

**INFORMATION BOOKLET**

**ON**

**TENDER CALL NOTICE**

(Ref: 35/21 /Dated 08/01.2021)



**PRINCIPAL  
BRAJRAJNAGAR COLLEGE  
BRAJRAJNAGAR  
JHARSUGUDA -768216  
ODISHA**

*Principal -*  
**Brajrajnagar College  
Brajrajnagar**

**Tender Call Notice No. 35/21 dt.08.01.2021**

Sealed tenders are invited in two parts i.e (i) Technical Bid (ii) Financial Bid in separate envelopes from intending manufacturers / firms /suppliers for supply of Laboratory Equipments (CBCS), Library Books (CBCS), ACs, Desktop Computer and Printers etc. for Brajrarnagar College, to be procured from IDP funds under OHEPEE. The eligible bidders may submit their tender paper on or before dt. 25/01/2021 till 3pm through Regd./Speed Post/Courier only to the undersigned. The technical bid document will be opened on dt.27/ 01/2021 at 2pm. Those who will qualify in the technical bid, their financial bid will be opened on the same day. The details in this connection can be downloaded from the college website i.e. [www.brajrajnagarcollege.ac.in](http://www.brajrajnagarcollege.ac.in)

The undersigned reserves the right to reject or cancel any or all tenders without assuring any reason thereof.

  
Dr. S.N. Boxi  
Principal  
**Brajrajnagar College**  
Brajrajnagar College  
Brajrajnagar  
Brajrajnagar

**OFFICE OF THE PRINCIPAL, BRAJRAJNAGAR COLLEGE, BRAJRAJNAGAR,  
DIST JHARSIGUDA -768216**

**TENDER CALL NOTICE**

No. 35/21

Dated. 08/01/2021

Terms and condition of Tender submission of Finalisation

Sealed tenders are invited under two bid system from intending manufactures / firms /suppliers for supply of laboratory equipments (CBCS), Library Books (CBCS), ACs, Desktop Computer and Printer for Brajrajnagar College, to be procured from IDP funds under OHEPEE as per specification in Annexure "A"

Last date and time for Submission	Dt. <u>25 / 01/2021</u> Through (speed Post/Registered Post/ Courier only)
Date, Time and place of Opening Tender Bid Documents	Dt. <u>27/01/2021</u> at 2pm. At. Brajrajnagar College, Brajrajnagar
Submission of Bid Documents	The Bidders must submit technical Bid and Financial Bid in separate envelopes through Regd./Speed Post/Courier Only) as "Tenders for supply of laboratory equipments (CBCS), Library Books (CBCS), ACs, Desktop Computer and Printers." Those who qualify the technical Bid their Financial Bid will be opened on the same day.
Tender Paper Cost and Earnest Money Deposit	Tender Paper cost of Rs.500 (Rupees five hundred only) (Non-Refundable) in the form of bank Draft drawn in favour of Principal, Brajrajnagar College, at payable Brajrajnagar. Earnest Money Deposit of Rs.5000/- (Rupees five thousand only) in the form of Bank draft in favour of Principal, Brajrajnagar College, payable at

	finalisation of tender process without interest. The EMD of successful bidder will be refunded after completion of supply without interest.
Signing of Documents	All papers /documents submitted with the Tender must be signed by the Bidder.
Delivery Time Line	The agency must ensure for delivery of the product at office of the Principal, Brajrajnagar College within 15 days after receiving of order.
Library Books	Latest edition of the library books shall be supplied by the supplier. The supplier must mention the rate of discount in case of foreign books, Indian books, Govt. and institutional books separately in financial bid of the tender document and provide the authentic price proof of the books.
Samples	Samples to be provided with tender documents for consumable items.

The undersigned reserves the right to reject or cancel any or all tenders without assuring any reason thereof. The decision of committee will be treated as final. The committee reserves the right to cancel any item if the quality of the item (sample) is compromised.

Principal  
Brajrajnagar College  
Dr. S. N. Bhoi  
Principal  
Brajrajnagar College  
Brajrajnagar



### TECHNICAL BID

(To be submitted in separate envelope)

For supply of CBCS Laboratory Equipments/ Desktop / Printer and ACs

1	Name of the Firm/ Agency (proof of Registration to be attached)	
2	Address of the Firm/ Agency	
3	Name of the Contact Person	
4	E-mail ID of the contact person	
5	Contact Number	
6	PAN Card of the organization Firm/ Agency/ Proprietor (Self Attested photocopy to be attached)	
7	GST No. of the Organisation (Self Attested photocopy to be attached)	
8	Copy of authorisation Certificate In case of distributor (to be attached)	
9	Proof of at least one order copy of any supply (Govt./PSU/PUT) to be attached	
10	Audit Report of Last three years	
11	Details of Bank— Name of Bank, Branch, Account No and IFSC Code.	
12	Details of EMD of Rs. B.D. No. and date	
13	Tender Paper Cost B.D. No and date	

This is to certify that I/we have carefully gone through all the above contents of the tender documents, thereby full understood the terms and condition therein and undertake myself/ourselves to abide the same. I/ we are not blacklisted by any Govt. /PSU in India.

Bidder

Full Signature\_\_\_\_\_

Name

Seal

Date:

Place:

### TECHNICAL BID

(To be submitted in separate envelope)

For supply of Laboratory Equipments/ Books/ Desktop with Printer and AC)

1	Name of the Firm/ Agency (proof of Registration to be attached)	
2	Address of the Firm/ Agency	
3	Name of the Contact Person	
4	E-mail ID of the contact person	
5	PAN Card of the organization Firm/ Agency/ Proprietor (Self Attested photocopy to be attached)	
6	Valid Authorised Distributorship/Dealership License (Self Attested photocopy to be attached)	
7	Three supply order of specific value of Rs.five lakhs or more (Self Attested photocopy to be attached)	
8	List of Installments to which library books supplied in last three years along with documentary proof (Self Attested photocopy to be attached)	
9	Member of the Good Office Committee of Publishers and Book Seller of India	
10	Attested copy of Income Tax Certificate (up to date) to be attached	
11	Details of Bank— Name of Bank, Branch, Account No and IFSC Code.	
12	Authentic Price Proof	
13	Details of EMD of Rs. B.D. No. and date	
14	Tender Paper Cost B.D. No and date	

N.B: All the photocopy of the documents duly self-attested must be attached to the purpose of Technical Evaluation.

This is to certify that I/we have carefully gone through all the above contents of the tender documents, thereby full understood the terms and condition therein and undertake myself/ourselves to abide the same. I/ we are not blacklisted by any Govt. /PSU in India.

