# **Request for Proposal (RFP)**

For Procuring Equipments and Consumables for Clinical, Anthropometric and Biochemical (CAB) Tests in National Family Health Survey (NFHS-5) 2019-20

# RETENDER NO.IIPS/NFHS-5/CAB/06/2019

# **Bid Document**



# **International Institute for Population Sciences**

(Deemed University) B.S. Devashi Marg (Govandi Station Road), Deonar, MUMBAI-400088 Tel: 91-22-42372400;

> Fax: 91-22-25563257 Email ID: nfhs52017@gmail.com

# **Key Events and Dates**

1	Tender Inviting Authority	International Institute for Population Sciences, Govandi Station Road, Deonar, Mumbai-400 088
2	Job Requirement	Procuring Equipments and Consumables for Clinical, Anthropometric and Biochemical (CAB) Tests
3	Announcement of Bids for 2019-2020 NFHS-5 CAB Equipment and consumables suppliers	January 16, 2019
4	Any query on Bid document	January 25, 2019
5	Last date for submission of bid	February 6, 2019 (till 5.00PM)
6	Opening of bids and sample submission by suppliers	February 12, 2019
7	Technical evaluation by duly- constituted committee	February 13-15, 2019
8	Financial evaluation by duly- constituted committee	February 20, 2019
9	Submission of Performance Security and issuing Purchase Order (PO)	To be announced through IIPS website

# Checklist of eligibility for opening of bid

Sl No.	Items	Tick
1	Certificate of Registration/License	
2	PAN Card	
3	Processing fees* of Rs. 10,000/-	
4	EMD* for Equipments and	
	consumable are given in Annexure A	
5	Having MSME certificate for	
	exemption of EMD and processing fees	

<sup>\*</sup>Should be paid through Demand Drafts drawn in favour of "Director, IIPS" payable at Mumbai.

**Note**: It is mandatory for organization/bidder to submit one combined bid document, specifying all the details and specifications if the organization or bidder bidding for more than one biomarker item instead of providing separate bid for each of the items.

# Issues, observations and suggestion obtained during pre-bid conference

Sl No.	Issues, observations and suggestion	Remark
1		
2		
3		

# Bid for Procuring Equipment and Consumables for Clinical, Anthropometric and Biochemical (CAB) Tests in National Family Health Survey (NFHS-5)

#### 1. INTRODUCTION

## 1.1 Purpose of Request for Proposal (RFP)

The purpose of this Proposal is to procure the CAB equipment and consumables required for conducting the fifth round of National Family Health Survey (NFHS-5) in India during 2019-20.

#### 1.2: Background

The National Family Health Survey (NFHS) in India was initiated in the early 1990s with the first NFHS being conducted in 1992-93. Since then, India has successfully completed four rounds - NFHS-2 in 1998-99, NFHS-3 in 2005-06 and NFHS-4 in 2015-16. All four rounds of the survey were conducted under the stewardship of the Ministry of Health and Family Welfare (MoHFW), Government of India, with the International Institute for Population Sciences (IIPS), Mumbai, as the nodal agency and technical assistance provided by the United States Agency for International Development (USAID) through ICF Macro (now called ICF)<sup>1</sup>. USAID has been the primary funding agency for the NFHS surveys, but in the two most recent surveys (NFHS-3 and NFHS-4), other development organizations, such as DFID, the Bill and Melinda Gates Foundation, UNICEF, UNFPA, the MacArthur Foundation, as well as the Government of India, also supported the surveys in a major way. The main objectives of the NFHS programme have been to strengthen India's demographic and health database by providing information that is both reliable and relied upon; to strengthen the survey research capabilities of Indian institutions to provide, analyse, and disseminate high quality data; and to anticipate and meet the country's needs for data on emerging health and family welfare issues.

In 2019-20, India will implement the fifth round of the National Family Health Survey (NFHS-5). Like its predecessors, NFHS-5 will be conducted under the stewardship of the Ministry of Health and Family Welfare, coordinated by the International Institute for Population Sciences (IIPS), Mumbai, and implemented by a group of survey organizations and Population Research Centres, following a rigorous selection procedure. Technical assistance for NFHS-5 will be provided by ICF, USA.

