

OFFICE OF THE PRINCIPAL,
S.B.R.GOV.T.WOMENS COLLEGE, BHERHAMPUR

No. 284 / Date. 13.02/2024

CORRIGENDUM

TENDER CALL NOTICE

In partial modification to the earlier TENDER CALL NOTICE vide letter no.218 dt.03.02.2024 published in this daily on 04.02.2024 for the receipt of quotation, the date line is extended to **24.02.2024 (5.00 PM)**.

All other conditions remain same.

Sd/-

Principal

S.B.R.Govt.Womens College
Berhampur

OFFICE OF THE PRINCIPAL,
SBR.GOV.T.WOMENS COLLEGE, BERHAMPUR
NO. ~~218~~ /DATE ~~3-2~~ /2024
TENDER CALL NOTICE

Sealed tenders are invited from interested reputed registered firms/authorized suppliers having valid up-to-date GST/IT Clearance Certificate alongwith Dealership Certificate for supply of Laboratory equipments /articles of reputed make, so as to reach the under signed on or before 12.02.2024 by Regd/Speed Post.

For details , visit the college website
www.sbrgautowomenscollege.ac.in

Sd/-
Principal
SBR.Govt.Women's College,
Berhampur



OFFICE OF THE PRINCIPAL,
S.B.R.GOV'T. (AUTO.) WOMEN'S, COLLEGE, BERHAMPUR.
Website: www.sbrgautowomenscollege.ac.in
Email Id: sbrgwc.berhampur@gmail.com

Letter No. 219^(C2)

Date. 3-2-2024

To

The Editor,

Times of India
The Samaj.

Sub: Publication of an advertisement

Sir,

Please find the enclosed tender call notice for publication in your daily news paper on 04.02.2023 and submit the bill for the payment.

Memo No. 0 /Date. /2024
Copy to Accounts Section for information.


Principal
S.B.R. Govt Women's College,
Berhampur

3.2.24

Principal,
S.B.R. Govt. Women's College,
Berhampur

Letter No. _____

Date. _____/2024

EXPRESSION OF INTEREST

SASHI BHUSAN RATH GOVT. WOMEN'S COLLEGE, BERHAMPUR, ODISHA through Open Tender Enquiry (OTE) invites Expression of Interest (EOI) from registered reputed original equipment manufacturing Companies/ Firms or their authorized partners/ agents/ distributors to supply various laboratory equipments/ instruments/ accessories as listed in **Scheduled-I (Part-A & B)**. EOI cum tender bid fee of Rs. 500/- (Rupees five hundred only - Non refundable) by Demand Draft drawn in favor of "**Principal, S.B.R Govt. Women's College, Berhampur Ganjam payable at Berhampur** to be submitted along with EOI bid.

1. Single bid for supply, installation & commissioning of the items listed in **Schedule – I (Part – A & B)** can be submitted in a envelope duly sealed and super scribed "**BID FOR ITEM No EOI No....**" to the "**Principal, S.B.R Govt. Women's College, Berhampur, Ganjam Odisha, India** by Speed Post/ Registered Post only. It should reach on or before **12.02.2024 by 5.00 P.M.**
2. **DUE & OPENING DATES:** The tenders will be opened on **13.02.2024 at 4.00 P.M. in the Principal's Chamber** of the college before the Purchase Committee in the presence of bidders. If necessary, bidders have to give a technical presentation of **10 min at 4.00 P.M. on 13.02.2024** before the opening of the bids. In case opening date happens to be a holiday, the tender will be opened on next working day at the same time & location.
3. The College is not responsible for non receipt of tenders within the specified date and time due to any reason including postal delay or holidays.
4. For any query pertaining to this bid document, correspondence be addressed to: **Shri. Narayan Behera, Asst. Prof. of Logic & Philosophy, Accounts Bursar, S.B.R Govt. Women's College, Berhampur, Ganjam, Odisha, India (Mob: +91-7978591363)**
5. The vendor must submit the following documents in Envelope
 - a) Bidder Profile Annexure-I
 - b) **SPECIFICATIONS:** Specifications are basic essence of the product. It must be ensured that the offers must be strictly as per our specifications. At the same time it must be kept in mind that merely copying our specifications in the quotation shall not make the parties eligible for consideration of the quotation. A quotation is to be supported with the printed technical leaflet/ literature of the quoted model of the item by the quoting party/ manufacturer and the specifications mentioned in the quotation must be reflected/ supported by the printed technical leaflet/ literature. Therefore, the model quoted invariably be highlighted in the leaflet/ literature enclosed with the quotation.
 - c) Authorized partner/dealer/distributor must submit appropriate authorization certificate from the original manufacturer for participation in the said tender.
 - d) EOI cum tender bid fee of **Rs. 500/-** by Demand Draft drawn in favour of '**The Principal, S.B.R Govt. Women's College, Berhampur, Ganjam Odisha, India**'.
 - e) Attested copy of PAN card, Aadhar Card and GST registration papers