Date:  
Place:

Bidder  
Full Signature \_\_\_\_\_  
Name  
Seal

### FINANCIAL BID

(To be submitted in separate envelope)

For supply of CBCS Laboratory Equipments for the Deptt. of Physics

Sl. No	Name of the Goods (PHYSICS)	Unit Price (As per specification)	Base Price Rs.	GST (in %)	Rate in Rs. (Inclusive of GST)
1	Determination of Planck's Constant using black body radiation	Per piece			
2	C.R.O (cathode Ray Oscilloscope)	Per piece			
3	Zener diode to determine V-I Characteristics	Per piece			
4	Tunneling effect in tunnel diode to determine V-I Characteristics	Per piece			
5	Quincks Tube for study susceptibility	Per piece			
6	Measurement for dielectric material	Per piece			
7	To study out characteristics of MOSFET	Per piece			
8	Polarimeter with sodium light	Per piece			
9	Babinet compensator	Per piece			
10	Desauty bridge with null detector	Per piece			
11	Logic gate trainer	Per piece			
12	Thermal Conductivity of a bad conductor by lees charlton method	Per piece			
13	Newton's ring complete set	Per piece			
14	Polarimeter	Per piece			
15	Standard Computer (scilab, matlab) with printer	Per piece			

- Note— The rate to be quoted must be inclusive of transportation (FOR Destination)

Bidder

Full Signature \_\_\_\_\_

Name

Seal

Date:

Place:



### FINANCIAL BID

(To be submitted in separate envelope)

For supply of CBCS Laboratory equipments for the Deptt. of Chemistry

Sl. No	Name of the Goods (Chemistry)	Unit Price (As per specification)	Base Price Rs.	GST (in %)	Rate in Rs. (Inclusive of GST)
1	Ostwald viscometer	Per piece			
2	Digital PH meter with accessories	Per piece			
3	Digital conductivity meter with accessories	Per piece			
4	Potentiometer with accessories	Per piece			
5	Computer with Laser printer (desktop)	Per piece			

- Note— The rate to be quoted must be inclusive of transportation (FOR Destination)

Bidder

Full Signature \_\_\_\_\_

Name

Seal

Date:

Place:



# FINANCIAL BID

(To be submitted in separate envelope)

For supply of CBCS Laboratory equipments for the Deptt. of Botany

Sl. No	Name of the Goods BOTANY	Unit Price (As per specification)	Base Price Rs.	GST (in %)	Rate in Rs. (Inclusive of GST)
1	Desktop computer with printer	Per piece			
2	Screen projector with fittings	Per piece			
3	Smart Board	Per piece			
4	Pettenkfor Apparatus (full fitting)	Per piece			
5	Stage Micrometer	Per piece			
6	Darwin's Bell cup setting	Per piece			
7	Swan neck Balance	Per piece			
8	Reagent Sprayer	Per piece			
9	Magnetic Stirrer	Per piece			
10	Ocular MicrometerDisc	Per piece			
11	Specimen Jar for Paper Chromatography	Per piece			
12	Pfeffer's Pressure Apparatus	Per piece			
13	Osmotic Pressure Apparatus	Per piece			
14	Ganong's Osmometer	Per piece			
15	Endosmometer	Per piece			
16	Root Pressure Expt apparatus	Per piece			
17	Moll's Potometer	Per piece			
18	Photosyntheto meter	Per piece			
19	Geotropism apparatus for Root Curvature	Per piece			
20	Germination Box (Tripple Chamber)	Per piece			
21	Soil Thermometer	Per piece			
22	Photometer				
23	Calorimeter	Per piece			
24	Absorbing tower	Per piece			
25	Dark Bottle with rubber tube	Per piece			
26	Gas stove	Per piece			
27	Gas Cylinder	Per piece			

- Note— The rate to be quoted must be inclusive of transportation (FOR Destination)

Bidder

Full Signature \_\_\_\_\_

Name

Seal

Date:

Place:

**FINANCIAL BID****(To be submitted in separate envelope)****For supply of CBCS Laboratory equipments for the Deptt. of Zoology**

Sl. No	Name of the Goods (ZOOLOGY)	Unit Price (As per specification)	Base Price Rs.	GST (in %)	Rate in Rs. (Inclusive of GST)
1	BINOCULAR MICROSCOPE WITH (LIGHT) ARRANGEMENT (UNILAB)	Per piece			
2	BINOCULAR MICROSCOPE (UNILAB)	Per piece			
3	COLORIMETER	Per piece			
4	DESKTOP COMPUTER WITH UPS & COLOUR PRINTER (DELL)	Per piece			
5	COMPUTER TABLE & 2 CHAIR	Per piece			
6	PROJECTOR (LCD)	Per piece			
7	QUADRATE FRAME (IRONE)	Per piece			
8	HAEMOGLO BINOMETER (GERMAAN MADE)	Per piece			
9	MAEMOCYTOMETER	Per piece			
10	TURBIDITY METER	Per piece			
11	KNEE JERK STIMULATOR	Per piece			
12	BINOCULAR	Per piece			
13	SPOTTING SCOPE WITH STAND	Per piece			
14	IRON ALMIRAH (6FT.) (GODREJ)	Per piece			

- Note— The rate to be quoted must be inclusive of transportation (FOR Destination)

Bidder

Full Signature \_\_\_\_\_

Name

Seal

Date:

Place:

### FINANCIAL BID

(To be submitted in separate envelope)

For supply of Desktop Computer and Printer, ACs and Smart Board with specification

Sl. No	Name of Goods to be procured	Unit Price (As per specification)	Base Price Rs.	GST (in %)	Rate in Rs. (Inclusive of GST)
1	Desktop Computer <ul style="list-style-type: none"><li>• Corei3 processor</li><li>• 4GB Memory</li><li>• 500 GB HDD Storage</li></ul>	Per piece			
2	Normal Printer	Per piece			
3	Multifunctional Printer	Per piece			
4	Air Conditioned (A.C) *1.5 ton	Per piece			
5	Smart Board	Per piece			

- Note— The rate to be quoted must be inclusive of transportation (FOR Destination)

Bidder


Full Signature\_\_\_\_\_

Name

Seal

Date:

Place:

  
08/01/2021

**Principal**  
**Brajrajnagar College**  
**Brajrajnagar**



### FINANCIAL BID

(To be submitted in separate envelope)

For supply of CBCS Library Books

1. Name of the Firm/supplier
2. Rate of Discount ; books to be supplied
  - i. Rate of discount on foreign books\_\_\_\_\_
  - ii. Rate of discount on Indian books\_\_\_\_\_
  - iii. Rate of discount on Govt. and Institutional books\_\_\_\_\_
3. All the library books shall be supplied with Agreed  
authentic price proof yes/No\_\_\_\_\_
4. Latest edition of the library books shall be  
supplied Agreed  
Yes/No
5. Actual price of the publisher shall be charged  
Without any handling charges Agreed  
Yes/No
6. Signature kind should be strictly followed Agreed  
Yes/No

Note- The rate to be quoted must be inclusive of transportation (For Destination)

Date:  
Place:

Bidder

Full Signature\_\_\_\_\_

Name

Seal

### Annexure "A"

#### Books List of Deptt. of Commerce

Sl. No.	Book Name	Author	Publisher	Qty (Pcs)
1	Financial Accounting	S.P. Jain & K.L. Narang	Kalyani Publisher	20
2	Financial Accounting	Mukharjee	Oxford University	02
3	Financial Accounting	R.K. Mittal & M.R. Bansal	V.K. Global Publisher	05
4	Financial Accounting	Bal Ranjan Kumar	S. Chand	02
5	Financial Accounting	Anil Kumar & Mariappa	Himalaya Publishing House	02
6	Financial Accounting	P.C. Tulsian	Pearson Publication	02
7	Financial Accounting	Maheswari S.N. & S.K. Maheswari	Vikash Publishing House	02
8	Financial Accounting	Bansal K.M.	Taxman Publication	02
9	Financial Accounting	Anthony, R.N. Hawkins	Mc Graw Hill Education	02
10	Business Law	Garg K.C., Saaren & Sharma	Kalyani Publisher	02
11	Business Law	Das & Roy	Oxford University	20
12	Business Law	Ashok Sharma	V.K. Global Publisher	02
13	Business Law	Tulsian P.C.	S. Chand	05
14	Business Law	Jena B. & Mahapatra	Himalaya Publishing House	02
15	Business Law	Tejpal Singh	Pearson Publication	
16	Business Law	Kuchhal M.C. & Vivek Kuchhal	Vikash Publishing House	02
17	Business Law	Arora Sushama	Taxman Publication	02
18	Cost Accounting	S.P. Jain & K.L. Narang	Kalyani Publisher	20
19	Cost Accounting	J. Mitra	Oxford University	02
20	Cost Accounting	S.P. Gupta & A Sharma	V.K. Global Publisher	05
21	Cost Accounting	Arora M.N.	Himalaya Publishing House	02
22	Cost Accounting	Datar & Jaran	Pearson Publication	02
23	Cost Accounting	Arora M.N.	Vikash Publishing House	02
24	Cost Accounting	Lal Jawahar	Mc Graw Hill Education	02
25	Corporate Law	Gupta, Garg & Dhingra	Kalyani Publisher	20
26	Corporate Law	Roy & Das	Oxford University	02
27	Corporate Law	Ashok Sharma	V.K. Global Publisher	05
28	Corporate Law	Gogna P.P.S.	S. Chand	02
29	Corporate Law	Maheswari	Himalaya Publishing House	02
30	Corporate Law	Arora & Bansal	Vikash Publishing House	02
31	Corporate Accounting	S.P. Jain & K.L. Narang	Kalyani Publisher	20
32	Corporate Accounting	Maheswari	Vikash Publishing House	02
33	Corporate Accounting	R.K. Mittal	V.K. Global Publisher	05
34	Corporate Accounting	Tulsian P.C.	S. Chand	02
35	Corporate Accounting	Anil Kumar Mariappa	Himalaya Publishing House	02



36	Management Principle and Application	Pany Tusar K.	Kalyani Publisher	10
37	Management Principle and Application	Mitra	Oxford University	02
38	Management Principle and Application	R.K Singhal	V.K. Publisher	02
39	Management Principle and Application	Gupta R.N	S.Chand	02
40	Management Principle and Application	Jhunubala & J. Mohanty	Himalaya Publishing House	02
41	Management Principle and Application	Chandan J.S	Vikash Publishing House	02
42	Management Accounting	S.P. Jain	Kalyani Publisher	10
43	Management Accounting	S.Swain, S.P. Gupta & A. Sharma	V.K. Global Publisher	02
44	Management Accounting	Lal Jawahar	S.Chand	02
45	Management Accounting	M.Willson	Himalaya Publishing House	02
46	Management Accounting	Arora M.N	Vikash Publishing House	02
47	Management Accounting		Taxman Publication	02
48	Management Accounting	Khan M.Y & P.K Jain	MC Graw-Hill Education	02
49	Fundamental of Financial Management	Sharma & Gupta	Kalyani Publisher	02
50	Fundamental of Financial Management	Vandana Dangi	V.K. Global Publisher	02
51	Fundamental of Financial Management	Bhalla V.K	S.Chand	02
52	Fundamental of Financial Management		Himalaya Publishing House	02
53	Fundamental of Financial Management	Rostogi	Taxman Publication	02
54	Fundamental of Financial Management	Pandey I.M	Vikash Publishing House	02
55	Auditing & Corporate Governance	Pradeep Kumar	Kalyani Publisher	02
56	Auditing & Corporate Governance	A. Sharma	V.K. Global Publisher	02
57	Auditing & Corporate Governance	B.N. Tandon	S.Chand	02
58	Business Mathematics	Patri & Patri	Kalyani Publisher	10
59	Business Mathematics	S.C. Agrawal	V.K. Global Publisher	02
60	Business Mathematics	P.N. Arora	S.Chand	02
61	Business Mathematics	S.K Sahoo	Brinda Publication	02
62	Business Mathematics	Arora S.R & Gupta K	Taxman Publication	02
63	Business Mathematics	J.K. Singh	Himalaya Publishing House	02
64	Business Mathematics	Patri & Patri	Kalyani Publisher	10
65	Business Mathematics	S.C. Agrawal	V.K. Global Publisher	02



66	Business Mathematics	Gupta S.P & Archana Gupta	Sultan Chand	02
67	Business Mathematics	S.C. Gupta	Himalaya Publishing House	02
68	Business Mathematics	S.K. Sahoo	Brinda Publication	02
69	Business Mathematics	J.K. Sharma	Vikash Publishing House	02
70	Principle of Marketing	Bajaj & Kaur	Kalyani Publisher	10
71	Principle of Marketing	R.K.Mittal	V.K. Global Publisher	02
72	Principle of Marketing	M.K. Nabi	Brinda Publication	02
73	Principle of Marketing	Rudani R.B	S. Chand	02

### Book List For Chemistry Deptt.

Sl. No.	Name of the book	Author	Publisher
1	Modern college chemistry –I (Semester-I)	Y.R.Sharma K.D.Sharma	Kalyani publisher
2	Modern college chemistry –II (Semester-I)	-do-	-do-
3	Modern college chemistry (Semester-II)	-do-	-do-
4	Modern college chemistry (Semester-III)	-do-	-do-
5	Modern college chemistry (Semester-IV)	-do-	-do-
6	Modern college chemistry (Semester-V)	-do-	-do-
7	Modern college chemistry (Semester-VI)	-do-	-do-
8	Modern college chemistry Generic Elective-I (Semester-I)	-do-	-do-
9	Modern college chemistry Generic Elective-II	-do-	-do-
10	Modern college chemistry Generic Elective-III	-do-	-do-
11	Modern college chemistry Generic Elective-IV	-do-	-do-
12	Discipline Specific Elective Paper-I		

	Text book of polymer science	Fred w. billmeyer	Wiley inter science
13	Discipline Specific Elective Paper-II Green chemistry (Theory practical)	Anastas P.T Warner J.K	Oxford University Press (contact)
14	Discipline Specific Elective Paper-III Environmental pollution Analysis	S.M. Khopkar	Wiley Eastern Ltd. New Delhi
15	Discipline Specific Elective Paper-IV Industrial chemistry Vol-I	E. Stocchi	Ellis Horword Ltd. UK
16	Skill Enhancement compulsory course (SECC Option-I) Pesticides	R.J.W Cremlyn	Jhon Wiley and sons Ltd. (1978)
17	SEC option II Engineering Chemistry	P.C. Jain, M. Jain	Dhanpat Rai & Sons, Delhi
18	Concise Inorganic Chemistry	J.D. Lee	Wiley India, 5 <sup>th</sup> Edn 2008
19	Physical Chemistry	R.G. Mortimer	Elsevier (A.P) 3 <sup>rd</sup> Ed 2008
20	Pradeep's Org Chemistry Vol-I,II	Dhawan, S.N	Pradeep Publication
21	Pradeep's Physical Chemistry	Kheterpal S.C	Pradeep Publication
22	Pradeep's Inorganic Chemistry		Universal Book seller 14 <sup>th</sup> Ed. 2017
23	Advanced Organic Chemistry, 2 <sup>nd</sup> Ed.	Bhal and Bhal	S. Cahnd Publisher 2012
24	Inorganic chemistry	Shriver D.E & Ankins P.W	Oxford University press 5 <sup>th</sup> Edn.
25	Advance Organic chemistry 2 <sup>nd</sup> Edn.	Arun Bahl & P.S. Bahl	S. Chand Publisher
26	Physical chemistry 3 <sup>rd</sup> Ed.	Engel T & Reid P.	Pearson 2013
27	Organic Spectroscopy and Applications	Jag Mohan	Narosa Publisher 2012
28	Quantum Chemistry	D McQuarie	University Science Publisher 2007
29	Fundamentals of Inorganic Chemistry Vol-II	Das Asim K.	CBS Publications 2 <sup>nd</sup> Ed. 2010
30	M. textbook Biochemistry and Human Biology 3 <sup>rd</sup> Edn.	Talwar, G.P. & Srivastava	PHI Learning