#### 2. SPECIFIC OBJECTIVES AND SCOPE OF NFHS-5

Each successive round of the NFHS has had two specific goals: a) to provide essential data on health and family welfare required by the Ministry of Health and Family Welfare and other agencies for policy and programme purposes, and b) to provide information on important emerging health and family welfare issues. To meet the first of the two objectives NFHS-5, like NFHS-1, NFHS-2, NFHS-3, and NFHS-4 will:

Provide estimates of the levels of fertility, infant and child mortality, maternal and child health, and other health and family welfare indicators by background characteristics at the national and state levels; and Measure trends in health and family welfare indicators over time at the national and state levels. Similar to the NFHS-4, NFHS-5 will also provide information on several emerging issues

<sup>&</sup>lt;sup>1</sup>ICF International implements the USAID-supported MEASURE DHS Project, and has the experience of providing technical assistance to more than 300 surveys in more than 90 countries.

including:

Perinatal mortality, high-risk sexual behaviour, safe injections, tuberculosis, and malaria;

Non-communicable diseases;

Use of emergency contraception; and

Disability

As was in case of NFHS-4, which is being considered as a benchmark in India's quest to achieve the Sustainable Development Goals (SDGs) by 2030, the scope of NFHS-5 has been expanded substantially. Some salient features of NFHS-5 are:

In addition to the 29 states, NFHS-5 will also cover all the seven Union Territories (UTs) was done as in NFHS-4. Similarly, NFHS-5 will provide estimates of most indicators at the district level for all 707 districts in the country as on March 1, 2017.

Given the need to estimate most demographic and health indicators at the district level, the NFHS-5 sample size is expected to be approximately 610,000 households (in all 707 districts). As the survey will elicit information (using Household, Woman's, Man's, and Biomarker questionnaires) from all women age 15-49 and men age 15-54 in a subsample of households, it is estimated that NFHS-5 will yield a total sample of 6,68,622 women aged 15-49 years, and 91,200 men aged 15-54 years. In these households information on about 265,000 children below age 5 will be also collected in the survey.

Data will be collected using Computer Assisted Personal Interviewing (CAPI) on mini-notebook computers. CAPI eliminates the need for a separate data entry operation and for data editing in the field. With essential data consistency checks built into the programming, data are also likely to be of better quality. Additionally, data will be sent to the central office on a daily basis, enabling fast feedback to teams on quality or other concerns, as required. It is expected that about 17-18field agencies will be selected to implement the data collection.

Anaemia testing and height and weight measurements for women age 15-49, men age 15-54 and children age under5 years will also be included in NFHS-5. All related estimates will be provided at the district level.

Like in NFHS-4, other components included in the domain of clinical, anthropometric and biochemical testing (CAB) in NFHS-5are blood glucose and hypertension measurements with estimates to be provided at the district level.

In addition, NFHS-5 will be collecting finger-stick blood to produce dried blood spots (DBS) from a subsample of respondents for laboratory testing of malaria, HbA1C and vitamin D3. These tests will provide an opportunity to estimate the community based burden of malaria and antimalarial drug resistance in high malaria endemic states, as well as at the national level. It will also provide information on the extent of Vitamin-Deficiency in the population and level of diabetes control at the national level amongNFHS-5 respondents, who report that they have diabetes.

Data on waist and hip circumference will be collected for the first time in NFHS-5., which will allow these measures to be compared to the body mass index (BMI) as predictors of chronic diseases. This will not only help build a large health database for monitoring of health related programmes in the country but also provide information for public health researchers and programme implementers to prioritize and develop effective health interventions.

As with anaemia, testing of blood glucose and blood pressure will be conducted in the field using portable equipment. The HemoCue instrument will be used for anaemia testing, and the similar type of battery-operated portable glucometers as was used in the NFHS-4, will be used for blood glucose testing. Retractable lancets and all blood-contaminated materials will be disposed of in a biohazard bag according to an established protocol. Only medical or other personnel with specific training on the procedures and on universal precautions regarding blood-borne pathogens will be engaged for conducting the anaemia and blood glucose tests and in the collection of DBS samples.

