifications Yes, Support HDD interface 1SATA HDDs, up to 6TB Multiplex Operation live display, record, playback, backup and network USB 2xUSB (for mouse and backup/upgrade) PTZ Control yes Mobile Surveillance Support Mobile Phones based on iPhone and Android operation system VGA800*600,1024*768,1280*1024,1440*900,1920*1080 HDMI 1080P IR Extender Port NO CLOUD Optional P2P Optional Power Supply DC 12V 3A</p>		
07	<p>CENTRAL SERVERfor VMSSoftware :03 Nos.</p> <p>Rack Mount Server Having Processor Intel E-5 2640 V2 Series 2.4GHz Xeon eight core 20MB Cache or better. No of processors 02</p> <p>RAM Memory – Minimum 64 GB ECC DDR3 1333 Mhz. Memory expandable up to minimum 128Gb.</p> <p>OS- Windows 2012 Standard Edition 64 bit or as per requirement</p> <p>OS Drive – 2 X 500 Gb SATA at 7200 rpms or higher</p> <p>Backup HDD: Minimum 3 X 1.5 TB SATA at minimum 7200 rpms or better with RAID Controller</p> <p>It should be supportable with fibre channel.</p> <p>Network Card – Minimum 2x1Gbit/s network cards with separate segment for cameras and viewing station.</p>		

	<p>Raid Controller – Minimum 2GB</p> <p>Power supply (N+1) Redundant</p> <p>The Application Should be based on Standard DBMS Solution</p> <p>SQL Enterprise or Data centre edition if windows clustering are implemented or else express or standard edition will work well.</p>		
08	<p>UNIFIED STORAGE –FOR VIDEO STORAGE HAVING 80 TB:01 Unit</p> <p>It Should Be Redundant Controller Based Storage Or Better failover</p> <p>The solution should implement 80TB on Suitable chassis, which is Rack Mounted with proper configuration</p> <p>It should have RAID Controller with 2GB flash back write cache (FWBC).</p> <p>It should be Connecting with server on fiber channel</p> <p>It should have redundant and load sharing power supplies</p> <p>It should support RAID-0, RAID-1, RAID 1+0, RAID 4, RAID-5 and RAID-6 storage configurations for resiliency</p> <p>It should Be Support OS Windows / Linux</p> <p>It should have Secondary Storage controller</p>		
09	<p>NETWORK SWITCH :- 8Port Gigabit-PoE+ Layer 2 Switch:15 Nos. or As Per Site required</p> <p>I/O ports and slots 8 RJ-45 auto sensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX:half or full; 1000BASE-T: full only 2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-Tx; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as aSFP slot (for use with SFP transceivers)</p> <p>Additional ports and slots : 1 dual-personality (RJ-45 or USB micro-B) serial console port</p> <p>Physical characteristics Dimensions 10(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45cm) (1U height)</p>		

Memory and processor Processor ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM

Mounting and enclosure Mounts in an EIA-standard 19-inch Telco rack or equipment cabinet (rackmounting kit available); horizontal surface mounting; wall mounting

Performance IPv6 Ready Certified

100 Mb Latency < 7.4µs (LIFO 64-byte packets)

1000 Mb Latency < 2.6 µs (LIFO 64-byte packets)

Throughput up to 14.8 Mpps (64-byte packets)

Switching capacity 20 Gbps

MAC address table size 16000 entries

Environment Operating temperature 32°F to 113°F (0°C to 45°C)

Operating relative humidity 15% to 95% @ 104°F (40°C), non-condensing

Altitude up to 10,000 ft (3 km)

Electrical characteristics Frequency 50/60 Hz

65 BTU/hr (68.58 kJ/hr), (switch only: 65 BTU/hr; combined switch + max. PoE devices: 293 BTU/hr)

Current 1.4A

Maximum power rating 86W

Idle power 13.4W

PoE power 67W

NOTES Idle power is the actual power consumption of the device with no ports connected Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the total power budget available to all PoE ports.