### Book List for +3 Science (CBCS ) Deptt. of Physics

Sl. No.	Name of the Book	Author	Publishers	Qty.
1.	Physics for Degree students Vol-I 1 <sup>st</sup> Year	C.L Arora	S.Chand	05
2.	Physics for Degree students Vol-II 2 <sup>nd</sup> Year	C.L Arora	S.Chand	05
3.	Physics for Degree students Vol-III 3 <sup>rd</sup> Year	C.L Arora	S.Chand	05
4.	Mechanics	Debasis Das	Kalyani	05
5.	Properties of matter	D.S. Mathur	S. Chand	05
6.	Mechanics	By K.R.Siman		05
7.	Mechanics	M. Das, P.K.Jena	Srikrishna	05
8.	Introduction to Numerical Analysis	S.S. Sastry		05
9.	Numerical Methods for Scientists and Engineers	R.W. Hamming		03
10.	An introduction to computational physics		Cambridge Univ. Press	03
11.	Mathematical Physics-I	Debasis Das	Kalyani	05
12.	New Pattern Mechanics and properties of matter	J.P.Agarwal	Pragati Edition	05
13.	Modern college physics mathematical physics P-II	Dabasis Das	Kalyani	05
14.	Elements of modern Phy.	J.P.Agarwal	Pragati Edition	05
15.	Elements of modern Phy.	K.K.Sharma B.S Satyal	Kalyani	05
16.	Solid state physics	-do-	Kalyani	05
17.	Soild state physics	R.K.Puri V.K.Babbar	S. Chand	05
18.	Classical Electrodynamics	J.D. Jacks		03
19.	Electricity and Magnetism	D.C. Tayal	Himalaya	04
20.	Optics	A.k.Gahatak		03
22.	Basic Electrical Engineering	B.B. Swain		05
23.	Thermal Physics	J.P.Agarwal	Pragiti Edn.	05
24.	Thermal Physics	K.K.Sharma B.S. Satyd	Kalyani	05
25.	Nuclear and Particle Physics	K.K.Sharma B.S. Satyal	Kalyani	05
26.	Statistical mechanics	B.K.Agrawal Meluin eisnor	New Age Inematiaral	05
27.	Statistical mechanics	K.K.Sharma B.S. Satyal	Kalyani	05
28.	Classical Dynamics	Dabasis Das	Kalyani	03
29.	Electromagnetic theory	S.L.Gupta V.Kumar	Pragati edition	05
30.	Introduction to Nuclear Phy.	Roy and Nigam		03
31.	Atomic and Nuclear Phy	Brijlal Ssabrahmanyam	S.Chand	03
32.	Concepts of Nuclear Phy	Bernard	Tata Mcgraw	03



		L.Cohen	Hill	
34	Digital Systems and Application	Kamalakanta Jena		05
35	Analog systems and applications	Ashok Ku Dash Rita Paikray	Kalyani	05
36	Electricity and Magnetism	J.P. Agrawal	Pragati Edt.	05
37	Fundamental Electronics	D. Chatto padhyaya		03
38	Principles of Electronics	V.K.Mehta		02
39	The physics of waves and oscillations	N.K.Bajaj	MC anawhill	03
40	A Laboratory Manual of Phy For U.G. classes for all Sem	D.P. Khandelwal vani		06
41	Sci Lab (A free soft ware to Matlab)	H.Ramchandran	S.Chand	04
42	Concepts of Electronics	Raskhit and Chattopadhyay		03
43	A Text Book of Practical Phy	P. Ramakrishna	Kitab Mahal	03
44	Basic Electronics A Text Books Lab Manual	P.B. Zabar A.P. Maluino		03
45	Quantum Mechanics theory and Applications	A. Ghatak S.Lokanatham		05

**Book List for +3 Science (CBCS ) Dept of Pol. Science**

Sl. No.	Name of the Book	Author	Publishers	Qty.
1.	Political Process in India	K.K Ghai	Kalyani	20
2.	Constitutional Govt and Democracy on India	K.K Ghai	Kalyani	20
3	Perspective an Public Administration	K.K Ghai	Kalyani	10
4	Administrative change and innovation	B. Chakrabaty	Axford University press	05
5	Restructure in public administration	M. Bhattacharya	New Dally Jawahar publisher	05
6	Public administration and public affairs	An Henry	New Jersey Pearson	05
7	Governance issues and challenges	Santosh Ku Sahu	Kalyani	20
8	Classical political philosophy	Deepak Ku Dash Dr. Arun Ku Dash	Kalyani	20
9	Modern political philosophy	Deepak Ku Dash	Kalyani	20

		Dr. Arun Ku Dash		
10	Introduction to comparative Govt. and politics	Dashrathi Bhuan	Kitamal	20
11	Public policy and administration	Dr. Arun Ku Dash Deepak Ku Dash	Kalyani	20
12	Understanding political theory	Gouranga Ch. Nayak	Kalyani	20
13	Indian political thought themes and thinkers	New Dally Pearson	2 <sup>nd</sup> Ed. New Dally Pearson	10
14	Foundation of Indian political thought	V.P.Verma	New dally Monohar	05
15	Western political thought	B.Nelson	New York Pearson Longman	05
16	Western political thought	Bidyut Chakrabati		05
17	International politic: concept and issues	Basu Rumki	New Dally	05
18	Interdiction to international releatation and theory	R. Jackson & G.Sornsen	Oxford Univ. Press	05
19	Comparative politics Explaining democratic system	J.Bora and Pannigton	Sage publication	05
20	21 <sup>st</sup> chenshory political Science	J.Esma Breunng	Los Angenls	05
21	Global politics		Heywood New york	05
22	Very short introduction		London Axford Univ	05
23	Golbal Politics	Deepak Ku Dash	Kalyani	10
24	History of Political thought Plto to mark	Mukherjee Subrato	Ph Publisher New Delhi	10