# 3. INTRODUCTION OF CAB

CAB stands for Clinical, Anthropometric and Biochemical tests which are integrated in NFHS- 5, to collect information on nutrition and health. A biomarker may be thought of as a characteristic that can be independently measured and evaluated as an indicator of normal biologic processes, pathogenic processes, or pharmacologic response to a therapeutic intervention. Biomarker measurements can serve as diagnostic tools to identify diseases in their early stages and can be used as surveillance tools to track changes in disease patterns or to evaluate intervention programs. In population-based surveys, biomarkers help assess the prevalence or occurrence of diseases or health conditions and can also be used at a macro level to measure the long-term effect of policies and programs. In NFHS, biomarkers are measured in order to report levels of specific diseases and conditions at the population level. Specific to NFHS-5, the following biomarkers will be measured: Haemoglobin, random blood glucose, blood pressure, height/length & weight, waist and hip circumference, along with test for iodization of salt.

As with haemoglobin measurement, testing of these CAB components in the field will be conducted using portable equipment. The HemoCue instrument will be used for haemoglobin measurement and battery-operated portable Glucometers will be used for random blood glucose testing. Lancets and all blood-contaminated materials will be disposed of in a biohazard bag according to an established protocol. Only paramedical or other personnel with specific training on the procedures and on universal precautions regarding blood-borne pathogens will be used for conducting the haemoglobin and random blood glucose testing and preparing dried blood spot (DBS) for testing of HbA1c, Vitamin D3 and Malaria related testing.

#### 4. SURVEY ORGANIZATION

NFHS-5 is being conducted at the request of the Ministry of Health and Family Welfare which has a primary role in the planning for the survey and in the analysis and dissemination of the survey results.

The International Institute for Population Sciences (IIPS) will serve as the implementing agency for NFHS-5. IIPS will take responsibility for operational matters including planning and conducting fieldwork, processing of collected data and organizing the writing and distribution of reports. IIPS will furnish the necessary central office space for survey personnel and will undertake to secure transport for the data collection activities. Staff from IIPS will be responsible for overseeing the day-to-day technical operations including recruitment and training of field and data processing staff and the supervision of the office and field operations.

#### **General Terms and Conditions:**

- i. The proposal, along with all the correspondence and documents exchanged by the bidder and IIPS, shall be written in the English language.
- ii. **Amendments to the tender:** IIPS reserves rights to amend any of the tender conditions or a part thereof before the last date for the receipt of the tender, if necessary. Amendments, if any, would be placed on the Institute's website (www.iipsindia.org). The decision of extending the due date and time for the submission of tender documents on the account of amendments will be at the sole discretion of IIPS.
- iii. IIPS reserves the right to cancel the RFP at any stage without citing any reason.
- iv. Earnest Money Deposit (EMD): The bidders should furnish an Earnest Money Deposit (EMD) for Biomarker equipments & consumables as specified in the Annexure A. Each bid submitted by the bidding by means of Demand Draft/ Banker Cheque drawn on any Nationalized Bank / Scheduled Bank payable in favor of the "Director IIPS". The Demand Draft/Banker Cheque for the earnest money shall be put in the envelope for the eligibility criteria as the Technical and Financial Bid would be opened only in respect of those bidders who qualify according to the prequalification criteria. Cheque, Cash payment, Money Order, Fixed deposit etc. will not be accepted as EMD. The Tenders received without the Earnest Money Deposit will be summarily rejected. The Earnest Money Deposit will be refunded after the completion of the selection process as per the rule 170 of GFR 2017. The amount remitted towards Earnest Money Deposit is liable to be forfeited in the case the bidder retracts its offer after submission of the tender or after the acceptance of the offer by IIPS or fails to sign the Contract or to remit the Security Deposit. No interest will be payable by the IIPS on the Earnest Money Deposited/remitted.
- v. **Performance Security**: The successful supplier should furnish, Performance Security of 5% of the value of the contract as specified in the bid documents prior to signing contract with IIPS by means of account payee Demand Draft, fixed deposit receipt or Bank guarantee from any of the commercial banks or payment online in an acceptable form, safeguarding the purchaser's interest in all respects drawn on any Nationalized Bank / Scheduled Bank payable in favour of the "**Director IIPS**" on award of contract. The total FOB/CIF value as the case may be, valid until the completion of the warranty period of the equipment.
- vi. Each Bidder has to provide Processing Fees of **Rs. 10,000/-** (Non-Refundable) for each bid by means of Demand Draft/Banker Cheque drawn on any Nationalized Bank/ Scheduled Bank in favour of the "**Director IIPS**" payable at Mumbai. The Demand Draft/Banker Cheque for the earnest money shall be put in the envelope for the eligibility criteria as the Technical and Financial Bid would be opened only in respect of those bidders who qualify according to the prequalification criteria.
- vii. No proposal shall be accepted unless it is properly sealed. The documents should be sent by speed post/registered post/courier or hand delivered. IIPS will not be responsible for any postal delay.