Safety UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1

Emissions FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A

Immunity Generic EN 55024, CISPR 24

EN EN 55024, CISPR 24

ESD IEC 61000-4-2

Radiated IEC 61000-4-3

EFT/Burst IEC 61000-4-4

Surge IEC 61000-4-5

Conducted IEC 61000-4-6

Power frequency

Magnetic field IEC 61000-4-8

Voltage dips and interruptions IEC 61000-4-11

Harmonics EN 61000-3-2, IEC 61000-3-2

Flicker EN 61000-3-3, IEC 61000-3-3

Management IMC - Intelligent Management Center;

	command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB Ethernet Interface MIB		
10	<p>24Port Layer 3 Network Switch:- 01 Unit</p> <p>I/O ports and slots 24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASETX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP ports</p> <p>Additional ports and slots RJ-45 serial console port</p> <p>Physical characteristics Dimensions 17.3(w) x 6.3(d) x 1.72(h) in (43.94 x 16 x 4.37 cm) (1U height)</p> <p>Weight 6.61 lb (3 kg)</p> <p>Memory and processor 128 MB flash, 128 MB SDRAM; Packet buffer size: 0.5 MB</p> <p>Mounting and enclosure Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)</p> <p>Performance 1000 Mb Latency < 3 μs</p> <p>Throughput up to 41.7 Mpps</p> <p>Routing/Switching capacity 56 Gbps</p> <p>Routing table size 32 entries (IPv4)</p> <p>MAC address table size 8192 entries</p> <p>Environment Operating temperature 32°F to 113°F (0°C to 45°C)</p> <p>Operating relative humidity 10% to 90%, non condensing</p> <p>Non operating/Storage temperature -40°F to 158°F (-40°C to 70°C)</p> <p>Non operating/Storage relative humidity 5% to 95%, non condensing</p> <p>Acoustic Pressure: 43.8 dB; ISO 7779</p> <p>Electrical characteristics Maximum heat dissipation 107 BTU/hr (112.89 kJ/hr)</p> <p>Voltage 100 - 240 VAC, rated</p> <p>Maximum power rating 31.5W</p> <p>Idle power 13.4W</p> <p>Frequency 50/60 HZ</p> <p>NOTES Idle power is the actual power consumption of the device with no ports connected Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated</p> <p>Safety UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC 60950-1; CAN/CSA-C22.2 No. 60950-1; Anatel; ULAR; GOST; EN 60950-1/A11; FDA 21 CFR Subchapter J; NOM; ROHS Compliance</p>		

	<p>Emissions FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4 2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR 22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4- 2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; EN 61000-3-2:2006; EN 61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A</p> <p>Management IMC - Intelligent Management Center; Command-line interface; Web browser; SNMP manager</p>		
11	<p>Client Workstation:- 03 Nos.</p> <p>Processor: Intel Core i7</p> <p>RAM 16GB DDR3</p> <p>HDD Min 1TBX2 SATA</p> <p>Optical Drive Latest Version DVD-R/W</p> <p>External Graphical Card NVIDIA Ge Force 210 with 1 GB or better</p> <p>Optical Mouse & Keyboard Head phone and micro phone</p> <p>10/100/1000 Ethernet, 4USB2.0Ports (incl. two in the Front side) and other Ports required for the System/Common ports</p> <p>Latest renowned Antivirus Suite licensed</p> <p>All Software's to be supplied with OEM media and Licensed All Hardware and Software to be IPv4, IPv6 Compliant and Dual stack configurable, wherever applicable.</p> <p>Windows 7 Professional or equivalent or higher with Original License</p>		
12	<p>LED Display Unit 47”:- 04 Nos.</p> <p>Resolution 1920 x 1080 pixels, Full HD or higher</p> <p>Size 47 inch or bigger</p> <p>Light Source LED</p> <p>Brightness 350cd/m</p> <p>Ratio 3000:1</p>		