## BOOK LIST

### Department of Zoology

#### STRICTLY ACCORDING TO NEW CBCS SYLLABUS

Sl. No.	Name of Book	Publisher Name	Qnt.
1.	Non-Chordates-I (Prostoma to pseudocoelomates)	Kalyani Publisher	05
		Rastogi Publisher	02
2.	Principles of Ecology	Kalyani Publisher	05
		Rastogi Publisher	02
3.	Principles of Ecology	Kalyani Publisher	05
		Rastogi Publisher	02
4.	Non-Chordates-II (Coelomates)	Kalyani Publisher	05
		Rastogi Publisher	02
5.	Cell Biology	Kalyani Publisher	05
		Rastogi Publisher	02
6.	Diversity of Chordates	Kalyani Publisher	05
		Rastogi Publisher	02
7.	Physiology- Control and Coordination system	Kalyani Publisher	05
		Rastogi Publisher	02
8.	Fundamentals of Biochemistry	Kalyani Publisher	05
		Rastogi Publisher	02
9.	Comparative Anatomy of Vertebrates	Kalyani Publisher	05
		Rastogi Publisher	02
10	Physiology- Life Sustaining System	Kalyani Publisher	05
		Rastogi Publisher	02
11	Biochemistry of Metabolic Process	Kalyani Publisher	05



		Rastogi Publisher	02
12	Molecular Biology	Kalyani Publisher	05
		Rastogi Publisher	02
13	Principles of Genetics	Kalyani Publisher	05
		Rastogi Publisher	02
14	Developmental Biology	Kalyani Publisher	05
		Rastogi Publisher	02
15	Evolutionary Biology	Kalyani Publisher	05
		Rastogi Publisher	02
16	Economic Zoology	Kalyani Publisher	05
		Rastogi Publisher	02
17	Animal Behaviour	Kalyani Publisher	05
		Rastogi Publisher	02
18	Immunology	Kalyani Publisher	05
		Rastogi Publisher	02
19	Fish & Fisheries	Kalyani Publisher	05
		Rastogi Publisher	02
20	Wildlife Conservation & Management	Kalyani Publisher	05
		Rastogi Publisher	02
21	Animal Diversity	Kalyani Publisher	05
		Rastogi Publisher	02
22	Food, Nutrition & Health	Kalyani Publisher	06
		Rastogi Publisher	02
23	Human Physiology	Kalyani Publisher	02
		Rastogi Publisher	02

24	Cell & Molecular Biology	Kalyani Publisher	02
		Rastogi Publisher	02
25	Bee Keeping in India	ICAR	02
26	Animal Biotechnology	Kalyani Publisher	02
		Rastogi Publisher	02
27	Basic Neuroscience	Kalyani Publisher	02
28	Reproductive Biology	Kalyani Publisher	02
29	Insect Vectors & Diseases	Kalyani Publisher	02
30	Aquatic Biology	Kalyani Publisher	02
		Rastogi Publisher	02
31	Environment & Public Health	Kalyani Publisher	02
32	Cell & Molecular Biology	Kalyani Publisher	03
33	Apiculture and Bee Keeping	According to CBCS Syllabus	05
34	A Manual of Practical Zoology (Invertebrates)	S. Chand & Co	03
		Rastogi Publisher	04
35	Advanced Practical Zoology (Vertebrates)	S. Chand & Co	03
		Rastogi Publisher	04

### Books List of Department of Mathematics

SI No	Name Of The Books	Author	Publisher	Quantity
1	Introduction To Real Analysis	R.G Britle And DR Sherbert	John Willy And Sons Private Limited	2
2	Fundamental Of Mathematical Analysis	G.Das And S Pattnaik	Tmh Publishing Company	2
3	Mathematical Analysis	SC Malik And S Arora	New Age International Publications	2
4	A Course Of Ordinary And Partial Differential Equation	J Sinha Roy And S Padi	Kalyani Publication	2
5	Mathematical Modelling With	Belinda Branes And Glenn	Taylorand Francis	2

	Case Studies A Differential Equation Approaching Maple And Matlab 2nd Edition	R Fulford	Group	
6	Differential Equation And Their Application	Martin Varun	Pringer International Student	2
7	Complementary Abstract Algebra	Joseph A Gallian	Narosa Publication House	2
8	Linear Partial Differential Equation For Scientists And Engineers 4th Edition	Tyn Myint -U And Loknath Debnath	Birkhauser Indian Reprint 2014	2
9	Calculus	Mj Starus Gl Bradley Kj Smith	Dorling Kinderseley(Indian) Pvt. Ltd. Pearson Education	2
10	Linear Algebra	Stephen H Freiburg Arnold J Irsel Lawrence E. Spence	Princeton Education 2018	2
11	Complex Analysis	Elias M. Stein And Remi Shakarchi	Princeton University Press	2
12	Operation Research	Kanti Swarup	S Chand And Sons	2
13	Mathematical Statistics With Applications 8th Edition	Irwin Miller And Maryless Miller	Pearson 2014	2
14	Introduction To Differential Geometry	T.J Willmore	Dover Publication	2
15	Elementary Number Theory	David M .Burton	Tata Mcgraw Hill	2

## DEPARTMENT OF ECONOMICS

The following books are to be procured for the Department of Economics as per syllabus.

Sl. No.	Books	Author	Quantity
1	INTRODUCTORY MICROECONOMICS	i) Gregory N Mankiew ii) Karl E. Case and Ray C. Fair	4
2	MATHEMATICAL METHOD FOR ECONOMICS -I	i) A.C . Chiang and K. Wainwright ii) K. Sydsaeter and P.J Hammond	4
3	INTRODUCTORY MACROECONOMICS	i) Gregory N Mankiew ii) Richard T. Froyen	4
4	MATHEMATICAL METHOD FOR ECONOMICS -II	i) A.C . Chiang and K. Wainwright ii) K. Sydsaeter and P.J Hammond	4

*Principal*



5	MICROECONOMICS-I	i) ii)	C. Snyder and W. Nicholson H.R. Varian	4
6	MACROECONOMICS-I	i) ii)	Gregory N Mankiew Richard T. Froyen	4
7	STATISTICAL METHOD FOR ECONOMICS	i) ii)	S.C Gupta Murray R. Spiegel	4
8	MICROECONOMICS-II	i) iii)	C. Snyder and W. Nicholson H.R. Varian	4
9	MACROECONOMICS-II	i) ii)	Gregory N Mankiew Brain Snow and Howard R. Vana	4
10	RESEARCH METHODOLOGY	i) ii)	C.R Kothari G.Guthrie	4
11	INDIAN ECONOMY-I	i) ii)	S.K. Mishra and V.K Puri Dutta and Sundharan	4
12	DEVELOPMENT ECONOMICS-I	i) ii)	Michael P. Tordo and Stephen C. Smith Debraj Ray	4
13	INDIAN ECONOMICS-II	i) ii)	S.K Misra and V.K Puri Dutta and Sundharan	4
14	DEVELOPMENT ECONOMICS-II	i) ii)	Michael P. Tordo and Stephen C. Smith A.P. Thirlwall	4
15	MONEY BANKING AND FINANCIAL MARKET	i)	I) L.M. Bhole	4
16	PUBLIC ECONOMICS	i) ii)	J.Hindriks and G. Myles R.A. Musgrave and Peggy Musgrave	4
17	ENVIRONMENTAL ECONOMICS	i) ii)	R.N Bhattachary C.D. Kolstad	4
18	INTERNATIONAL ECONOMICS	i) ii)	H.G. Mannur Dominic Salvatore	4
19	DATA ANALYSIS AND COMPUTER APPLICATION	i) ii)	C.S French P.K. Sinha	4
20	ODISHA ECONOMY	i) ii)	P.K. Naik S.C. Panda	4