- viii. If the envelope is found to be open, not sealed and not marked as instructed above, IIPS will not be responsible for misplacement or premature opening of the proposal submitted. Any proposal opened prematurely due to this cause shall be rejected.
  - ix. The bidder is advised to attach any additional information that is considered necessary to establish its capabilities. No further information will be entertained after submission of application unless it is required by IIPS. The IIPS reserves the right to call for additional information and clarification on information submitted by the bidders.
  - x. Proposals must be received by IIPS, at the address specified not later than the date and time specified in the Invitation of RFP. In case the specified date for the submission of proposal is a declared holiday at the IIPS, the same will be received on next working day with the same specified time. Proposals received after the due date and time specified will automatically be rejected.
- xi. Submission of tender: Sealed tenders received up to 5:00 PM of February 6, 2019 will be taken up for opening. Tenders received after specified date and time will not be accepted. IIPS reserves the right to disqualify any of the tenders in case it is not satisfied with the documents furnished or otherwise, without assigning any reasons thereof. Any efforts by an agency to influence the IIPS personnel or representative on matters relating to bids under consideration in the process of examination, clarification, evaluation and comparison of bids and in decision concerning award of Contract, shall result in the rejection of the bidder's bid and also lead to blacklisting of the organization.
- xii. The bidder shall submit in a sealed envelope three (3) copies of all the bid documents. All copies of the bids (One Original and Two Duplicates) must consist of the following:
- a. Eligibility criteria as per the criteria given in this document along with the requisite Earnest Money Deposit (EMD) (Refundable) for Biomarker equipments /equipments & consumables for Biomarker Consumables in a separate envelope as given in the Annexure A.
- b. Technical proposal, superscribing on the top right hand side of the cover envelope as Technical Bid and Biomarkers equipments and/or consumables for which the technical bid is being submitted.
- c. Financial proposal superscribing on the top right hand side of the cover as Financial Bid and the Biomarkers equipments and/or consumables for which the financial bid is being submitted.
- d. For each of the bid application, a non-refundable processing fee (as per processing fees slab mention above) by DD in favour of Director, IIPS payable at Mumbai should be submitted with Bid document.
- e. For each of the Bid application, the envelopes containing the Technical and Financial Proposals are to be enclosed in separate envelope, clearly super scribing the original/duplicate copy, contents of the envelope of the enclosed proposals.
- f. All the pages of the Financial Proposal shall be duly signed by the authorized signatory of the bidder in ink before submission. Corrections, if any, shall be countersigned.
- g. The bid will be valid for 180 days from the last date of submission.
- h. Failure to provide and/or comply with the required information, instructions, etc.