	<p>Viewing Angle H : 178°, V : 178°</p> <p>Video NTSC, PAL</p> <p>Standard Inputs HDMI,DVI-D,RGB,USB2.0,Audio</p> <p>External control RS232,RJ45,IR Receiver</p> <p>The Display unit should be capable of 24 x 7 operations without degradation in performance</p> <p>Makes:- Sony,LG,Samsung,Panasonic</p>		
13	<p>UPS :-On Site – On remote Locations - ON LINE 1KVA Minimum for 2 hours back up</p>		
14	<p>UPS On Control Room – ONLINE UPS5KVA N+1</p> <p>APPROPRIATE POWER BACK UP TO BE PROVIDED - Minimum for 2 hours - 01 Set</p>		
15	<p>Integrated Video management Software</p> <p>The system should be easy to install, learn, operate and manage:</p> <p>The VMS must have rich user interface that provides one-click access, dragdrop, context menu, shortcut keys, customizable GUI etc. to enhance operational efficiency in daily tasks and maintain The VMS shall have ability to respond fast & shall be applicable to all processes, functions, features, and screens of a video management system.</p> <p>Scalability: The VMS shall have ability to connect and integrate other technologies and third party software systems in future and act as a cohesive platform for entire surveillance and security system. The system should be able to bi-directionally and dynamically exchange data between various software applications in real-time as well as schedule transfer. The Software shall be scalable upto 10 times minimum. Support for unlimited cameras, servers, sites and clients. Support for storage expandability.</p> <p>Well documented Software Development Kit (SDK): The SDK should include a rich, easy-to-use Application Programming Interface (API) that supports the most common programming languages.</p>		

Input and output support: The VMS shall have ability to receive and accumulate inputs from external hardware/software and respond and activate outputs based on the predefined rules.

Event management: The VMS shall have ability to enforce custom settings for event detection, alarm notification, recording, input/out (I/O) control, and other features in response to events. The alarm management module shall support graphical displays with interactive icons to display the status of the cameras & other inputs.

Support for standard protocols: The VMS shall have ability to maintain independence from any one vendor & shall support open standard protocol i.e. ONVIF

Smooth software upgrade path for support of new devices, drivers and operating systems. System should be able to implement software upgrades without requiring all hardware components to be reconfigured.

System should provide Database Server Redundancy options, Camera Server Redundancy options, and automatic fault tolerance for robust system uptime and Distributed database and video storage.

The system should be able to define critical cameras and provision to record critical cameras over others.

On screen help and instructions: The system should provide context-sensitive help and active assistance based on the module / screen / operations a user is trying view or perform. As the user moves around the interface, the help should automatically changes to the relevant field-level help topic.

Recording Server :

- The System shall not restrict the number of recording servers
- Shall support dual streaming
- Shall allow each stream to be viewed independently by client viewer.
- Recording from connected cameras shall be stored in individual databases.

