



**Department of Life science and Bioinformatics**  
**ASSAM UNIVERSITY, SILCHAR**

(A Central University constituted under the Act of Parliament of India in 1994)

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**NOTICE INVITING TENDER**

**NIT No. UGC-SAP (DRS-II)/LS/17 dated 25.08.2017**

Assam University, Silchar, a central university invites sealed tender from reputed manufacturers/ authorized distributors/authorized firms with sound technical capabilities for supply, installation and commissioning of the following items to be procured under UGC-SAP (DRS-II) in the Department of Life science and Bioinformatics, Assam University, Silchar. Tenders should be submitted in two bid system *i.e.*, technical and financial. The tenders will be opened at 1.00 pm on 21<sup>st</sup> September 2017 in UGC-SAP conference hall of the Department of Life Science and Bioinformatics. Detailed technical specifications including make/model/accessories and price including taxes should be quoted against each item separately. All terms and conditions will be as per Assam University, Silchar, rules and regulations.

<b>Sl. No.</b>	<b>Particulars of the equipment with minimum specifications</b>
1	<p><b><u>Specifications for -20 °C Deep freezer</u></b></p> <ul style="list-style-type: none"><li>▪ Micro processor controller with digital display</li><li>▪ Door key lock</li><li>▪ Stainless steel exterior &amp; interior</li><li>▪ Automatic door closing</li><li>▪ Forced air cooling</li><li>▪ Adjustable shelves</li><li>▪ Light</li><li>▪ Lockable castors</li><li>▪ Gross Capacity:650 liter</li><li>▪ Dimension(W x D x H inch):29 x 33 x 79</li><li>▪ Temperature range: -16°C - 22°C</li><li>▪ Temperature display: digital</li><li>▪ Microprocessor controller: yes</li><li>▪ Lock: yes</li><li>▪ No of Shelves/Drawers: 3 + 1 shelves</li><li>▪ Wheels: yes</li></ul>
2.	<p><b><u>Specifications for- 80°C Deep freezer</u></b></p> <ul style="list-style-type: none"><li>▪ Vertical Freezer is having Microprocessor-controlled temperature facility and alarms with non-volatile memory.</li><li>▪ Capacity 101 Liters.</li><li>▪ Sample storage capacity 6,000 (in 2" box)</li><li>▪ 2 compartments and 2 insulated inner doors.</li><li>▪ Vent Plunger to prevent vacuum formation, Keyed lock, polished 304L stainless steel interior, exterior : 18 gauge steel, 1.2 mm thick, powder coated, scratch and rust resistant</li></ul>