- incorporated in these Bid documents may result in rejection of its tender.
- xiii. Failing to execute the Contract within the prescribed period may result in termination of the Contract and award of the same to other agency/agencies at the risk and cost of the bidder.
- xiv. The person to sign the Contract shall be duly authorised.
- xv. Arbitration: Arbitration proceeding shall be conducted in accordance with procedure of the Arbitration and Conciliation Act 1996, of India. The decision of the arbitrator shall be final and binding on both parties. The place of Arbitration shall be **Mumbai**.
- xvi. Good Manufacturing Practices (GMP), WHO-GMP, or equivalent international quality certification for the product applied for is essential. Preference will be given to WHO-GMP certificate.
- xvii. IIPS reserves the right to choose, accept or reject any or all request /offers, in full or part, reduce or increase the quantity, split the order, criteria of requirement at any stage without giving any notice or assigning any reason. The decision of the Director, IIPS in this regard shall be final.
- xviii. The quoted rate should be valid for one year from the last date of bid submission. The supplier is required to supply the selected items (consumables) in a staggered manner in 3-4 lots, tentatively scheduled as first lot for training in the last week of March 2019, second lot for the first phase in the month of May/June 2019, and third lot for second phase in the month of November/December 2019.
  - xix. All bidders will have to submit at least one sample of each equipment and ten samples of each consumable applied, for verification and approval by the committee for evaluation of technical specifications.
  - xx. Failure to submit samples within the prescribed timeline will result in disqualification of the agency.
  - xxi. Along with the samples, each vendor will have to submit a declaration that if finally selected, they will supply the same quality of the product (model with same technical specifications) for the entire procurement. Failure to do so will lead to disqualification of the agency supplying the allocated items.
- xxii. For all the supplies and equipments, those items which have been successfully used earlier in large scale surveys in India or outside will be given preference.
- xxiii. Cost of travel and stay of the officials for attending pre-bid meeting/technical or financial bid opening will be borne by the bidder.
- xxiv. Hard copy of the Prequalification, Technical and Financial proposals should be kept in three separate envelopes placed in one large envelope that must be marked as below and sent to:-

BID FOR CAB EQUIPMENTS AND CONSUMABLES FOR NFHS-5,

To,

The Director,

International Institute for Population Sciences,

POST BOX NO.-8307

B.S. Devashi Marg (Govandi Station Road),

Deonar, Mumbai-400 088 Tel: 91+22+42372400;

Fax: 91+22+2556 3257

The last date for submission of complete bid with all supporting documents (by hand, by post or by courier) is February 6, 2019 up to 5:00 PM. any bid received after the prescribed time will not be entertained. IIPS will not be responsible for any loss or postal delay.

#### 6. Force Majeure and Termination

#### **6.1 Force Majeure:**

- 6.1.1 Where the performance by the bidders of their obligations under this Contract is delayed, hindered or prevented by an event or events beyond the reasonable control of the bidders and against which an experienced bidder could not reasonably have been expected to take precautions, the bidders shall promptly notify IIPS in writing, specifying the nature of the force majeure event and stating the anticipated delay in the performance of this Contract.
- 6.1.2 From the date of receipt of notice given in accordance with Clause 6.1.1, IIPS may, at its sole discretion, either suspend the Contract for up to a period of 6 months ("the Suspension Period") or terminate the Contract forthwith.

If by the end of the Suspension Period the parties have not agreed on a further period of suspension or re-instatement of the Contract, the Contract shall terminate automatically.

## **6.2 Suspension or Termination without Default of the bidders**

- 6.2.1 IIPS may, at its sole discretion, suspend or terminate this Contract at any time by so notifying the bidder and giving the reason(s) for such suspension or termination.
- 6.2.2 Where this Contract has been suspended or terminated pursuant to Clause 6.2.1, the bidder shall:
- a) Take such steps as are necessary to terminate the provision of the Services, (including suspending or terminating any Sub-contracts) in a cost-effective, timely and orderly manner; and
- b) Provide to IIPS, in not more than 30 days after IIPS notifies the bidder of the suspension or termination of this Contract an account in writing, stating:
  - i. Costs, if any, due before the date of suspension or termination;
  - ii. Any costs to be expended after the date of suspension or termination, which the bidder necessarily incurred in the proper performance of this Contract and which it cannot reasonably be expected to avoid or recover.

Subject to IIPS approval, IIPS shall pay such amount to the bidder normally within 30 days after receipt from the bidder of an Invoice in respect of the amount due.