<ul style="list-style-type: none"> • Shall support multiple storage formats • Shall support recording in all resolution at desired FPS • Shall support audio recording <p>Remote Users : Should support at least 10 remote users via network/web browser/client software</p> <p>Automatic check & update of hardware drivers & firmware free of cost</p> <p>Configurable data aging mechanism to automatically compress older recordings</p> <p>Customizable recording retention period for specific camera, group, area etc.</p> <p>The VMS shall have ability to easily install, configure, modify, search and remove surveillance devices with automatic discovery of IP devices.</p> <p>Advanced option to install other devices like Analog cameras, encoders, microphone-speakers.</p> <p>The VMS shall have ability to logically group devices based on installation location, device type, configuration type or any other predefined rules.</p> <p>Individual cameras/devices should inherited rules from parent group/subgroup</p> <p>The VMS shall have ability to search and view device(s) based on standard criteria like ID, Name, Location, Group, Type etc.</p> <p>The VMS shall have ability to enforce access privileges (View /Add /Edit/ Remove) to device(s) or group(s).</p> <p>The VMS shall have ability to configure e-map of surveillance facility, choose back-ground images, User-definable symbols (for deployed devices)and programmable functions, e.g. hyperlinks, controlling video feed, initialing alarms etc.</p> <p>Remote firmware updates notifications and wizard driven installation.</p> <p>Provision for primary and backup storage settings for individual camera feeds.</p>		
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<p>The VMS shall have ability to configure multiple streams with different quality parameters e.g. Codec (H.264, MPEG, JPEG) , resolution, frame & bit rate etc.</p> <p>Basic recording options [Full, Scheduled recoding , Motion detection recording, external/internal hardware or software events / trigger based recording]</p> <p>The VMS shall have ability to create and assign pre-configured views/layouts for monitoring including features like:</p> <ul style="list-style-type: none"> Linking dynamic Web pages, images, maps a view, Sharing a view between users, Special views for widescreen monitors, Updating a view only on motion detection, Rotating live video from a pool of cameras, Assigning different quality attributes on-the-fly, based on operator's actions. E.g. different quality settings for selected and non-selected video feeds/tiles/panes. Granting or revoking permission to use the view etc. <p>Basic recording options [Full, Scheduled recoding , Motion detection recording, external/internal hardware or software events / trigger based recording]</p> <p>The VMS shall have ability to configure, store and track both pre- and post-event recordings. The pre-post event time should be configurable.</p> <p>PTZ configuration including presets, patterns, patrolling, masking, priority and permissions.</p> <p>The VMS shall have ability to support operations from Web client, Windows Client, and Mobile devices etc. Popup display on the screen in case of any event/alarm/threshold etc.</p> <p>Multiple monitor support: The system should allow connecting multiple monitors on single client workstation (loaded with suitable graphics card) and display different contents on each of the connected monitor.</p> <p>All panes / tiles should indicate mode (live or recoded), source (camera name/location) and date/time and applied</p>		
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<p>quality information (FPS, CODEC).</p> <p>The font color shall be changed automatically in sync with the video/image to have a clear text reading at any point of time.</p> <p>A matrix view should support minimum 2x2, 3x3, 4x4...9x9 formats and any number of multiple screen divisions.</p> <ul style="list-style-type: none"> • VMS shall be able to operate in multicast protocol to minimize the network bandwidth • VMS shall have the capability of managing the camera throughput on per camera basis. • VMS shall support H.264 and MJPEG stream for both live view and Recording independently. Compression rate shall be manageable. • Each video streams shall be individually and independently configurable in term of resolution, frames and bandwidth • VMS shall support video streams up to at least 30fps • VMS shall support at least CIF, 2CIF, 4CIF/D1 and Full HD resolutions. • VMS shall include automatic camera discovery function and intuitive configuration wizards. • The VMS shall be able to stream standard H.264/Mpeg4 camera video streams to any external software on demand basis. <p>While in Unicast streaming, the VMS shall support flow control independently for each client.</p> <p>Snapshots: System should allow creating a still image from live or recorded feed and storing it into a workstation</p> <p>Instant replay facility with configurable replay-duration</p> <p>Digital zoom to enlarge portion of an image to provide superior zooming capability</p> <p>The VMS shall have ability to Start/Stop Recording on demand (manually)</p> <p>Evidence export feature: The system should allow users to export audio/video evidences in open format for internal</p>		
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investigation or to share authentic proof to public authorities and outside agencies. Alternatively the bidder may provide the required player/software to run the exported video file if the VMS not support to export in avi or other standard format. The system should offer options to enable watermarking camera name & timestamp and also encrypt or apply password protection to the exported clips

The VMS shall have ability to quickly search and retrieve recordings: Search methods should include search by camera(s), group, date/time, alarm/event / bookmark list, smart (motion) search by creating motion index or by generating thumbnail summary of a video archive to locate specific event. The search result should provide an intuitive timeline browser that represents the overall length of the recording. It should underscore recoded event (motion based, scheduled, event based or normal) and allow users to quickly jump back and forth to a location in selected recording.

Smart (motion) Search: The feature should enable users to select area of interest on any given view of camera recording, and search for motion incidents within that area

Sharpness etc. e in-built, configurable, basic motion detection analytic

- The system should havengitehat efficiently • motion • Missing Object •Sterilzone,Direction Violation, etc

Software should be able to generate alerts in case of:

*signal loss from the camera on account of either tampering or cable fault

* low signal-noise ratio

* full blocking of camera view

The VMS shall have the capability of providing real time alerts upon detection of each events and alarms. The VMS should support the following:

* Notification on the display monitor

* Email

* Triggering a relay/output port

The VMS shall provide chart based reports on the alarms

<p>and events received over the last 7 days</p> <p>Video analytics and video management software shall preferably be from the same OEM</p> <p>The VMS should be scalable. It should be capable of supporting up to 100 SD cameras on a single hardware server.</p> <p>The VMS client should provide additional Hindi language support along with English</p> <p>The system should offer following playback controls</p> <p>Play/Pause</p> <p>Lock speed</p> <p>Forward playback (1x, 2x, 4x, 10x, 20x, 40x,...</p> <p>Reverse playback (-1x, -2x, -4x, -10x, -20x,-40x,</p> <p>Slow forward playback (frame by frame, 1/8x, 1/4x,1/3x, 1/2x, 1x)</p> <p>Slow reverse playback</p> <p>The VMS shall have ability to bookmark / add-to-favorites in both</p> <p>Live and playback modes. Bookmarks should be user specific and managed (create, share with other users, search, remove, add comment) by the owner</p> <p>The VMS shall have ability to Start/Stop Recording on demand (manually)</p> <p>The facility should be there to extract & save the video footages / images on</p> <p>CD, DVD, USB, External Storage etc.</p> <p>The VMS client should support touch monitors in Windows 8</p> <p>Each camera's bit rate, frame rate and resolution for display and recording shall be set independently from other cameras in the system</p> <p>The VMS client shall be capable of supporting the following layouts for viewing:</p>		
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<p>* Full Screen.</p> <p>* 2x2, 3x3, 4x4, 5x5 or 1+ 5.</p> <p>* Any other customized view needed</p> <p>VMS shall be designed to offer a full IP based distributed architecture.</p> <p>VMS shall be accessible using any Standard Web browser (Safari, Firefox, Internet Explorer, Chrome, etc.) for Live view and Archive search.</p> <ul style="list-style-type: none"> • VMS shall allow managing initial client login, system configurations, logging, remote administration of recording servers, devices, security, rules, alerts and logging. • VMS shall support at least 5 levels of users with various privileges to access the system functionality. Each category of users shall have selectable rights to perform various operations like Camera add/delete, Change camera settings, Configure storage, Control PTZ cameras, User management, etc. • The System health status like Server failure, Camera disconnection, Storage full, etc. shall always be displayed in Client UI. • VMS shall maintain a continuous log of server status messages, Camera connectivity, Storage status, Recording ON/OFF, User activity logs etc. which shall be accessed from the Workstations using different filters. • VMS shall be able to detect IP devices automatically. • VMS shall store all configuration data of Servers, Analytics application settings, Camera recording Schedules, User login credentials, Archived video files etc. in a single unified Database. • VMS shall allow the user with Administrator privilege to import any Operator's screen on his/her desktop to watch the operator's activity on- 		
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line.

- VMS shall support multi-layer hyperlinked maps in form of JPEG files. Cameras can be dragged and dropped from directory on the map for click-n-view on Client viewer. It should be able to help the person at Control Room draw the shortest route between two points, calculate the distance between two points and similar functions.
- VMS shall allow for continuous monitoring of the operational status and event-triggered alarms from servers, cameras and other devices. The VMS shall provide a real-time overview of alarm status or technical problems while allowing for immediate visual verification and troubleshooting.
- VMS shall provide interface and navigational tools through the client including:
 - Graphical overview of the operational status and alarms from servers, network cameras and external devices including motion detectors and access control systems
 - The system log shall be searchable by Level, Source and Event Type.
 - The Audit Log records remote user activity (searchable by User name, Audit ID, Source and Location)
 - The Alert Log records alerts triggered by rules (searchable by Alert type, Source and Event type)
 - The Event Log records event-related information (searchable by Service name, Source and Event type)
 - The Rule Log records rules in which the Make new <log entry> action been specified (searchable by Service name, Source, Event type and Rule name)
- The configuration of the system shall be easy and shall not require IT skilled manpower.
- The configuration and set up shall not require any specific knowledge on a particular DBMS, Operating system or architectural framework.
- The solution shall be capable of analyzing video from full high-definition cameras.