	<ul style="list-style-type: none"> <li>▪ programmable temperature range from – 50°C to -86°C, in 1°C increments, even at 32°C ambient temperature.</li> <li>▪ Minimum Power Consumption approx. 10.6 kWh/Day</li> <li>▪ Facility for Automatic Reset, Automatic Restart with Non-Volatile memory, programmed Restart.</li> <li>▪ Hermetically-sealed two-stage cascade refrigeration system with CFC, HCFC free refrigerants.</li> <li>▪ Internal Dimensions: 25.2” x 18.9” x 13” (H x W x D), External : 32.7” x 35.4” x 22.3” (H x W x D).</li> <li>▪ Shipping Weight 116 Kg.</li> <li>▪ 4-digit Password to prevent unauthorized changes.</li> <li>▪ S.M.A.R.T. Plus™ Diagnostic Software to trace and solve system errors.</li> <li>▪ CE Certified and UL Certified.</li> </ul>
3.	<p><b><u>Specifications for Refrigerated Centrifuge</u></b></p> <ul style="list-style-type: none"> <li>▪ Centrifuge should be 24-places Microcentrifuge with Maximum Speed of between 21,000 to 21300xg /14500-15000 rpm, with a brushless motor</li> <li>▪ Instrument should have a maximum rotor capacity of 24 x 1.5/2mL tubes</li> <li>▪ Temperature range should be of -10 deg C to 40 degC</li> <li>▪ Rotor should be certified aerosol tight for safe centrifugation of hazardous samples</li> <li>▪ Should have separate short spin button for quick centrifugation</li> <li>▪ Should have SOFT brake to protect sensitive samples</li> <li>▪ Should have Soft touch one finger lid closure for ergonomic operation</li> <li>▪ Fast temp function for quick pre-cooling of centrifuge</li> <li>▪ System should be of guaranteed temp of 4 Deg at maximum rotational speed</li> <li>▪ ECO Power shut-off option</li> <li>▪ Timer should be of 30 s to 9.59 hr with cont run function</li> <li>▪ Noise level should not be greater than 55 dBA</li> <li>▪ Rotor should be supplied for 1.5/2.0 ml</li> </ul>
4.	<p><b><u>Specifications for Biosafety Cabinet</u></b></p> <ul style="list-style-type: none"> <li>▪ Dimension (in): 1185(W) × 640(D) × 700(H)mm <ul style="list-style-type: none"> <li>○ (out): 1365(W) × 800(D) × 2032(H)mm</li> </ul> </li> <li>▪ Fan Motor: AS - 880D × 1EA</li> <li>▪ F.L Lamp: 30W × 1EA</li> <li>▪ UVG Lamp: 30W × 1EA</li> <li>▪ Controller: Microprocessor Control</li> <li>▪ Inflow Velocity: 0.5m/sec</li> <li>▪ Downflow Velocity: 0.3m/sec</li> <li>▪ Manometer: 0 ~ 50mmAq</li> <li>▪ HEPA Filter: 0.3 Micron 99.9% Efficiency</li> <li>▪ Pre Filter: Nylon Material</li> <li>▪ UV Timer: 15, 30, 60min &amp; Constant</li> <li>▪ Casing (in): Stainless Steel (SUS 304) 1.2t</li> <li>▪ (out): SCP1 1.2t + Powder Coating</li> <li>▪ Door: Sliding Safety Tempered Glass Door, 5t</li> <li>▪ Safety Device: Auto Change FL/UV S/W, Door Limit Alarm / 8”, Filter Change Wnainrg</li> <li>▪ Utility: Gas Faucet, Air Faucet, Power Outlet, D.O.P Test Nozzle</li> <li>▪ Power: 220V, 4.2A, 60Hz</li> </ul>
5.	<p><b><u>Specifications for Digital Autoclave</u></b></p> <ul style="list-style-type: none"> <li>▪ Should be use for sterilization under saturated steam pressure at any selected point between 10 to 20 p.s.i.</li> <li>▪ Should be double walled units with inner chamber made of 18 S.W.G stainless steel and outer</li> </ul>

	<p>chamber is covered with S.S. Lid is tightened by Radial locking system. Should be Fitted with neoprene rubber gasket.</p> <ul style="list-style-type: none"> <li>▪ All systems must be hydraulically tested upto 40 p.s.i., as a safety measure.</li> <li>▪ All autoclaves should be fitted with standard accessories such as water level indicator, pressure gauge, steam release cock, spring loaded safety valve and heating element.</li> <li>▪ Should be supplied complete with S.S basket, cord and plug.</li> <li>▪ Outer &amp; Inner chamber must be made of SS-304 Grade.</li> <li>▪ Should be fitted with low water level cut off device for general safety of the element.</li> <li>▪ Should be with radial locking arrangement foot lifting.</li> <li>▪ Should be filled with neoprene rubber gasket.</li> <li>▪ All autoclaves are fitted with standard accessories such as water level indicator, pressure gauge, steam release cock, spring loaded safety valve and heating element. Should be Filled with a PLC Logic controller 16x2 alphanumeric LCD.</li> <li>▪ Should have display with timer and temperature programmable.</li> <li>▪ Capacity: 85 ltrs</li> <li>▪ Dia x Height: 400 x 600 mm</li> <li>▪ Load: 4 KW</li> <li>▪ Must work on 220/230 volts AC Supply.</li> </ul>
6.	<p><b><u>Specifications for Digital Balance</u></b></p> <ul style="list-style-type: none"> <li>▪ Capacity: 220 g</li> <li>▪ Readability: 0.1 mg.</li> <li>▪ Repeatability : +/- 0.1 mg</li> <li>▪ Linearity: A+/- 0.2 mg</li> <li>▪ Pan size: 90mm dia</li> <li>▪ Stabilization time: 3.5 sec.</li> <li>▪ Tare range: Full.</li> <li>▪ Working Temp: 10°C to 40°C.</li> <li>▪ Power supply: A/C Adaptor 230V Or 115V +/- 20%, 50-60 Hz</li> <li>▪ Calibration: Motorized Internal Calibration</li> <li>▪ Display: Back light LCD Display.</li> </ul>
7.	<p><b><u>Specifications for Incubator</u></b></p> <ul style="list-style-type: none"> <li>▪ Body should be thick stainless steel sheet (SS 304 grade)</li> <li>▪ Top lid should be made up of transparent see through plexi glass.</li> <li>▪ A variable speed rotary shaker platform should be fitted with IMPORATED DC DRIVEN MOTOR for Continuous operation units should also fitted with MICROPROCESSOR DIGITAL RPM/SPEED INDICATOR</li> <li>▪ The shaking platform should accommodate 16 flasks of 250/500 ml or 25 flasks of 100 ml or 36 flasks of 50 ml must be provided at the base of incubator so as to shake Erlynmeyer flasks.</li> <li>▪ The variable speed motor should be fitted outside of the inner chamber, at the base.</li> <li>▪ Complete unit should be mounted on a sturdy angle iron frame.</li> <li>▪ Temperature should be controlled by microprocessor based PID digital temperature indicator cum- controller from ambient to 70°C ±0.5°C.</li> <li>▪ The unit should be fitted with air circulation fan for temperature uniformity.</li> <li>▪ Should work on 220/230 volts A C supply.</li> <li>▪ Platform size:450 x 450 mm</li> <li>▪ Cap:200 liter</li> <li>▪ For 12 flask of 250 ml</li> <li>▪ Should also include Spare set of Lotus Clamps of 50ml, 100ml, 250ml, 500ml.</li> </ul>