- f) Banker's Solvency Certificate.
 - g) Audited statement of accounts and IT returns for the last three years
 - h) Name and address of past satisfactory supplies with minimum two POs to whom such items/ stores have been supplied should be mentioned in the technical bid.
 - i) Copy of mandatory test reports, national testing/ reliability and endurance test reports etc., certified or conducted at the manufacturing site, granted by the bureaus/ quality control departments/national testing laboratories.
 - j) The OEMs/ Vendors need to submit a certificate that they are not at any time debarred or **blacklisted (Annexure-III)** in **S.B.R Govt. Women's College, Berhampur**, for any supplies, products or services, or at present in any national organization or educational institute/ college.
 - k) Offer should be a page numbered and signed by an authorized signatory giving his/her name and designation below the signatures with Signed copy of the tender document, company seal, agreeing to the terms & conditions and declaration.
 - l) The vendor must submit the Price information mentioning all taxes/ duties as per **Annexure-II**. The price should be quoted in words and in figures, without any errors, erasures or alterations. Unit price of each product and accessories should be quoted separately. Maximum educational discount for College as could be offered should also be mentioned. The bidders should mention in the quotation, the rate/ amount of five year comprehensive annual maintenance charges, if we opt for maintenance contract after expiry of the warranty period.
 - m) Please quote best minimum prices applicable for a premiere Educational institution, leaving no scope for any further negotiations on prices.
 - n) The quoting party should give a certificate to the effect that the quoted prices are the minimum and they have not quoted the same item on lesser rates than those being offered to College to any other customer nor they will do so till the validity of offer or execution of the purchase order, whichever is later.
 - o) Copies of at least last two-supply orders received from other customers or details of last two supplies made to other customers preferably in Odisha for the same item/ model may be submitted with the offer giving reasons of price difference of their supply order & those quoted to us, if any.
 - p) The party must give details of identical or similar equipment, if any, supplied to any College laboratory during last three years along with the final price paid and Performance certificate from them.
 - q) Purchaser's right to accept any Bid and to reject any or all Bids: The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Purchaser's action.
6. **Offer validity period:** Bid shall remain valid at least for a period of **120 days** after the date of opening of bid prescribed by the Purchaser. A bid valid for a shorter period may be rejected by the Purchaser as non-responsive. In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses there to shall be made in writing or by e-mail.
7. **Performance Guarantee:** Performance Security for an amount of 5% of the order value may be furnished in the form of an Account payee Demand Draft, Fixed Deposit Receipt from a Commercial bank or Bank Guarantee from a Commercial bank in an acceptable form by the successful bidder. Performance Guarantee is to be

- furnished within 21 days after notification of the award and it should remain valid for a period of 90 days beyond the date of completion of all contractual obligations of the vendor, including warranty obligations.
8. The Cost of the equipment/ items should be inclusive of all taxes and statutory levies. Labour, installation charges, packing, insurance, freight, pre installation requirements etc. should be mentioned separately (inclusive of all taxes liveable on them). Price to be quoted FOR S.C.S. (A) College, Puri, Odisha, India.
 9. Annual turnover of the bidder for each of the last three financial years should not be less than 10/- lakhs (Rupees Ten Lakhs). Financial statements with net profit, duly audited/ certified by Chartered Accountant (CA) of the last three financial years along with the copies of Income Tax Return (ITR) must be enclosed with the bid.
 10. **Warranty:** The equipment/instrument must be guaranteed/ warranted for a period of at least two year, if not specifically mentioned otherwise in the specifications sheet, from the date of its satisfactory installation/ commissioning against all manufacturing defects. If the equipment is found defective during this period the whole equipment or part thereof will have to be replaced/ repaired by the supplier free of cost at the lab. Or at site of the supplier for which 'to and fro' expenses will be borne by the supplier. Availability of spare parts of the equipment/ instrument must be guaranteed for a period of at least five years from the date of supply. The warranty period and validity of Performance Guarantee shall be extended for the period of delay in satisfactory installation and delay in warranty services.
 11. **Delivery period:** The complete delivery of goods, installation & commissioning of both the equipments/instruments should be made within 2 weeks from the date of issue of purchase order (PO)/ as mentioned in the PO.
 12. Transportation and Commissioning: **It should be free of cost at College.**
 13. The OEM should be an ISO-9000 and ISO-14001 certified company with due credits to energy conservation and green earth compliance (copy of the certificate should be provided).
 14. Firm has to quote their rates only **on the format attached at Annexure-II**. Rates quoted on other format or specifications are not be accepted.
 15. Relevant documents of the OEM shall be enclosed, along with the Bid. Any explanation on this account shall be supported with documentary evidence from the principals.
 16. **The College does not bind** itself to offer any explanation to those bidders whose bids have not been found acceptable by the Bid Evaluation Committee of the College.
 17. The successful bidder with quoted price as approved by college shall be considered for issue of purchase order only when the bidder fulfils all the terms and conditions laid down in tender document/ PO & **shall submit bid security @ 3% of total estimated amount mentioned in PO in form of demand draft/ BG in favour of "The Principal, S.B.R.Govt.Women's College, Berhampur, Ganjam" payable at Berhampur**. The bid security will be returned back without any interest to bidder on successful execution of the purchase order/work order.
 18. The vendor should adhere with all seriousness to the time schedule provided by the College. The **Liquidated Damage** will be applicable at the rate of 0.5% per week. The purchaser has the right to cancel the purchase order when LD accumulates to 10%. **The same rate of penalty shall be applicable for late installation of the equipment/ instrument also.**

19. The specification & quantity indicated in the **Schedule-I (Part-A & B)**. College reserves the right to increase or decrease the quantity or delete some or all of items depending on the needs/allotment of the College without assigning any reasons, there upon.
20. **Payment on Bill Basis after supply:** No advance payment will be made at any circumstances. The payment will be made only after satisfactory installation, commissioning and performance of the equipment at S.C.S. (A) College, Puri and after certification by our technical expert. However, supplier will be required either to submit **performance bank guarantee for 5% amount of the total value of equipment, after installation of the material, valid up to 60 days after the expiry of warranty period or the equivalent amount shall be released after expiry of the satisfactory warranty period.**
21. College may accept or reject any or all the bids in part or in full without assigning any reason and does not bind himself to accept the lowest bid. The College at its discretion may change the quantity/ upgrade the criteria/drop any item or part thereof at any time before & after placing the Purchase Order.
22. The bids once submitted shall be the property of the College and shall not be returned to the vendor in future. A bid submitted with false information will not only be rejected but also the OEM/vendor will be debarred from participation in future tendering process. Late or delayed/Unsolicited quotations/offers shall not be considered at all. Post tender revisions/corrections shall also not be considered.
23. **Resolution of disputes:** College and the vendor shall make every effort to resolve amicably, by direct informal negotiations, any disagreement or dispute arising between them under or in connection with the contract. If after thirty days from the commencement of such informal negotiations, College and the vendor have been unable to resolve amicably a resolution by formal arbitration the Principal of College shall appoint a sole Arbitrator of the dispute who will not be related to the vendor and whose decision shall be final and binding. In case of any dispute, the decision of the Principal of this College shall be final and binding on the bidders.
24. **Jurisdiction:** All disputes will be subject to Berhampur, Odisha jurisdiction only.
25. All correction/corrigendum will be given in our website
i.e. www.sbrgautowomenscollege.ac.in
only. Please visit college website regularly for any information/updates.