16	<p>Network Cable (OFC):</p> <p>Optical Fiber Cable Single mode (SM) Fiber, Standard Properties:-Outdoor UnitubeArmored 9/125µm OS1.Also Provide all relate accessories.</p> <p>All fiber cable is to be protected with inner duct. After installation, inner ducts are to be permanently labeled as containing FIBER optic cable.</p>		
17	<p>Cat6 Cable with PVC Conduit Pipe and All Accessories:</p> <p>UTP Cat 6 Cable, TIA-568C.2, Outer Sheath LSZH, Category-6 (305 Mtrs./1000 feet per Box)</p> <p>Shall be of 4 twisted pairs of 23 AWG solid conductors</p> <p>Shall be 4-pair Unshielded twisted pair with a cross filler/divider/ isolator, meeting Category 6 tested to 250 MHz or more as per TIA 568C.2.</p> <p>Shall support 1000Base -TX and Video, Voice and have NVP of 69-70% More</p> <p>Insulation – High Density Polythene</p> <p>The Category 6 Solution shall fully comply with the link segment specifications for 1000 Base-TX in addition to the ANSI/TIA and ISO/IEC Category 6 requirements</p> <p>Performance Characteristics compliance to EIA/TIA-568C.2</p> <p>TemperatureRange: 0 deg. to +55 deg</p> <p>Shall be RoHS Compliant</p> <p>The cable shall be laid in provided separate PVC conduit (ISI Marked) from electrical cables wherever required without sharp bends. The cable shall be spliced at both the ends for punching/ crimping at keystone jacks/ UTP connectors</p>		
18	<p>HDD 5TB OEM by International manufacturers of repute 10 or as per requirement</p>		
19	<p>Network Video Recorder (NVR) 8/16 Channels as per requirement</p> <ul style="list-style-type: none"> • Network Video Recorder shall provide a live view, storage and playback of minimum 4 IP camera or more and must be ONVIF with at least 5 camera make supported. • NVR should support H.264 Main Profile, MPEG-4, MJPEG support. • It should have 1/2/ 4/8 channel display mode. • It should have Sequential display mode. • It should have 100 fps @ 8 CIF • Must support Resolution: 1024x768, 1280x720, 1280x 1024, 1920x1080 • Must support recording resolution of 704x480, 704x576, 1280x720(1M), 1280x1024(1.3M), 1920x1080(2M), 2040x1536(3M) • Must support Continuous, Alarm, Motion, Instant, and Panic 		

	<p>Recording Mode.</p> <ul style="list-style-type: none"> • Must support two way audio. • NVR can adjust the PTZ cameras directly by the web user interface. • NVR can view different preset positions of the IP cameras by clicking the number buttons on the monitoring page. You can also configure auto cruising settings on the NVR for periodic monitoring of the preset positions of the PTZ cameras. The NVR supports digital zoom for more flexible monitoring and playback. • When alarm recording is enabled and an event occurs, you can click the alarm icon on monitoring page to view the alert details. The snapshot function is supported on monitoring and playback page. • Alarm recording (by motion detection or sensor triggered). • It must have High performance megapixel recording. • The Network Video Recorder (NVR) shall be configured to send email whenever a system message is created or an alarm event occurs. The email server shall be a valid SMTP server. Each recipient email address shall be configured to receive any combination of critical, warning, or informational messages or alarm notifications. When an alarm occurs, the email message includes the NVR name, time of alarm and a list of camera that is configured to record upon alarm. • It must have Multi-channel playback at different speed. • It should support Network Support: HTTP, TCP/IP, SMTP, DHCP, DNS, DDNS, FTP, NTP, UPnP, and Multi IP Setting. Convert multiple recording files to one avi file. • Must support e-SATA. • Must support up to 5 concurrent remote connections. • Must have 1 alarm inputs, 2 relay output. • Must support minimum 2 x USB 2.0 or higher • It should have inbuilt storage capacity of 6 TB or more and must be loaded with required storage Hard disks for the recording of 8 cameras @25FPS @ HD resolution • Intelligent auto power on when power resumes after power outage. • Two Gigabit LAN ports for failover, load-balancing, with multi-IP setting. • Linux (preferred)/any OS -embedded system. • 1VGA port and 1 HDMI port should be available for connecting monitor directly to the NVR • NVR must have embedded Video management software (VMS) • Compliance Status through OEM & Boucher to be attached • Make & Model Specifications Required 		
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**Item – Wise Price Schedule For Supplying and Commissioning and CCTV system
in Jiwaji University Gwalior on Turnkey Base**