8.	<p><b><u>Specifications for CO2 Incubator</u></b></p> <ul style="list-style-type: none"> <li>▪ Temperature Range should be from 5°C above ambient to 60 °C ± 0.5°C.</li> <li>▪ Should be designed to provide ideal tissue culturing conditions with high resistance to contamination.</li> <li>▪ Should give control over contamination with simplicity of operation and reliable performance.</li> <li>▪ Should be useful for photosynthesis.</li> <li>▪ Temperature should be controlled by solid state digital temperature controller cum indicator.</li> <li>▪ Carbon dioxide should be provided inside the chamber through an inlet nozzle provided on the cabinet through a CO<sub>2</sub> cylinder.</li> <li>▪ Outer body should be made of M.S sheet.</li> <li>▪ Castor wheels must be provided for easy mobility.</li> <li>▪ Inner chamber should be made of polished insulated with glass wool.</li> <li>▪ Inner chamber size: 18" x 24" x 16".</li> <li>▪ All controls of the incubator should be ergonomically housed &amp; must be easily accessible.</li> </ul>
9.	<p><b><u>Specifications for Vortex</u></b></p> <ul style="list-style-type: none"> <li>▪ Should accelerate mixing of solution in test tubes.</li> <li>▪ Short, rapid, essentric stroke</li> <li>▪ It should be particularly efficient for dislodging sedimemnts from tips of centrifuge tube.</li> <li>▪ The vaccum rubber at the bottom should prevent the machine from walking.</li> <li>▪ Should be fitted with speed control arrangement.</li> <li>▪ Should work on 220 to 230 volts.</li> <li>▪ Shold b supplied with touch on/ off type</li> </ul>
10.	<p><b><u>Specifications for Microwave</u></b></p> <ul style="list-style-type: none"> <li>▪ Capacity: 20 Ltrs</li> <li>▪ Oven cooking mode: convection</li> <li>▪ Glass finish - black glass</li> <li>▪ Warranty : 1 year comprehensive warranty on product</li> <li>▪ Handle Type: Pull handle</li> <li>▪ Steam clean and high rack</li> <li>▪ Cavity: Painted cold roll steel</li> <li>▪ Control: Jog wheel plus button</li> <li>▪ Grill Type: 2 quartz tube</li> </ul>
11.	<p><b><u>Specifications for Micropipette set</u></b></p> <ul style="list-style-type: none"> <li>▪ Should be fully autoclavable</li> <li>▪ Should have the ranges from:</li> <li>▪ 0.5-10µl, 10- 100 µl, 20-200 µl, 100-1000 µl.</li> </ul>
12.	<p><b><u>Specifications for pH meter</u></b></p> <ul style="list-style-type: none"> <li>▪ pH Range: -2.00 to 16.00 pH; -2.000 to 16.000 pHt</li> <li>▪ pH Resolution: 0.01 pH; 0.001 pHt</li> <li>▪ pH Accuracy(@25°C /77°F): ± 0.01 pH; ±0.002 pH</li> <li>▪ pH Calibration: Automatic, upto 3 points(five points) calibration, 5 standard (7 standard) buffers available (1.68, 4.01 or 3.00, 6.86, 7.01, 9.18, 10.01, 12.45) and two custom buffers.</li> </ul>