ANNEXURE – I

FORMAT TO BE FILLED BY THE MANUFACTURERS/ INDIAN AGENTS (ON BEHALF OF THEIR FOREIGN PRINCIPLES) OR THEIR AUTHORIZED COUNTRY DISTRIBUTORS/ REPRESENTING DEALERS/ REGIONAL AGENCIES, SUBMITTING TENDER

BIDDER PROFILE (TECHNICAL)

Sl. No.	Details	
1.	Name of the Firm	
2.	EOI Fee Details	
	Name of Bank	
	Amount	
	Date	
3.	Registered Office address	
	Telephone Number	
	Fax Number	
	E-mail	
4.	Correspondence/ contact address	
5.	Details of Contact person	
	(Name, designation, address etc.)	
	Telephone Number	
	Fax Number	
	e-mail	
6.	Is the firm a registered company? If yes, Submit Documentary proof. Year and Place of the establishment of the Company	
7.	Bidder's Bank Details Name of Bank	
	A/c No.	
	IFSC Code	
8.	Government/ Public Sector Undertaking propriety firm partnership firm (if yes, give partnership deed) limited company or limited corporation member of a group of companies (if yes, give name and address, and description of other companies) subsidiary of a large corporation (if yes give the name and address of the parent organization) If the company is subsidiary, state what involvement if any, will the parent company have in the project.	

9.	Is the firm registered with sales tax department? If yes, submit valid sales tax registration certificate.	
10.	Is the firm registered for service tax with Service Tax department? If yes, Submit valid service tax registration certificate.	
11.	What type best describes your firm?	
	• Manufacturer	
	• Supplier	
	• System Integrator	
	• Consultant	
	• Service Provider (pl. specify details)	
12.	Details of Empanelment Certificate/ Purchase Order of any 3 PSUs/ Govt. institutions, enclosed	
	1)	
	2)	
	3)	
13.	Have you ever been denied tendering facilities by any Government/ Department/ Public sector Undertaking? (Give details)	

Sl. No.	Name of the Bidder	Turn Over (Rs. Crores) Total of three Financial Years			Average Turn Over for three years
		2019-20	2020-21	2021-22	

Note: Please enclose certificate issued by CA in this regard.

Seal & Signature of Bidder

DECLARATION

1. I, Son/
Daughter of Shri
Proprietor/ Partner/ Director/ Authorised Signatory of M/s.....
..... am competent to sign this
declaration and execute this EOI cum tender bid document.
2. I have carefully read and understood all the terms and conditions of the EOI cum
tender bid and hereby convey my acceptance of the same.
3. The information/ documents furnished along with the above application are true and
authentic to the best of my knowledge and belief.
4. I/ we/ am are well aware of the fact that furnishing of any false information/
fabricated document would lead to rejection of my bid at any stage besides liabilities
towards prosecution under appropriate law.
5. Our firm is neither blacklisted by any Government Department nor is any Criminal
Case registered against the firm or its owner or partners or directors anywhere in
India.
6. Each page of the tender document and papers submitted by my Company is
authenticated, sealed and signed, and I take full responsibility for the entire
documents submitted.

Signature of the Authorized Person

Date:.....

Place:.....

Full Name:.....

Company Seal:.....

Mobile No:.....

Note:

1. The above declaration, duly signed and sealed by the authorized signatory of the
firm/company, should be enclosed with the EOI cum tender bid document.
2. Certificate as per above must be submitted only on non-judicial stamp paper of
suitable amount.

ANNEXURE – II

Please quote rates for installation accessories (including were, stands or any socket etc)/ transportation charges/ labour charges if any separately.

For Equipments/ Instruments:

Item No.	Name of Instrument/ Equipment with Specification	Unit Price	GST/ any other Tax	Total Price (for SBRG. Women's College, Bam., Odisha

For Books:

Sl. No.	Name of the Book/ Author/ Publication	Unit Price	GST/ any other Tax	Total Price (for SBRG. Women's College, Bam., Odisha

SELF DECLARATION FOR NOT BLACK LISTED

To

Principal,
S.B.R.Govt.Women's College, Berhampur- 760001

Ref: Tender No. _____ / Dated. _____

Madam/ Sir,

I/ We _____ hereby confirm that our firm has not been banned or blacklisted by any Government Organization/ Financial Institution/ Court/ Public Sector Unit/ Central Government.

Date:

Place:

(Signature and seal of the bidder)

INSTRUMENT SPECIFICATION, BOTANY DEPARTMENT

LOCK IN OF TRINOCULAR PHASE CONTRAST

MICROSCOPE

- **OPTICAL SYSTEM:** Semi PlanAchromat
- **Body:** Aluminium die cast body with all critical movements based on ball bearing and wire guides, thereby ensuring smooth and precise manipulation
- **Observation Head:** 45deg incline for binocular and one trinocular head for attaching camera
- **Eyepiece:** HWF 10X (FN 18 mm) paired eyepiece.
- **Nosepiece:** Quadruple revolving nosepiece based on precision ball-bearing mechanism with positive stop click.
- **Objective:** Semi Plan Achromat 4X, Phase 10X, Phae20X , Phase 40x(spring) and Phase 100X oil spring
- **Mechanical Stage:**Co-axial low drive mechanical stage (125mm X 145 mm) (+- 5mm) with traverse area of 50mm X 76mm (+- 5 mm)
- **Condenser:**Turret type condenser with BF, DF and phase option.
- **Focusing:** Co-axial coarse & fine controls with a focus adjustment and fine adjustment knobs. Coarse focus range 20 mm.
- **Illumination:** Built-in illumination base with pre-centered LED light source coupled with an efficient collector lens system. Universal power supply 100V-240V AC 50/60 Hz (SMPS).
- **Power supply open from front side** for easy remove of light user friendly.
- **Should have CE certification on model no.**
- **Camera Casing-** Metal Alloy, Camera Dimension- 60 X60X40 mm, Image sensor- CMOS 5.1 Mp with eyepiece adapter forgetting excellent flatness of the image. Sensor Size- 1/2.5", Pixel size- 2.2 X 2.2 micron, Resolution (Max)- 2592 X 1944 Pixels, Frame Rate- 5@2592 X1944,18@1280X960,60@640X480, Dynamic range-66.5dB,Signal/Noise ratio- 40.5dB, Bining- 2X2, 4x4, Exposour time- 0.29ms to 2000ms, Spectral Range 380-650nm with IR filter, Software: Operating System Win Xp/Vista/7/8/10 (32,64 bit), software MagVision, Image format- JPG/TIF/BMP/PNG,
- The camera system is excluding computer and printer attachment. You have to arrange separately these all system.
- Microscope's base should be hexagonal for the better stability of the microscope.