S.no.	Name of Equipment /Item	Qty	UnitCost	VAT / Service TAX %	TAX Amount	Total Unit Price	Gross Total
01	2MP (1080P) IR Fixed Indoor Dome Camera	50 Nos.or as per need					
02	IP 2 MP Out Door Fix Bullet Camera	06 Nos.or as per need					
03	IP 2 MP Out Door Box Camera	04 Nos.					
04	2MP IR Fixed Indoor Dome AHD Camera	50 Nos. or as per need					
05	2 MP Out Door AHD Camera (Bullet Camera):	06 Nos. or as per need					
06	Central Server for VIDEO MANAGEMENT Software	03 Nos. Or As per required					
07	UNIFIED STORAGE with 80 TB	01 Unit					
08	Layer 2 Network Switch, Power Cable or other active and passive component	15 Nos. or As per site Required					
09	Layer 3 Network Switch	01 Set					
10	Client Workstation with antivirus license	03 Nos.					
11	LED Display Unit 47"	04 Nos.					
12	Online UPS 1 KVA for outdoor camera with 2 Hr. Backup	10 or Need Based					

13	Online UPS 5 KVA for Control Room with 2 Hr. Backup	01 Set					
14	HDD 5 TB	10 Nos. or as needed					
15	Integrated Video Management Software for Camera	60 Per Channel					
16	Network Cable (OFC) with all terminal equipments	Need Based					
17	CAT 6 Cable	Need Based					
18	Installation/Civil work of poles and other required accessories etc.	As required given location					
19	Customized furniture for Control Room with air conditioning	01 Lot					
20	Network Rack/ outdoor cabinet for all equipment at main control room and remote location with electric fitting	As required given location					
21	Warranty Period Onsite.	3 Year					
			Total Cost				

Signature of Tenderer with Seal

JIWAJI UNIVERSITY, GWALIOR

TECHNICAL BID FOR CCTV SURVEILLANCE SYSTEM

(To be submitted in Envelope No. -02)

(Please write all entries in Capital letters and enclose relevant documents as required)

- 1- Name Of The Tenderer Firm :
- 2- Address Of The Firm :
.....
.....Telephone No.....
- 3- Name Of The Proprietor Of The Firm :
- 4- Telephone Number 1- Office :.....2- Residence :..... Mobile :.....
.....Fax :.....
- 5- E-Mail Id Of The Firm :
- 6- Full Address of the ServiceCenter :.....
Situatd at GwaliorCity.Telephone No.
- 7- Details Of The EMD Amount : Rs..... D.D. No.....
Dated..... Name and address of the Bank :
- 8- Details Of The Cost Of Form Purchased :
(A) If Purchased From The University : Amount Rs..... (Please enclose photocopy of the receipt) –
Receipt No..... Dated.....
(B) If Downloaded From The University Website Rs..... D.D. No..... Dated..... Name and address of the Bank :
- 9- PAN No. issued by Income Tax Department : (Please enclose photocopy)
- 10- VAT/TIN/CST Registration No. : issued by commercial Tax department: (Please enclose photo copy)
- 11- Service Tax Registration No. : issued by Central Excise & Custom department : (Please enclose photo copy)
- 12- Whether Registration No./Certificate Issued Under : Yes/No
M.P. shops and Establishment Act/Company Act or other applicable Act is enclosed.
- 13- Whether copy of Audited Balance Sheet of the firm along : Yes/No
with Audit Report for the last three financial years 2012-13, 2013-14 and 2014-15 is enclosed.
- 14- Whether Copy of Income Tax Return of the firm for the : Yes/No
last three assessment years 2012-13,2013-14 and 2014-15 is enclosed.
- 15- Whether Copy of Authorized Dealership Certificate : Yes/No.
issued by the manufacturer for the equipments is enclosed .

**16- Whether copy of brochures or relevant documents : Yes/No
for the equipments is enclosed.**

**17- Whether Acceptance of terms & conditions is enclosed : Yes/No
(Please sign each page of terms & conditions as token of acceptance)**

**18- Whether Agreed for three year Comprehensive Annual Maintenance : Yes/No
Contract (AMC) as mentioned in tender document.**

19- Whether ISO Certificate is enclosed.: Yes/No

**20- Whether copy of work order along with installation report to prove the experience as
mentioned in the tender document :
Yes/No
is enclosed.**

**21- Whether Copy of Compliance Sheet is enclosed : Yes/No
(Please sign each page of Compliance Sheet)**

Signature of Tenderer with Seal