## **TERMS and CONDITIONS:**

1. The tenders complete in all respects should be addressed **Prof. Manabendra Dutta Choudhury, UGC-SAP, Coordinator, Department of Life science and Bioinformatics, Assam University, Silchar-788011, India.**
2. The tenders for equipments must be submitted in two-bid system (Technical and Financial). The tenders shall be submitted item-wise in two separate sealed covers clearly mentioning on the envelope the details of items for which bid is submitted. The format for the same is enclosed in the Annexure. **ONLY TECHNICALLY** accepted competitive bids will be considered for placing Purchase Order. **Last date and time for receipt of Tenders: 20/09/2017 during the office hours up-to 4.00 pm. Date of opening Tenders: 21/09/2017 at 1.00 pm.**
3. The technical bids should include all the specification for each part complete with part numbers of main equipments and accessories. **The technical details should be supported by original brochure/documents for each component.**
4. Tenders by e-mail, Fax, Telex, Telegram will not be accepted. Tenders must be submitted in sealed envelope only clearly indicating **“TENDER FOR ITEMS FOR UGC-SAP (DRS-II)/LS/17”** addressed to undersigned. The university shall not be responsible for any delay in receiving tenders.
5. In case of any modification in specifications / terms and conditions / any clarification to the bid document, it will be hosted in the university website only and the bidders are requested to log to our website from time to time and no separate corrigendum will be issued in this regard.
6. The rate should be exclusive of taxes and applicable tax should be clearly indicated. The rates should be quoted along with supporting documents of specifications, technical features, list of users and authorized dealership documents (if applicable).
7. **A certificate from vendors mentioning the place of manufacturing of the all the components of the equipment along with a certificate that the equipment supplied is new without any defect must be supplied to qualify for Technical bid.**
8. **AFTER SALES SERVICE:** Details of availability of after sales support will have to be furnished. The offer shall clearly state full details of the service after sales facility available for the equipment. The details shall include & qualification of service personal stationed at the service centre, response time in case emergency, availability of spares, etc. The offer shall also give the amount and other terms & conditions for annual service contract of the equipments after the expiry of the guarantee/warranty period.
9. **The university is exempted from paying Customs and Excise duty.**
10. Proprietary items should be quoted with sole Manufacturer/Dealership certificate. Without dealership or manufacturer's certificate no bids will be accepted.
11. No advance payment will be made. However, if items are of foreign origin, advance payment can only be made in the form of vide LOC/FDD/Wire Transfer. **Performance Bank Guarantee must be submitted as per rules covering warranty period.**
12. **Items of foreign origin should have insurance up to installation site.**
13. If any item/equipment delivered in damaged condition, the equipment should be replaced with new one immediately.
14. Items of foreign origin should have insurance up to installation site. In case of equipment of foreign origin, the Indian dealer/agent should submit one undertaking on non-judicial stamp paper, stating that if any equipment delivered in damaged condition they will be liable to replace the same with a new one (applicable only when order is placed).

15. The invitation for bid is open to all OEM (original equipment manufacturer) or their authorized dealers. The principal company may authorize their dealer to participate in the quotation and authorization letter must be attached with the quotation document.

16. Copies of valid Central/State sales tax registration certificate, Income tax clearance certificate, proof of manufacturing unit/dealership & general order suppliers and copies of two major supply orders executed during the preceding two years for Govt. depts. /PSUs and Central Autonomous bodies have to be submitted.