Spahs
29/1/24

S.B.R.G Women's College

Practical instruments for +2 Psychology

1. Tachistoscope (Span of Attention) - 5 sets
2. Memory Apparatus (Memory for meaningful words & Nonsense Syllables) - 5 sets
3. Muller-Lyer Illusion Apparatus (Optical Illusion) - 5 sets
4. Mirror Drawing Apparatus (Sensory-motor Learning) - 3 sets
5. RCPM- 4 sets. -
6. Case-history Form - 10 sets
7. Personality Test (Type A and B) - 10 sets
8. Piagetian Task (conservation of liquid quantity) - 2 sets
9. Practical Book for +2 classes.

Dipti Parida.
2.2.24

SBR Govt(Auto) Women's College Berhampur, Department of Home Science, Laboratory Equipments

SL NO	NAME OF THE ITEM	QUANTITY
01	Magnus Monocular Compound Microscope	01
02	BP Instrument (Sphygmomanometer) Digital	01
03	Heamoglobinometer (Digital)	01
04	Infantometer	01
05	Stadiometer	01
06	Weighing Machine (Adult)	01
07	Glucometer	01
08	Beam Balance	01

Nabha
02-02-24

H.O.D

Dept Of Home Science

Physics Laboratory requirements 2024 for +2

Sl. No.	Apparatus	Quantity
1	Ohm's Law apparatus	2
2	Metre bridge	2
3	10 wires Potentiometer	1
4	Galvanometer	6
5	Voltmeter	6
6	Ammeter	6
7	Resistance Box 1-10000 Ohm	2
8	Resistance Box 1-500 Ohm	2
9	Resistance Box 1-1000 Ohm	2
10	Resistance Box 1-20 Ohm	2
11	Jockey	2
12	Plug keys	4
13	Resistance wire	50m
14	Connecting insulated wire	50m
15	Battery eliminator 1amp	3
16	Rheostat 15cm	2
17	Sonometer	1
18	Slotted weights (500g each)	2
19	Slotted weights (25g each)	2
20	Horse Shoe magnet	2
21	Concave mirror	5
22	Convex lens	5
23	Optical bench (wood)	2
24	Pin stand	5
25	Lens holder	5
26	Prism	20
27	Hair pin	100
28	Fixing pin	100
29	Drawing board	5
30	Lycopodium powder	100gm
31	Traveling Microscope	2
32	Glass slab	5
33	Hand lens	5
34	Liquid Lens	5
35	pn junction diode set up	2
36	Zener diode set up	2
37	BJT set up	2
38	Vernier caliper	35
39	Spherical n cylindrical(hollow and solid) body	35
40	Screw gauge	35
41	Spherometer	35
42	Physical balance	2
43	Watch glass	30
44	glass plate(15cmx15cm)	30
45	Gravesend apparatus	3
46	Simple pendulum	5
47	Iron stand	5
48	splitted cork	5
49	metre scale	5
50	Young's modulus apparatus	2
51	Resonance tube apparatus	2
52	Tunning fork set	2
53	Rubber pad	2
54	Plane mirror (15cmx7cm)	10
55	Weight boxes	3
56	Stop watch	5

57	Spring balance	3
58	Friction table	2
59	Helical spring	2
60	Surface tension by capillary method apparatus	2
61	Calorimeter	3
62	Thermometer of Celsius scale	5
63	Convex mirror	5
64	Concave lens	5
65	Fractional weights	3
66	digital weighing machine	1
67	multimeter	1
68	lead shots 250g	1pkt

[Signature]
29/1/2024
(HOD, PHYSICS)

f 2 Wing

DEPARTMENT OF CHEMISTRY

Chemical required

❖ Organic practical:

1. Hydrochloric acid
2. Acetic acid
3. Chromium trioxide
4. Pyridine
5. Cyclohexene
6. Potassium permanganate
7. Methanol
8. Sodium hydroxide
9. Methyl salicylate
10. Sulfuric acid
11. Benzaldehyde
12. Acetone
13. ethanol
14. benzoic acid
15. cyclohexane
16. ethyl acetate
17. acetanilide
18. aniline
19. sodium nitrite

Peel 31/1/24
(HOD, Chemistry)

❖ Inorganic practical

1. nickel chloride.hexahydrate
2. ethylenediamine
3. ammonium hydroxide
4. dolomite
5. silver nitrate
6. ammonium chloride
7. EBT indicator
8. EDTA
9. zinc chloride
10. PR-indicator
11. potassium dichromate
12. bromine water
13. ammonium nitrate
14. brass
15. ammonium bisulfite
16. ammonium thiocyanate
17. ammonium phosphate
18. potassium iodide
19. sodium thiosulphate
20. cobalt chloride.hexahydrate
21. 1,2-diaminoethane
22. hydrogen peroxide

keel 31/1/24

Physical & analytical

1. Ester
2. hydrochloric acid
3. sodium hydroxide
4. sucrose
5. amyl alcohol
6. CTAB
7. acetic acid
8. nitric acid
9. sulfuric acid
10. FAS
11. oxalic acid
12. KSCN
13. potassium permanganate
14. ammonium chloride
15. Mohr's Salt