**Books Lists:**

- *The Pelican Guide to English Literature*. Ed. Boris Ford. Vol 1
- *The Age of Chaucer English Literature in Context*. Paul Poplawski. Cambridge UP, 2008
- *Routledge History of Literature in English*. Ronald Carter & John Mc Rae. London:Routledge, 1997
- *Shakespeare for Beginners* by Brandon Toropov
- *English Literature* by Jonathan Bate (Ch. 7 "Shakespeare and the Dramatic Literature")
- Black, Joseph (Ed). : *The Broadview Anthology of British Literature* Concise Edition, Vol. A. Broadview Press, London, 2007.
- Corns, T N( ed.) *The Cambridge Companion to English Poetry*. Cambridge: UniversityPress, 1973
- Ford, Boris ed. *The Pelican Guide to English Literature*. Vol 3. From Donne to Marvell in. Harmondsworth: Penguin Books, 1976.
- Parry, G.: *The Seventeenth Century: The Intellectual and Cultural Context of English Literature*. Harlow: Longman, 1989.
- Sherwood, T. G: *Fulfilling the Circle: A Study of John Donne's Thought*, Toronto, Toronto Press, 1984.
- Mehrotra, Arvind Krishna. *Concise History of Indian Literature in English*, PermanentBlack, 2010.
- K. Srinivas Ayenger. *A History of Indian Writing in English*
- M.K. Naik. *History of Indian Writing in English*
- Vinay Dharwadker. "The Historical Formation of Indian English Literature" in Sheldon Pollock (ed) *Literary Cultures in History*
- *Modern Indian Drama: Issues and Interventions* (ed) Lakshmi Subramanyam
- Norton Anthology of English Literature. Vol 2 (Head notes on the periods and authors featured in the paper)



- *English Literature*. Jonathan Bate (Ch. 4 "The Study of English", Ch. 5 "Periods and Movements")
- Terry Eagleton, *The English Novel*
- Toril Moi, *Sexual/Textual Politics*
- Elaine Showalter, *A Literature of Their Own*
- Sandra Gilbert and Susan Gubar, *The Mad Woman in the Attic*
- *The Distant Window*, Prachi Prakashan, Tr. Anima Bose, 1997
- Helen Carr, 'A History of Women's Writing' in *A History of Feminist Literary Criticism* by Gill Plain and Susan Sellers
- Mary Eagleton, 'Literary Representations of Women' in *A History of Feminist Literary Criticism* by Gill Plain and Susan Sellers
- Peter Barry, *Beginning Theory*
- Terry Eagleton, *Literary Theory*
- David Lodge, ed. *Twentieth Century Criticism*
- David Lodge, ed. *Modern Criticism and Theory: A Reader*
- Jonathan Culler, "In Pursuit of Signs"
- Tony Bennett, *Formalism and Marxism* (New Accents)
- Sukrita P. Kumar, "Narrating Partition" (Delhi: Indialog, 2004)
- Urvashi Butalia, "The Other Side of Silence: Voices from the Partition of India" (Delhi: Kali for Women, 2000)
- Sigmund Freud, "Mourning and Melancholia" in *The Complete Psychological Works of Sigmund Freud*, tr. James Strachey (London: Hogarth Press, 1953)
- Rangaswamy Parthasarathy, *Journalism in India: From the earliest times to the present day*, Sterling.
- S V Parasher, *Indian English: Functions and Form*, Bahri Publications.
- Stephen McLaren, *Easy Writer*
- A R Parhi, *Indian English through Newspapers*, Concept Publications.
- G L Labru, *Indian Newspaper English*, B R Publishing House.
- Vinod Dubey, *Newspaper English in India*, Bahri Publications.
- Braj Kachru: *from Indianization of English*



- Dutta and Parhi, 'Prospect of Electronic Media as Curriculum in Non-Native Contexts', *I-Manager's Journal on English Language Teaching*. (2014)
- Aijaz Ahmed: 'Disciplinary English: Third-Worldism and Literature'.
- Narasimhaih; C.D. (ed.): *Awakened Consciousness: Studies in Commonwealth Literature*, New Delhi: Sterling.
- Omkar N. Koul: *English in India: Theoretical and Applied Issues*. New Delhi: Creative Publishers
- John Creswell, *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications. 2009
- K Samantray, *Academic and Research Writing*. Orient Blackswan. 2015
- Sword, H. *Stylish Academic Writing*. Harvard University Press. 2012
- Norman Denzin, *Sage Handbook of Qualitative Research*. Sage Publications. 2005
- Kothari & Garg, *Research Methodology*. New Age Publishers
- Deepak Chawla & Neena Sondhi. *Research methodology: Concepts & Cases*. Vikas Publishing
- Kalidasa. Critical Edition. Sahitya Akademi
- Bharata's Natyashastra. English Translation by M.M. Ghosh. Vol 1. 2<sup>nd</sup> edition. Asiatic Society, Kolkata, 1950. Ch. 6 "Sentiments". Pp. 158-95
- J.A.B. Van Buitenen, "Dharma and Moksa" in Roy W. Perrett. Ed. *Indian Philosophy*. Vol 5, *Theory of Value: A Collection of Readings*. New York: Garland, 2000. Pp. 33-40
- Vinay Dharwadkar, "Orientalism and the Study of Indian Literature", *Orientalism and the Postcolonial Predicament: Perspectives on South Asia*. Ed. Carol A. Breckenridge and Peter Van der Veer. New Delhi: OUP, 1994. Pp. 158-95
- Haldhar Panda, *Universals of Poetics*
- **Ben Jonson** (i) *Volpone*
- **Dryden** (i) *All For Love*
- Sarojini Naidu "The Bangle Sellers",
- A.K.Ramanujan "Obituary",
- Jayanta Mahapatra "Grandfather",

- Nissim Ezekiel "Night of the Scorpion"
- R.K Narayan (i) *The Guide*
- Mahesh Dattani *Final Solutions*
- Jane Austen(i) *Pride and Prejudice*
- Charles Dickens (i) *Hard Times* (Norton Critical edition)
- Virginia Woolf: *Mrs. Dalloway*
- J M Synge *Ryders to the Sea*
- Arthur Miller: *The Death of a Salesman*
- Ernest Hemingway: *A Farewell to Arms*
- David Daiches' *A Critical History of English Literature* Volume I & Volume II
- Charlotte Bronte (i) *Jane Eyre*
- Henrik Ibsen (i) *Ghosts*
- Eugene Ionesco (i) *Chairs*
- Bertolt Brecht (i) *Life of Galileo*
- **A Brief History of American Literature by Richard Gray**
- **Modern british and irish criticism and theory A CRITICAL GUIDE by Edited by JULIAN WOLFREYS**