17. The equipment will have to be installed by the supplier /Agent in the Department of Life Science & Bioinformatics within 4 weeks, from the receipt of equipment, free of charges.

18. Price quoted for the material/equipment shall be firm and valid for 60 days from the date of opening.

19. Tenders not conforming to the terms and conditions and procedure so outlined or Tender incomplete in any respect are liable to be summarily rejected. The university reserves the right to accept or reject any or all the bids without assigning any reason whatsoever.

20. Special discount/rebate: Special discount/rebate admissible to Educational Institution/Central University may be specifically indicated in the quotation.

21. If there be any dispute, it will be referred to an arbitrator to be appointed by the University for his decision and award. The award or decision of the arbitrator shall be final and binding on both parties.

Those bidders, who accept the above terms and conditions, may submit their tenders in the prescribed format along with all relevant documents/brochures to the undersigned. The tender must also submit a certificate in their official letter head duly signed and sealed stating that all above terms and conditions are acceptable to them.

Sd/-

Prof. Manabendra Dutta Choudhury  
Co-ordinator, UGC-SAP

Department of Life science and Bioinformatics  
Assam University, Silchar-788011, India

**Copy to:**

1. Copy to Secretary to VC, AUS for VC's kind information
2. The Registrar, AUS
3. The Finance Officer, AUS
4. Internal Audit Officer, AUS
5. Director, Computer Centre, AUS for uploading in the university website ([www.aus.ac.in](http://www.aus.ac.in))
6. File for record

**PROFORMA FOR SUBMISSION OF TECHNICAL BID (TB)**

From

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To,

Prof. Manabendra Dutta Choudhury  
Co-ordinator, UGC-SAP  
Department of Life science and Bioinformatics  
Assam University, Silchar-788011, India

With reference to your advertisement dated \_\_\_\_\_ published in the Newspapers and posted at Assam University Website, I / We hereby submit the Technical bid for the \_\_\_\_\_ required by you. I / We confirm that I / We are the owners /authorized person to offer you the item as per the desired specifications.

Fill the appropriate table as applicable for the items separately

**1. -20 °C Deep freezer**

S.NO	TECHNICAL SPECIFICATION	DETAILS TO BE FILLED BY BIDDER
1.	Dimension	
2.	Temperature range	
3.	Temperature display	
4.	Microprocessor controller	
5.	Gross Capacity	
6.	No of Shelves/Drawers	
7.	Wheels	
8.	Lock	
9.	Door key lock	
10.	Stainless steel exterior & interior	
11.	Automatic door closing	
12.	Forced air cooling	
13.	Adjustable shelves	
14.	Light	
15.	Lockable castors	

**2. - 80°C Deep freezer**

S.NO	TECHNICAL SPECIFICATION	DETAILS TO BE FILLED BY BIDDER
1.	Microprocessor-controlled temperature facility	
2.	Alarms with non-volatile memory	
3.	Capacity	

4.	Sample storage capacity	
5.	Programmable temperature range	
6.	Automatic Reset, Automatic Restart	
7.	Dimensions (H x W x D)	
8.	Weight	
9.	No. of compartments and doors	
10.	Others	

### 3. Refrigerated Centrifuge

S.NO	TECHNICAL SPECIFICATION	DETAILS TO BE FILLED BY BIDDER
1.	Maximum Speed	
2.	Rotor capacity	
3.	Temperature range	
4.	Noise level	
5.	Timer	
6.	SOFT brake availability	
7.	Separate short spin button	
8.	Others	

### 4. Biosafety Cabinet

S.NO	TECHNICAL SPECIFICATION	DETAILS TO BE FILLED BY BIDDER
1.	Dimension	
2.	Fan Motor	
3.	F.L Lamp	
4.	UVG Lamp	
5.	Controller	
6.	Inflow Velocity	
7.	Downflow Velocity	
8.	Manometer	
9.	HEPA Filter	
10.	Pre Filter	
11.	UV Timer	
12.	Casing	
13.	Safety Device	
14.	Utility	
15.	Power	
16.	Others	

### 5. Digital Autoclave

S.NO	TECHNICAL SPECIFICATION	DETAILS TO BE FILLED BY BIDDER
1.	Steam pressure	
2.	Capacity	
3.	Dimensions	
4.	Voltage	