16. Potash Alum

17. K_2SO_4
18. HCl
19. H_2SO_4
20. NaOH pellets
21. Phenolphthalein
22. Methyl orange
23. Methylene Blue
24. $Na_2S_2O_3$
25. Lead Nitrate
26. Aluminum Sulphate
27. $CaCl_2$

peep 31/1/24

28. Fehling Solution-A
29. Fehling Solution-B
30. Ethanol
31. FeSO_4
32. Ammonium Sulphate
33. Benzoic Acid
34. Sodium Nitrate
35. NaHCO_3
36. Cupric Carbonate
37. KI
38. BaCl_2
39. FeCl_3
40. Na_2CO_3
41. CaSO_4
42. Nessler's Reagent
43. Oxalic Acid
44. Sucrose
45. KMnO_4
46. MnSO_4
47. NaNO_3
48. Dolomite
49. Iodine
50. Methanol
51. β -Naphthal

reaf 31/1/24

Instruments

1. Burette
2. Pipette
3. Conical Flask
4. Beaker
5. Micro-pipette
6. Kipp's Apparatus
7. Test Tube
8. Filter Paper
9. China Dish
10. Measuring Cylinder (50,100,250 ml, mini)
11. Measuring Flask
12. Funnel
13. Electronic Balance
14. Viscometer
15. Stalganometer

peep 31/1/24

SBR Women's Higher Secondary School, Department of Zoology, Laboratory Requirements

SL NO	Name of the Item	Quantity
1	Sycon (Specimen)	1
2	Liver fluke (Specimen)	1
3	Leech (Specimen)	1
4	Earthworm (Specimen)	1
5	Cockroach (Specimen)	1
6	Prawn (Specimen)	1
7	Snail (Specimen)	1
8	Starfish (Pentaceros) (Specimen)	1
9	Tree frog (Specimen)	1
10	Bat (Specimen)	1
11	Flying fish (Specimen)	1
12	Turtle (Specimen)	1
13	Shark (Specimen)	1
14	Rohu (Specimen)	1
15	Frog (Specimen)	1
16	Garden lizard (Specimen)	1
17	Cobra (Specimen)	1
18	Krait (Specimen)	1
19	Pigeon (Specimen)	1
20	Taenia solium (Specimen)	1
21	Ascaris lumbricoides Male (Specimen)	1
22	Ascaris lumbricoides Female (Specimen)	1
23	Amoeba WM	1
24	Entamoeba histolytica WM	1
25	Plasmodium vivax WM	1
26	Ring worm WM	1
27	Squamous epithelium WM	1
28	Muscle fibres	1
29	Mammalian blood film	1
30	TS through spinal cord	1
31	TS through ovary	1
32	TS through testis	1
33	TS through kidney	1
34	TS through stomach of rabbit	1
35	Limb bones of Rabbit	1
36	Girdle bones of Rabbit	1
37	Vertebrae bones of Rabbit	1
38	Test tubes (15*180)	50
39	Test tubes (18*180)	50
40	Petriplates 90mm	20
41	Conical flask with screw cap 250 ml	10
42	Reagent bottle 1 lit	5
43	Reagent bottle 500 ml	10
44	Reagent bottle 250 ml	10
45	Reagent bottle 100 ml	10
46	Reagent bottle 50 ml	10
47	Beaker 1 lit	5
48	Beaker 500 ml	10

49	Beaker 250ml	10
50	Beaker 100ml	10
51	Beaker 50ml	10
52	Funnel	10
53	Slide	5 packs
54	Coverslip	5 packs
55	Test tube stand	10
56	Wash bottle	10
57	Conical flask	10
58	Beaker 1 lit (Plastic)	10
59	Beaker 500 ml (Plastic)	10
60	Beaker 250 ml (Plastic)	10
61	Star fish (Model)	1
62	Pigeon (Model)	1
63	Honey bee (Model)	1
64	Mollusc shell (Model)	1
65	Honey comb (Model)	1
66	Developmental stages of frog (showing morula and blastula	1
67	TS of morula of frog (Model)	1
68	Ts of blastula of frog(Model)	1
69	pH tablets	3
70	Starch	1
71	Fructose	1
72	Urea	1
73	Ethanol	10
74	Iodine	1
75	Sudan III	1
76	Biuret reagent	2

ASB
29/01

Botany Laboratory (UG)			Ganjam	
Sl. No	Equipment/Apparatus for botany Laboratory (UG)	Description	Sashi Bhusan Rath Govt. (Auto.) Women's College, Berhampur	
			Available	Requirement
1	PCR	machine 48 well, 0.1 MI	0	1
2	Refrigerated Centrifuge	max. 16000 RPM 1.5 ml/15 ml rotor (table top)	1	2
3	Horizontal(Medium) and vertical gel electrophoresis	with complete set(Comb, glass plate etc all included) and power pack	0	2
4	Digital PH meter		2	5
5	Vortex machine		0	2
6	Inverter		0	2
7	UV -Torch	Standard	0	2
8	Centrifuge	13000rpm (1.5ml)	0	2
9	Refrigerator	Single door	1	2
10	Autoclave	Specification:Size 250x 450mm Load 2Kw ,Capacity 22Litre	0	2
11	UV trans illuminator		0	2
12	Microwave		2	2
13	Digital Dry bath mini 1.5 ml		0	2
14	Water Distillation Unit (single)		1	2
15	Vertical Laminar Air flow cabinet	Stainless steel voltage 220V	1	
16	Students' Compound Microscope		15	30
17	Ganong's Potometer		10	20
18	Farmers Potometer		10	20
19	Respiratory apparatus		0	10
20	T/A apparatus		10	20
21	Hemocytometer		0	5
22	Water bath		0	2
23	Weighing Balance		4	3

Chemistry Laboratory (UG)			Ganjam	
			Sashi Bhusan Rath Govt. (Auto.) Women's College, Berhampur	
Sl. No	Equipment/Apparatus for Chemistry Laboratory (UG)	Description	Available	Requirement
			0	4
1	Test tube		4	2
2	Round bottomed flask	Of different volumes	0	4
3	Flat bottomed flask	Of different volumes	5	10
4	Beaker	Of different volumes	8	10
5	Conical flask	Of different volumes	5	5
6	Graduated cylinder	Of different capacities	2	5
7	Graduated Pipette	Of different capacities	5	5
8	Volumetric pipette	Of different capacities	15	10
9	Filter Funnel		40	20
10	Burette		5	0
11	Thermometer		2	0
12	Buchner Funnel		2	2
13	Air condenser		5	0
14	Water condenser			4
15	Separating funnel		20	10
16	Volumetric Flask		0	6
17	Soxhlet extractor		1	2
18	Potentiometer		10	20
19	Calorimeter		30	20
20	Ostwald's viscometer		10	20
21	PH meter		1	2
22	Stalagmometer		0	2
23	UV-Visible Spectrophotometer		0	2
24	Colorimeter		0	2
25	Magnetic Stirrer		0	2
26	Digital weight machine		0	2
27	Hot air oven		0	40
28	Microwave Oven		0	40