**Book List for +3 Arts (CBCS) Dept. of Education**

S.N	Name of the Book	Author	Publisher	Qty
1.	Modern Theory and Principles of Education	R.N. Safaya & B.D. Shaida	Dhanpatrai	2
2.	A Comprehensive Study of Education	Samuel.S. Ravi	PHI	2
3.	Educational Thought and Practice	V.R. Taneja	Sterling	2
4.	Advanced Educational Psychology	S.S. Chauhan	Vikas	2
5.	Advanced Educational Psychology	S.K. Mangal	Prentice Hall of India	5
6.	A Textbook of Advanced Educational Psychology	S. Dandapani	Anmol	2
7.	A Sociological Approach to Indian Education	S.S. Mathur	Vinod Pustak Mandir	2
8.	Philosophical and sociological principles of education	R.P.Pathak	Pearson	2
9.	Sociological Foundation of Education	S. Bhattacharya	Atlantic	2
10.	Methods and Techniques of Teaching	S.K. Kochar	Sterling	2
11.	Innovations of teaching learning process	S.S.Chauhan	Vikash	2
12.	Technology of Teaching	R.A. Sharma	International Publishing House, Meerut	2
13.	Essentials of Examination System, Evaluation, Tests and Measurement	J.C. Aggrawal	Vikas	5
14.	Measurement and Evaluation in psychology and education	M. Goswami	Neelkamal	2
15.	Tests, Measurements and Research Methods in Behavioural Sciences	A.K Singh	Bharati Bhawan	2
16.	Research in Education(9 <sup>th</sup> Ed.)	J.W. Best and J.V Khan	Pearson	5
17.	Methodology of Educational Research	Lokesh Koul	Vikas	5
18.	Statistical Methods: Concepts, application and Computation	Y.P. Aggarwal	Sterling	5



19.	Statistics in Psychology and Education	H.E. Garrett	Paragon International Publisher	2
20.	Statistics in Education and Psychology	S.K. Mangal	Prentice-Hall of India Private Ltd	5
21.	Landmarks in the History of Modern Indian Education	J.C. Aggrawal	Vikas	7
22.	Development of Education in India	B.N.Dash	Ajanta Prakashan	2
23.	Development of Education in India	K.K.Das	Kalyani	1
24.	Curriculum: Foundations, principles and Issues	A.C. Ornstein & E. Hunkins	Boston: Allyn & Bacon	1
25.	Developing the Curriculum	P.F. Oliva	Pearson	1
26.	Curriculum Development: Perspectives, Principles and Issues	Mrunalini Talla	Pearson	1
27.	Educational and Vocational Guidance in Secondary Schools	S.K. Kochhar	Sterling	2
28.	Guidance and Counselling: A theoretical Perspective (Vol 1)	Asha Bhatnagar & Nirmala Gupta	Vikas	2
29.	Guidance and Counselling: A theoretical Perspective (Vol 2)	Asha Bhatnagar & Nirmala Gupta	Vikas	2
30.	History of Education in Odisha	J.K. Samal	Sankar Bhattacharya, Punthi Pustak, Calcutta	5
31.	Information & Communication Technology (ICT) in Education	Vanaja & S. Rajasekar	Neelkamal	2
32.	A Comprehension on Educational Technology and ICT for Education	V.K. Kanvaria	GBO, Delhi	2
33.	Education in the Emerging India	K.R. Pathak	Atlantic	2
34.	Contemporary trends in Education: A handbook for Educators	V. Saxena	Pearson	2

35.	School Administration and Management	S.K Kochar	Sterling	2
36.	Educational Administration, Supervision, Planning and Financing	R.P. Bhatnagar	R. Lal book Depot	2
37.	Techniques of Teaching English	A.L. Kohli	Dhanpat Rai	2
38.	Teaching of Mother Tongue	S.K. Kocchar	Sterling	2
39.	Teaching of Social Studies	S.K. Mangal & U. Mangal	PHI Learning	2
40.	Educational Policies in India: Analysis and Review of Promise and performance	K. Sudha Rao	NUEPA: New Delhi	2
41.	Education of Exceptional Children	K.C. Panda	Vikas	5
42.	Exceptional Children	S.K. Mangal	PHI Learning	2
43.	Foundation of Education	K.K Bhatia	Kalyani	2
44.	Text Book of Foundation of Education	B.K. Nayak	Kitab Mahal	2
45.	Assessment of Student Achievement	N.E. Gronlund	Allyn & Bacon	1
46.	Essentials of Educational Psychology	J.C. Aggarwal	Vikas	2
47.	Essentials of Educational Psychology	S.K Mangal	PHI	2
48.	Theory and Principle of Education	J.C. Aggarwal	Vikas	2
49.	Essentials of Educational Technology	J.C Aggarwal	Vikas	5
50.	Introduction to Educational Technology	K. Sampath & A Pannir Salvam & Santhanam	Sterling	2
51.	Measurement, Evaluation and Assessment in Education	R. Mohan	PHI Learning	2
52.	Action Research to improve school practice	S.M Corey	New York: Teachers College Press	2
53.	Foundation of Behavioural Research	F.N. Kerlinger	Holt Rinehart	2
54.	Action Research and Innovation	Sagarika Rout	Kalyani	2
55.	Open and Distance Education	Marmar Mukhopadhyay	Jawahar	2



56.	Equality, Quality and Quantity: The Elusive triangle of Indian Education	J.P. Naik	Allied Publication	2
57.	Total Quality Management in Education	M. Mukhopadhyay	Sage, India	1
58.	Models of Teaching	Bruce, Joyce, Marsha Weil	Prentice hall of India	2
59.	Distance Education	S. Parmaji	Sterling	2
60.	Foundation of Education	S.P. Chaube & A. Chaube	Vikas	5
61.	Introduction to Philosophy of Education	George. F. Kneller	John Wiley & Sons Inc	1
62.	Fundamentals of Educational Psychology	B.B. Panda	Vidyapuri	2
63.	Modern Trends in Indian Education	Jagannath Mohanty	Deep & Deep	2
64.	Early Childhood Care and education	J.C. Aggarwal & S. Gupta	Shipra	2
65.	Comparative Education	Biswas & J.C Aggarwal	Arya Book Depo	2
66.	Comparative Education	S.P. Chaube	Ram Prasad & Sons	2
67.	Comparative Education	T.S. Sodhi	Vikas	2
68.	Educational Planning in India	J.P Naik	Allied	2
69.	Economics of Education	B. Rajaiah	Mittal	2
70.	Research Methodology in Behavioural Sciences	S.K Mangal & S. Mangal	PHI	5
71.	Essentials of Educational Technology	S.K Mangal and Subhra Mangal	PHI	5
72.	Fundamentals of Computers	V. Rangarajan	PHI	2
73.	Integrating Educational Technology into Teaching	M.D. Roblyer	Pearson	2
74.	National Curriculum Framework 2005		NCERT	5
75.	National Focus Group on Educational Technology		NCERT	5



### Books List of Department of History

SI No	Name Of The Books	Quantity		Publisher
		Odia	English	
1	History Of India 1	10	5	Kalyani Publisher / Kitab Mahal
2	History Of India 2	10	5	Kalyani Publisher / Kitab Mahal
3	History Of India 3	10	5	Kalyani Publisher / Kitab Mahal
4	History Of India 4	10	5	Kalyani Publisher / Kitab Mahal
5	History Of India 5	10	5	Kalyani Publisher / Kitab Mahal
6	History Of India 6	10	5	Kalyani Publisher / Kitab Mahal
7	History Of India 7	10	5	Kalyani Publisher / Kitab Mahal
8	History Of India 8	10	5	Kalyani Publisher / Kitab Mahal
9	Social Formations And Cultural Patterns Of Ancient World History	10	5	Kalyani Publisher / Kitab Mahal
10	Social Formation And Cultural Patterns Of Mediaeval World History	10	5	Kalyani Publisher / Kitab Mahal
11	Rise Of Modern West 1	10	5	Kalyani Publisher / Kitab Mahal
12	Rise Of Modern West 2	10	5	Kalyani Publisher / Kitab Mahal
13	History Of Modern Europe 1	10	5	Kalyani Publisher / Kitab Mahal
14	History Of Modern Europe 2	10	5	Kalyani Publisher / Kitab Mahal
15	History Of Odisha Dsc Early Time To 1508	10	5	Kalyani Publisher / Kitab Mahal
16	History Of Odisha Dsc Early Time To 1568 To 195	10	5	Kalyani Publisher / Kitab Mahal
17	Understanding Heritage S E C	5	5	Kalyani Publisher / Kitab Mahal
18	History Of Odisha		10	Kalyani Publisher / Kitab Mahal (DB Mishra)
19	History Of Odisha	5	5	Kalyani Publisher / Kitab Mahal (H.H Panda)
20	History Of Odisha	10		Kalyani Publisher /