#### **6.3** Termination for Default of the bidders

- 6.3.1 IIPS may notify the bidder of the suspension or termination of this Contract where the services or any part of them are not provided to the satisfaction of IIPS giving the reasons for such dissatisfaction and, in the case of suspension, the action required by the bidder to remedy that dissatisfaction and the time within which it must be completed. 6.3.2 Where this Contract is suspended under Clause 6.3.1 and the bidder subsequently fails to remedy the dissatisfaction, IIPS may terminate the Contract forthwith.
- 6.3.3 IIPS may, without prejudice to its other rights, including but not limited to the right to claim for costs and losses incurred, terminate this Contract forthwith where:

- a) The bidder or any member of the bidder's personnel, either directly or through their servants or agents, breaches any of their obligations under this Contract; or
- b) The bidder or any member of the bidder's personnel has committed an offence under any of the prevailing laws applicable to the project; or
- c) The bidder is an individual or a partnership and at any time:
  - i. Becomes bankrupt; or
  - ii. Is the subject of a receiving order or administration order; or
  - iii. Makes any composition or arrangement with or for the benefit of the bidder's creditors; or
  - iv. Makes any conveyance or assignment for the benefit of the bidder's creditors; or
- d) The bidder is a company and:
  - i. An order is made or a resolution is passed for the winding up of the bidder; or
  - ii. A receiver or administrator is applied in respect of the whole or any part of the understanding of the bidder.
- e) The bidder is a partnership or a company and there is a Change in Control. "Change in Control" means that the person(s) (including corporate bodies) directly or indirectly in Control of the bidder at the time this Contract is entered into cease to be in Control. "Control" means the power of a person to secure that the affairs of the bidders are conducted in accordance with the wishes of that person.
- 6.3.4 Where the Contract is terminated in accordance with this Clause 6.3.3, the bidder shall without prejudice to IIPS other remedies, take any steps necessary to terminate the provision of the Services in a timely and orderly manner but shall not be entitled to any further payment in relation to this Contract.
- 6.3.5 Where this Contract is terminated pursuant to Clause 6.3.3 the bidder shall pay IIPS within 10 days of notification such amount, as IIPS shall have determined as the amount of any loss to IIPS resulting from such termination together with the amount or value of any gift, consideration or commission concerned.

Annexure A: Earnest Money Deposit (EMD) for CAB Equipment and Consumables					
	Items	Units	EMD		
1	Stadiometer (Adult height measuring equipment)	300	60,000		
2	Glucometer with carrying case	1200	3,00,000		
2	Glucose strips	1800000	3,00,000		
	Micro cuvettes/ Strips compitable with digital haemoglobinometer*	1405000			
3	Cleaner for digital haemoglobinometer*	100000	15,00,000		
	Carrying Case for digital haemoglobinometer*	400			
	BP monitor (m/medium cuff)**	300			
4	Additional BP cuff Small compatible with BP monitor**	300	50,000		
Additional BP cuff Large compatible with BP monitor**		300			
5	Gulick II Tape	1,200	1,00,000		
	AA Batteries of weighing scale	38500			
6	AA Batteries of HemoCue	21120	40,000		
0	AA Batteries of GPS	2000	40,000		
Compatible and recommended AA batteries for BP monitor		20750			
7	Compatible and recommended AAA batteries/ Lithium batteries for the glucometer		2,000		
8	Cooler Igloo box/cold box/ice carrier, 16Qt	1000	20,000		
9	Plastic Roy 3 31 (should be compatible with the design		3,000		
10	Cryogenic Barcode Label	300000	6,000		
11	Combo carry case for Stadiometer, Infantometer and mother and child weighing scale	1200	45,000		
12	Backpack	1200	40,000		
13	Large Ziploc bag 12"x 15"	10000	4000		

<sup>\*</sup>IIPS already has 1282 HemoCue HB 201+ Analyzers, which will be used for the survey and hence the consumables compatible with HemoCue HB 201+ Analyzers have to be procured.