Physics Laboratory (UG)			17	
			Ganjam	
Sl. No	Equipment/Apparatus for Physics Laboratory (UG)	Description	Sashi Bhusan Rath Govt. (Auto.) Women's College.	
			Available	Requirement
1	Meter Scale full	Wooden	5	12
2	Meter Scale full	Stain less Steel	0	6
3	Meter Scale Half	Wooden	20	6
4	Vernier Callipers :	well finished, Stainless Steel in Case; Least count =0.002 or 0.01	19	12
5	Screw Gauge :	Well finished. 25mm Stainless Steel in Case; Least count =0.001	16	12
6	Spherometer : 1/100	Brass scale, with stainless-Steel screw,	13	12
7	Stop clock:	Smith English type' with stop, start & fly back action.	14	6
8	Timer : Digital		3	6
9	Rising Table: (Capillary Rise Method)	Fitted with slow motion for easy movement, fitted with plate at the top, on heavy metal base complete with capillary tube holder, rod & boss-head	0	6
10	Capillary tube (Glass)	Different dia 0.2mm to 0.4mm	2	6
11	Capillary tube holder:-	Metallic, To hold three capillaries with pointer	2	6
12	Sextant with stand	All coloured metallic sextant with arc radius 6-7/16"	2	3
13	Spring Constant Laboratory Apparatus	a spiral spring about 25mm in diameter and 10cm long with hook for slotted weight, with meter scale and zero ajuater, fitted on 8"x5" base	0	3
14	Slotted weights (Set of 5) Iron	10gm (5x10gm)	2	
		20 gm (5x20gm)	2	6
		50gms (5x50gm)	2	6
		100gm (5x100gm)	2	6
		250gm (5x250gm)	2	6
		500gm (5x500gm)	2	6
		1Kg (5x1Kg)	2	6
15	Fractional weight: Analytical,	1 mgm-500 mgm.	9	6
16	FLYWHEEL	15cm diameter; balanced cast iron wheel and steel spindle is supported on ball bearings in strong iron brackets with pointer and diametric hole can be fixed to wall	1	5

	Poiseuilles method	L-shaped glass tubes forming the manometer with scale; A capillary tube of fine bore is fitted on a wooden board with a three limbed constant level tank of brass	0	6
18	Maxwells needle (with ceiling attachment)	25mm X 400 mm Dia 18cm and graduated with scale divided in millimeters on both sides from 0 to 15cm ; with a small chuck (torsion head) in the middle of which is fixed a plane mirror; Two solid brass cylinders and two hollow cylinders, all of length 10 cm long	2	6
19	Bar Pendulum	100 cm long bored at equal interval, with two removable knife edges and a wall bracket.	4	6
20	Kater's Pendulum (Steel)	Rod size 1.20 m Dia 1cm ; two adjustable knife edges; two metal weights (made of cast iron) of dimension 7.5×3.75 cm (length \times diameter) and (3.5×3.75) cm respectively can be made to slide and can be clamped in any position. Two wooden weights exactly similar to metal weights can also slide along the bar. knife edges and a wall bracket.	2	6
21	Callender and Barnes Apparatus	A horizontal corning glass tube open at both ends; a coil about 40 cm long of Ni- chrome wire (heating element); apparatus is mounted on a polished wooden base board., a copper calorimeter of 5 X 7.5cm size with outer vessel	1	3
22	Battery eliminator	0 to 12 V & output current 1 - 3 A	6	12
23	Thermo meter	100 degree Centigrade	26	0
24	Milli ammeter	0 to 100 mA	1	6
25	Voltmeter	0 to 50V	1	12
26	Lee & Charlton Apparatus	Cylindrical brass slab of 11cm dia and 10.5mm thick. On this rest a 4.5cm deep brass hollow cylinder (Steam Chest) of this same dia with inlet and outlet tubes for steam. A hole for thermometer is drilled radially in each, and the cylindrical brass slab is fitted with eyelets to enable it to be suspended by three strings from stout annular ring. The ring is held on a heavy Retort Stand. three suitable test specimens (glass, cardboard, and bakelite)	0	3
27	Hot Plate	Electric heater	1	3
28	Copper steam generator	A Vessel of 2 litre capacity		6

	Rubber lab hose	1 cm dia	0	6
30	Platinum Resistance Thermometer Setup(Griffith Bridge)	Complete set up for PRT	0	
31	Platinum Resistance Thermometer	Fine platinum wire of about 2.8 ohms resistance wound non inductively on a mica frame & soldered to stout 4 copper leads. All four leads being connected to terminals mounted on a suitably engraved insulating panel, which is joined to the mica resistance frame by cork mount on to which is fitted a Stainless tube.	0	3
32	Galvanometer	Analog	4	12
33	Copper Connecting Wire Cotton Insulated	100gm	0	5
34	Thermocouple trainer Kit	With a copper Constantan thermocouple		
35	Copper calorimeter	5 X 7.5cm size with outer vessel of well-polished wood fitted with Bakelite top with hole for thermometer & Stirrer	2	6
36	Digital balance	Cap. 600gm Sensitivity 0.1gm (100mg). Superior quality, small size	1	6
37	Searle's Apparatus (Iron)	an scale with vernier reading 0.1mm; clamping screws for the wires and hooks for the tension, weight and loading masses. a ceiling clamp is provided for the upper ends of the wires, together with a pair of large wood screws for attaching it to a convenient overhead beam,	2	
38	Spirit Level	1.0mm Accuracy without Magnet (Used for Optics Lab Also)	4	6
39	Sonometer A/C Frequency Apparatus	The set consists of Step Down Transformer, weights with hanger, a pair of Bar Magnets, an arrangements to place the Bar Magnets, (or Electromagnet) & Wooden Sonometer with brass parts	1	3
40	Tuning fork set	Aluminium Harmonic Tuning Fork for Laboratories (Set of 8 Pcs)	1	3
41	Torsion Apparatus (Barton's) Horizontal Type	Mild Steel; Table fixable		
	Vertical Type	A steel frame mounted on a heavy cast iron base with levelling screws.	0	2
42	Melde's Appratus	Electrically maintained tuning fork, fine thread, scale pan.	1	6
43	Diode laser (RED)	Wave length : 655 nm Optical power : 5 mW Operating Current : 28 mA Operating Temperature 10°C~35°C Input Voltage:230V	2	3