## CBCS Laboratory Equipments

### DEPARTMENT OF ZOOLOGY

Sl. No.	EQUIPMENTS	QUNT.
1.	BINOCULAR MICROSCOPE WITH (LIGHT) ARRANGEMENT (UNILAB)	1pcs
2.	BINOCULAR MICROSCOPE (UNILAB)	1pcs
3.	COLORIMETER	1pc
4.	QUADRATE FRAME (IRON)	1pcs
5.	HAEMOGLO BINOMETER (GERMANY MADE)	3pcs
6.	MAEMOCYTOMETER	2 pcs
7.	TURBIDITY METER	1pcs
8.	KNEE JERK STIMULATOR	1pcs
9.	BINOCULAR	2pcs
10.	IRON ALMIRAH (6FT.) (GODREJ)	1no
<b>MODEL &amp; CHART</b>		
1.	MODEL OF RNA (r, RNA, m, RNA, t, RNA	1 set each
2.	MODEL POLYSACCHARIDE	1 set each
3.	MODEL OF MONOSACCHARIDE	1 set each
4.	MODEL OF LIPID	1 set each
5.	DIFFERENT TYPES OF FEATHERS OF BIRDS (ORIGINAL OR MODEL	1 set each
6.	DIFFERENT TYPES OF CLAWS OF BIRD (ORIGINAL OR MODEL)	1 set each
7.	DIFFERENT TYPES OF SCALES OF FISH (ORIGINAL OR MODEL)	1 set each
8.	MODEL OF SKULL OF HERBIVOROUS ANIMAL	1 set each
9.	MODEL OF SKULL OF CARNIVOROUS ANIMAL	1 set each
10.	CHART OF DIGESTIVE SYSTEM OF COCK ROACH	1 set each
11.	MODEL OF HOMOLOGOUS ORGAN OF ANIMAL	1 set each
12.	MODEL OF ANALOGOUS ORGAN OF ANIMAL	1 set each
13.	MODEL OF TEURON	1 set each
14.	MODEL OF DIFFERENT TYPES OF PEARL	1 set each
15.	CHART OF DIFFERENT TYPE OF NEST OF BIRD	1 set each
16.	CHART OF SPLIT GENE	1 set each

### **MUSEUM SPECIMEN**

1.	PENATULA	1each
2.	FASCIOLA HEPATICA	1each
3.	SALAMANDER	1each
4.	ALYTES	1each
5.	EUROMASTIV	1each
6.	CHELONE	1each
7.	BUNGARUS	1each
<b>PRE-PREPARED MICRO SLIDE</b>		
1.	BINARY FISSION IN PARAMECIUM (DIFFERENT STAGED)	2 each
2.	CONJUGATION IN PARAMECIUM	2 each
3.	PLEUROBRANCHIA	2 each
4.	T.S & L.S OF SYCON	2 each
5.	CTENOPHORA (W.M)	2 each
6.	T.S. OF OVERY OF NAMAL	2 each

7.	T.S. OF GIZZARD OF EARTHNORM	2 each
8.	T.S. OF INTESTINE OF EARTHNORM	2 each
9.	BARR BODY	2 each
10.	T.S. OF SEA-ANEMONE	2 each
11.	T.S. OF MALE & FEMALE ASCARIS	2 each
12.	DIF. DEVELOPMENTAL STAGE OF DROSOPHILA	2 each
13.	BIPINNARIA LARVA	2 each
14.	PLUTEUS LARVA	2 each
15.	TAIL BUD STAGE OF FROG	2 each
16.	DIFFERENT STAGES OF LARVA OF ASCARIS	2 each
17.	T.S. OF TYPHLOSOLE OF EARTHWORM	2 each
18.	SPICULES OF HERDMANNIA	2 each
19.	POLYTENE CHROMOSOME	2 each
20.	LAMPBRUSH CHROMOSOME	2 each

## Department of Botany

### Equipments List

01	Desktop Computer with printer	01
02	Screen Projector with fittings	01
03	Smart Board	01
04	Pettenkfor Apparatus (full fitting)	01
05	Stage Micrometer	01
06	Darwin's Bell cup setting	01
07	Swan neck Balance	01
08	Reagent Sprayer	02
09	Magnetic Stirrer	01
10	Ocular Micrometer Disc	01
11	Specimen Jar for paper Chromatography	01
12	Pfeffer's Apparatus	01
13	Osmotic Pressure Apparatus	01
14	Ganong's Osmometer	01
15	Endosmometer	01
16	Root Pressure Expt apparatus	01
17	Moll's Potometer	01
18	Photosyntheto meter	01
19	Geotropism apparatus for Root Curvature	01
20	Germination Box (Tripple Chamber)	01
21	Soil Thermometer	01
22	Photometer	01



23	Calorimeter	01
24	Absorbing tower	01
25	Dark Bottle with rubber tube	01
26	Gas stove	01
27	Gas Cylinder	01

### Apparatus for +3 Science CBCS Deptt. of Physics

Sl.No	Items	Quantity
1	Determination of Planck's Constant using black body radiation	01
2	C.R.O (cathode Ray Oscilloscope)	01
3	Zener diode to determine V-I Characteristics	02
4	Tunneling effect in tunnel diode to determine V-I Characteristics	02
5	Quincks Tube for study susceptibility	01
6	Measurement for dielectric material	01
7	To study out characteristics of MOSFET	02
8	Polarimeter with sodium light	02
9	Babinet compensator	01
10	Desauty bridge with null detector	02
11	Logic gate trainer	02
12	Thermal Conductivity of a bad conductor by lees charlton method	01
13	Newton's ring complete set	01
14	Polarimeter	02
15	Standard Computer (scilab, matlab) with printer	02

### Instruments List of Department of Chemistry

Sl.No	Items	Quantity
1	Ostwald viscometer	03
2	Digital PH meter with accessories	02
3	Digital conductivity meter accessories	02
4	Potentiometer with accessories	02
5	Computer with Laser printer (desktop)	01



**Desktop Computer and Printer, ACs and Smart Board with specification**

Sl. No	Name of Goods to be procured	Quantity
1	Desktop Computer <ul style="list-style-type: none"><li>• Corei3 processor</li><li>• 4 GB Memory</li><li>• 500 GB HDD Storage</li></ul>	03
2	Normal Printer	01
3	Multifunctional Printer	01
4	Air Conditioned (A.C) *1.5 ton	04
5	Smart Board	04