5.	Load	
6.	Standard accessories	
7.	PLC Logic controller	
8.	Alphanumeric LCD	
9.	Others	

#### 6. Digital Balance

S.NO	TECHNICAL SPECIFICATION	DETAILS TO BE FILLED BY BIDDER
1.	Capacity	
2.	Readability	
3.	Repeatability	
4.	Linearity	
5.	Pan size	
6.	Stabilization time	
7.	Tare range	
8.	Working Temp	
9.	Power supply	
10.	Calibration	
11.	Display	

#### 7. Incubator

S.NO	TECHNICAL SPECIFICATION	DETAILS TO BE FILLED BY BIDDER
1.	Stainless steel sheet body	
2.	Plexi glass top lid	
3.	Imported DC driven motor	
4.	Microprocessor digital rpm/speed indicator	
5.	Flask accommodation	
6.	Temperature	
7.	Voltage	
8.	Platform size	
9.	Cap	
10.	Others	

#### 8. CO2 Incubator

S.NO	TECHNICAL SPECIFICATION	DETAILS TO BE FILLED BY BIDDER
1.	Temperature Range	
2.	Resistance to contamination	
3.	Conditions for tissue culturing	
4.	Conditions for photosynthesis	
5.	Digital temperature controller cum indicator	
6.	CO2 inlet nozzle	
7.	Outer body material	
8.	Wheels	
9.	Inner chamber dimensions	

10.	Others	
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### 9. Vortex

S.NO	TECHNICAL SPECIFICATION	DETAILS TO BE FILLED BY BIDDER
1.	Voltage	
2.	Vacuum rubber at the bottom	
3.	Sediments dislodging efficiency	
4.	Speed control arrangement	
5.	Others	

### 10. Microwave Oven

S.NO	TECHNICAL SPECIFICATION	DETAILS TO BE FILLED BY BIDDER
1.	Capacity	
2.	Oven cooking mode	
3.	Glass finish	
4.	Warranty	
5.	Handle Type	
6.	Cavity	
7.	Control	
8.	Grill Type	
9.	Others	

### 11. Micropipette set

S.NO	TECHNICAL SPECIFICATION	DETAILS TO BE FILLED BY BIDDER
1.	Autoclavable	
2.	Range	
3.	Others	

### 12. pH meter

S.NO	TECHNICAL SPECIFICATION	DETAILS TO BE FILLED BY BIDDER
1.	pH Range	
2.	pH Resolution	
3.	pH Accuracy( @25°C /77°F)	
4.	pH Calibration	
5.	Others	

Date:

(Signature of the Offerer)

OFFICE SEAL

(This format shall be sent in a separate sealed cover super scribing - "TECHNICAL BID FOR EQUIPMENT \_\_\_\_\_ for ref No UGC-SAP (DRS-II)/LS/17)

**PROFORMA FOR SUBMISSION OF FINANCIAL BID (FB)**

From

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To,

Prof. Manabendra Dutta Choudhury  
Coordinator, UGC-SAP,  
Department of Life science and Bioinformatics,  
Assam University, Silchar-788011, India.

Having read and understood the Technical bid, I am / We are furnishing the desired information and submitting our Technical Bid duly signed by our Authorized person. Now we hereby submit (in separate sealed cover) our Financial Bid for the purchase of equipments.

**Please fill up for the items mentioned separately, whichever is applicable:**

<b>S.NO</b>	<b>SPECIFICATION ITEMS</b>	<b>DETAILS TO BE FILLED BY BIDDER</b>
1	Name of the equipment with model no. etc	Price in /\$/Other currency whichever is applicable (Please mention separately the price of the items, accessories, insurance, etc. under separate heads)
2	Applicable taxes	To be included
3	CIF of FOR Silchar	To be included
4	Special Offer/ Discount	To be included
5	Grand Total	Price in INR/\$/Other currency whichever is applicable
6	Terms and condition	As applicable
7	Warranty and after sales service	As applicable
8	Banking Details (For foreign items)	To be included

Date:

(Signature of the Offerer)  
OFFICE SEAL

(This format shall be sent in a separate sealed cover super scribing - "**FINANCIAL BID FOR EQUIPMENTS \_\_\_\_\_ for ref No UGC-SAP (DRS-II)/LS/17**).