44	He-Ne Laser (Mountable on Optical Bench)	A 5 milliwatt Laser, in built power supply workable on 220V AC. 50Hz. Design for continues working, Highly rugged mechanical setup. Up-Down motion for beam.	0	5
45	Optical Bench	Double rod with 1.5meter stainless steel rod	2	3
46	Spectrometer	Stainless steel single phase; Dia 6" College Pattern Superior quality	12	6
47	Sodium Light Source	35 W; sodium vapour lamp transformer & heavy metal box for with electrical fitting	3	6
48	Mercury lamp	160W: 240V-50Hz input Complete with Wooden box	2	6
49	Traveling Microscope or Vernier Microscope:	Cast Iron good quality with vertical lateral and Horizontal scales (Three Motions).Least Count:0.01mm	6	6
50	Traveling Microscope for Newton's ring Experiment:	Least Count:0.01mm	1	3
51	Newton's Ring Apparatus :	a glass plate angle in groove in the sides of a small wooden box at an angle of 45° inside back and a plane glass plate and lense 2" dia.	0	6
52	Reading Telescope fitted with Achromatic lenses	Special clamp is provided for up & down motion (Mild steel)	0	2
53	Single Slits: (for single slit diffraction)	with rod can be fixed on optical bench	4	3
54	Double Slits: (for double slit diffraction)	with rod can be fixed on optical bench	4	3
55	Adjustable slit for optical bench	Spring loaded precision split. Maximum slit opening of 4mm.	2	6
56	Diffraction grating :	15,000 lines per inch	10	6
57	Ground Glass Screen:	Superior 6" x 4", metal holder for optical bench	0	
58	White screen	For optical bench with ruler	0	
59	Lens holder	Rectangular frame lens holder. With provision to hold filters also.	8	12
60	Needle holder	For optical bench	16	6
61	Plano Convex Lens :	Dia. 2". FL- 20cm.	0	12
62	Prism glass:.	Equilateral; 1.5"	9	12
63	Prism : For Spectrometer.	Size 32 x 32mm. Flint glass	8	12
64	Babinets compensator	Micrometer screw reads upto 0.001cm.	0	3
65	Wollastons air- film	With attachment	0	

66	Gaussian Eye piece	For refractive index of glass and liquid	0	
67	Polarizer- analyzer pair,	Malus law verification	0	5
68	Sodium Lamp	Tube Size: 200mm	0	6
69	Polarizer mount	0 to 360 degree; Mountable to Telescope of spectrometer	0	
70	Black cloth	As per the size of the room or partition	6 mts	20mts
71	Function Generator	60MHZ Digital Control Dual- channel DDS Function Signal Generator/frequency meter	1	3
72	Cathode Ray Oscilloscope	Type of Product : Dual Trace Oscilloscope Bandwidth : 30 MHz Model No : CES 5030 Vertical Sensitivity : 5 mV-5 V/DIV P/P	3	3
73	RC Circuit characteristics Kit	Built in power supply : +20V variable & 10V variable DC Mains : 230V AC	1	5
74	Potentiometer:	10 wire, with pencil type, jockey.	1	5
75	Meter Bridge: (Carry Foster's Bridge)	Four Gap with terminals with pencil type jockey..	0	5
76	Leclanche cell		0	2
77	Daniel Cell	a copper pot, copper (II) sulphate, sulfuric acid and a zinc electrode	0	
78	Leclanche Cell Substitute Electronic		0	2
79	Copper Connecting Wire	Cotton Insulated	0	5
80	High Resistance Box	1-10000 Ohms Plug Type	4	6
81	Fractional Resistance Box	0.01-1 Ohms & .1 -10 Ohms Plug Type	0	5
82	Resistance Box	1-50Ohms	2	5
83	Battery Eliminator	Input 220 volt A.C., output 0-12 v D.C. Extra Superior quality fitted with heavy duty transformer & long life Bridge Rectifier	6	12
84	Ammeter:	DC moving coils 0-100mA /0 -10mA	3	12
85	Voltmeter	DC moving coils mV (0-50mV) 0-50V	3	12
86	Galvanometer	DC moving coil Range 30-0-30	6	12
87	Soldering Iron Kit	With 5 Different Soldering Tips & 1 Roll Solder Wire, 80W/220V Temperature	1	2

88	Determination dB/dx Solenoid type	Complete Kit	0	1
89	De Sautys Bridge Apparatus	sine wave signal of 1KHZ Rotary switch. Circuit Diagram: 4mm socket are provided for making connection. R1, R2 : Two decade dial of x10 & x100 ohms. R1, R2 : Decade dial of x0.1mfd.	1	5
90	Thevenin and Norton theorems Kit		0	0
		With Power supply and meters (C.R.)		5
91	Andersons bridge	Andersons bridge Kit	0	3
92	Series/Parallel LCR circuit	Series/Parallel LCR circuit Kit	3	3
93	Zener diode Apparatus		3	6
94	Bipolar Junction Transistor (BJT) Kit		4	6
95	RC-coupled transistor amplifier		1	6
96	Wienbridge oscillator (using an op-amp)		0	5
97	4-Bit Binary Adder and Subtractor Trainer Kit,		1	5
98	Astable/ monostable multivibrator	using 555Timer	0	5
99	Op Amp Based LC Oscillators	Study of different LC oscillator circuits using operational amplifiers	0	5
100	Study of a Basic Operational Amplifier			
101	Quinck's Tube Apparatus	1. Compact Electromagnet (8K Gauss) arrangement with U-core. 2. DC Regulated Power Supplies (constant current and constant voltage source). 3. Digital Gauss meter with 2k & 20k Gauss capacity and resolution 4. Digital Weighing scales (700gm) 5.Travelling Microscope with Least count of 0.01 mm.	1	5
102	Magnetic Susceptibility Gouys Balance Method	Electromagnet : 0-6Amp, 60V digital display, Pole Pieces : 50mm dia. Digital Gauss Meter :Range : 0-2 K Gauss & 0-20 K Gauss	0	5
103	Dielectric Constant	Digital Display with dielectric sheets, 220V input	0	5