<sup>\*\*</sup> IIPS already has 642 Omron HEM-8712 BP monitors which were used in NFHS-4 and will be used for NFHS-5 survey also. However, in view of the expanded coverage of NFHS-5 the number of survey teams have increased. Therefore, IIPS need to procure additional 300 BP monitors to maintain uniformity in the recording of systolic and diastolic blood pressure levels in a community setting, a similar equipment and compatible consumables have to be procured.

# **LIST OF CAB EQUIPMENTS**

S. No.	Supplies	Estimated qty.*	Packs pieces	Generic specifications
1	Stadiometer (Adult height measuring equipment)	300	unit equipment	Foldable height measuring device, should be easily carryable in the field, calibrated with graduation of 1mm, should be able to measure 20-205 cm, light weight, must have a measurement reading window, the entire system should not weigh more than 4kg, product with demonstrated accuracy and earlier use in large scale surveys with international comparability would be preferred. GMP WHO-GMP or equivalent International quality standard Certification essential.
2	Glucose Strips and Glucometer with carrying case	1,800,000	unit equipment	Battery operated glucometer with digital display, should have documented quality control and calibration method, having Indian or International quality certificate and proven use in large scale studies. The results should be equivalent to plasma levels of glucose, documented accuracy for international comparisons (GMP/WHO-GMP or equivalent International quality standard certification essential.)  Compatible reagent containing strips for the glucometer, preferably edge tip filled, year manufacturing should be 2018 and should be have shelf life to cover 24 months of field work (otherwise phase supply would be needed) (GMP/WHO-GMP or equivalent international quality standard certification essential).  NOTE: One glucometer of given specifications (with free carry case) should be supplied complimentary on the purchase of every 1500 glucose strips.
3	BP monitor (w/ medium cuff)**	300	unit equipment	Automatic, battery operated BP instrument with demonstrated accuracy, preferred to have provision to indicate proper positioning of arm cuff, and should have standard Indian or international certification. Provided with Medium Cuff - arm sizes 22–32 cm (GMP/WHO-GMP or equivalent International quality standard certification essential.)

4	Additional BP cuff Small**	300	Unit cuff	Small Cuff – arm sizes 17-22 cm, compatible with the BP monitor
5	Additional BP cuff Large**	300	Unit cuff	Large Cuff – arm sizes 32-42 cm, compatible with the BP monitor
6	Gulick II Tape	1200	Unit equipment	Individually calibrated for optimum accuracy and should apply a constant tension to the measuring tape, should provide user independent repeatable measurements, Polyester reinforced tape (non-stretchable & non-pliable), non-stretchable, retractable tape with both Metric and English gradations (centimeters and inches) and graduation of 1mm, should be up to 5/16-inch-wide and up to 72 inches long (minor variations allowed), should include convenient clip-on lanyard. The tape should not be metallic to avoid the discomfort of a cold object touching the skin and to eliminate any possibility of scratches or cuts, self-retracting tape should be kept at the desired length until the retract button is pushed, compression spring should last lifetime without stretching.  Documented accuracy of use in large scale survey, with international comparability shall be preferred, with guaranteed service support (GMP/WHO-GMP or equivalent International quality standard certification essential.)
7	Combo carry case for Stadiometer, Infantometer and mother and child Weighing scale	1200	unit carry case	Tailor-made case to carry stadiometer, infantometer and weighing scale, waterproof material, guaranteed strength to last for 2 years of field work.
8	Backpack	1200	unit backpack	Tailor-made sturdy backpacks, with a strong shoulder strap of adjustable length, carrying capacity 10 kg, volume of at least 30 litres (1800 cubic inches), number of main pockets -2, side pockets-2, front smaller pockets-2

<sup>\*\*</sup> IIPS already has 642 Omron HEM-8712 BP monitors which were used in NFHS-4 and will be used for NFHS-5 survey also. However, in view of the expanded coverage of NFHS-5 the number of survey teams have increased. Therefore, IIPS need to procure additional 300 BP monitors to maintain uniformity in the recording of systolic and diastolic blood pressure levels in a community setting, a similar equipment and compatible consumables have to be procured.