104	Hall coefficient setup	(i) (a) Hall Probe (Ge Crystal - n type)(b) Hall Probe (Ge Crystal - p type)(ii) Hall Probe Multipurpose Stand,(iii) Hall Effect Set-Up,(iv) Electromagnet, (v) Constant Current Power supply, D Gauss meter	0	5
105	BH curve of Fe using solenoid	Features : Power Supply : 2,4,6,8,10,12 V* Selectable By using band switch, Control Knob : X Knob, Y Knob Solenoid : Primary 1000 , Secondary 280 Turns	2	5
106	Four Probe	Four Probe Arrangement Oven up to 200 C Sample Ge Crystal mounted Thermometer 200 degree C Four Probe Setup	0	5
107	ESR Apparatus	FET based marginal R.F. Oscillator Digital diaplay of frequency Excellent peaks display Digital display of Helmholtz Coil Current	0	5
108	Zeeman Effect Apparatus	Zeeman Effect Apparatus Consists of: (1) Electromagnet (7.5KGauss) with Power Supply(30V/5A) (2) Mercury tube with power supply (3) optical bench (4) Fabry-Perot etalon (5) condenser lens in mount (6) telescope (7) CCTV camera with connecting cables (8) 21 inch LED T.V	0	3
109	Tunnel diode I- V characteristics	Tunnel diode I-V characteristics Kit	0	3
110	Plancks constant using LEDs of at least 4 Different colours Kit	Digital panel meter 3½ digit 20 Volt DC03. Digital panel meter 3½ digit 2000mA DC04. For different colour LED'S (Red, Yellow, Blue, Green)05. Mains ON/OFF switch & Fuse.The unit is operative on 230V ±10% at 50Hz AC	2	5
111	e/m by (a) Magnetic focusing or (b) Bar magnet.	Power Supply : E.H.T. 800V D.C. for cathode Voltage to C.R. tube. 0-100 volts D.C. with moving coil meters to measure the Deflecting voltage either y1 or y2 Plates. Cathode Ray tube fitted on wooden frame with scale divided in centimeters. Deflecting Magnetometer with permanent magnetic compass included. Compass stand, a pair of Bar Magnet.	1	5

Mathematics Laboratory (UG)			Ganjam	
Sl. No	Equipment/Apparatus for Mathematics Laboratory (UG)	Description	Sashi Bhusan Rath Govt. (Auto.) Women's College, Berhampur	
			Available	Requirement
1	Desktop Computer	HP AIO 22-DD0201IN Desktop (AMD Ryzen 3/4 GB RAM/ 1 TB SATA/21.5(54.61 Cm)/ AMD Integrated Graphics/ Windows 10)	1	8
2	Projector	LED Projector with world mount		1
3	Printer	MFP		1

Home Science Laboratory (UG)			17	
			Ganjam	
Sl. No	Equipment/Apparatus for Home Science Laboratory (UG)	Description	Sashi Bhusan Rath Govt. (Auto.) Women's College.	
			Available	Requirement
1	Digital food Weighing machine		0	4
2	Chula stove		4	2
3	Induction -chulla		0	4
4	Fry pan, non-stick		5	10
5	Kadhai, ladel,		8	10
6	Saucepan		5	5
7	Tadka pan		2	5
8	Casserole (hot case)		5	5
9	Spatula (ladle, skimmer, solid spoon, slotted turner)		15	10
10	Spoon/fork/knife/ whisker/ grater/chopping board		40	20
11	Grinder		5	0
12	Refrigerator (Big)		2	0
13	Cup board		2	2
14	Pressure cooker (3 lit)		5	0
15	Pressure cooker (2 lit)			4
16	Plastic bowl		20	10
17	Strainer		0	6
18	Weighing machine for human		1	2
19	Cups		10	20
20	Plates		30	20
21	Glass (steel/glass)		10	20
22	Glucometer		1	2
23	Haemoglobin meter		0	2
24	Lacto meter		0	2
25	Measuring Tape		0	2
26	Stadiometer		0	2
27	Infant meter		0	2
28	Test-tube (glass)		0	40
29	Test tube holder & other related		0	40
30	Chemicals		0	20
31	Microwave Oven		2	0
32	OTG		5	0
33	Hand blender		2	5
34	Water purifier with RO +UV		2	0
35	Dinner set		2	3

Zoology Laboratory (UG)			17 Ganjam	
Sl. No	Equipment/Apparatus for Zoology Laboratory (UG)	Description	Sashi Bhusan Rath Govt. (Auto.) Women's College, Berhampur	
			Available	Requirement
1	Compound Microscope	Monocular	5	30
2	Microscope	Dissecting	2	10
3	pH meter		1	3
4	Burette with stand		4	25
5	Weighing balance	digital	1 (Not Working)	3
6	Microtome		0	3
7	Hot-air Oven		3	1
8	Reflex Hammer		0	5
9	Serological Water bath		0	3
10	Electrophoretic unit		0	5
11	Sphygmomanometer		0	10
12	Haemoglobinometer		5	10
13	Haemocytometer		7	10
14	Spectrophotometer		1 (Not Working)	3
15	Vortex machine		1	
16	Bench top Centrifuge		0	5
17	Refrigerator		1 (not working)	4
18	Egg incubator		1	1
19	Distillation Unit		1 (not Working)	2
20	Laminar Air-flow		1 (Not Working)	2
21	Autoclave		1 (Not Working)	3
22	BOD Incubator		1	1
23	ELISA plate reader		0	2