#### LIST OF CONSUMABLES

#### Note:

The consumables should have sufficient shelf-life so as to cover the entire time period of field work during NFHS-5 (up to December 2020 or after two years of purchase, whichever is later). In case of any product having limited shelf life, the supplier has to phase the manufacturing and supplies so that products with valid expiry dates are made available throughout the survey, otherwise the supplier should replace the expired supplies with new supply on their own cost. The total FOB/CIF values as the case may be, valid until the delivery of equipment/goods at IIPS. All equipment and consumables should be delivered to IIPS, Mumbai and pricing should be done by taking into consideration transportation costs.

S. No.	Supplies	Estimated qty*.	Generic specifications
1	Compatible and recommended AA batteries for GPS	2000	Leak-proof, with proven long shelf life, alkaline AA (R6) batteries (1.5 Volts)), with wider storage temperature and operating temperature range
2	Compatible and recommended AA batteries for Weighing scales	36500	Leak-proof, with proven long shelf life, alkaline AA (R6) batteries (1.5 volts), with wider storage temperature and operating temperature range
3	Micro cuvettes/ Strips compitable with digital haemoglobinometer*	1405000	Microcuvettes compatible with HemoCue Hb 201+ haemoglobinometer, made up of polysterene plastic, should be able to contain approximately 10 microliter blood and reagents, should carry CE mark
4	Cleaner for digital haemoglobinometer*	100000	Compatible for cleaning the cover glasses of optronic unit for HemoCue (Hb 201+) Sponge made of polyurethane foam, covered by microfiber fabric and presaturated with a cleaning solution (containing about 20% Ethanol and 1% Triton x-100)
5	Carrying Case for digital haemoglobinometer*	400	A protective plastic hard carry case. The carry case also conveniently allows to keep all consumables together with the analyzer, The small hard carry case fits HemoCue analyzer's —Hb-201+
6	Compatible and recommended AA batteries for HemoCue	21120	Leak-proof, with proven long shelf life, alkaline AA (R6) batteries (1.5 volts), with wider storage temperature and operating temperature range

7	Compatible and recommended AAA batteries/ Lithium batteries for the glucometer	6600	Leak-proof, long shelf life, alkaline AA (R6) batteries (1.5 Volts) OR Lithium batteries as per the recommendations of glucometer manufacturer
8	Compatible and recommended AA batteries for BP monitor	20750	Leak-proof, with proven long shelf life, alkaline AA (R6) batteries (1.5 Volts), with wider storage temperature and operating temperature range, as per recommendations from BP instrument

<sup>\*</sup>IIPS already has 1282 HemoCue HB 201+ Analyzers, which will be used for the survey and hence the consumables compatible with HemoCue HB 201+ Analyzers have to be procured.

## **Equipments and Consumables for DBS**

1	Cooler - Igloo box/cold box/ice carrier, 16 Qt.	1000	Insulated igloo box (cool box) with airtight lid and handle for carrying, dimensions-approximately 14 inches X 10 inchesX10 inches
2	Plastic box, 3.3L (should be compatible with the design drying rack selected)	1760	Box which has internal dimension of at least 10 inches X 5.5 inches X 4.5 inches, made of first grade transparent plastic, having completely removable lid on top (these boxes will be used for keeping filter paper cards in the drying racks)
3	Cryogenic Barcode labels 1x3	300000	Alphanumeric bar code, random numbers in triplicate, non-bearable material, should retain adhere at minus 20°C, cryogenic. <b>The size of barcode will be 38 mm X 15 mm (1x3 labels) and the barcode should be in rows.</b> The barcode will be provided by IIPS which should be printed on the barcode labels.
4	Large Ziploc bag 12"x15"	10000	Reclosable (Ziploc) bags, transparent, the size of large Ziploc bag should be 12 inches X 15 inches (measured from zip).

## **General terms and conditions:**

- IIPS reserves the right to choose, accept or reject, cancel any or all of the item in full or part, reduce or increase the quantity, spilt the order, criteria of requirement at any stage without giving any notice or assigning any reason. The decision of the Director, IIPS in this regard shall be final.
- All equipment and consumables should be delivered approximately within 90 days of issuing the purchase order, in a staggered manner. The purchase order for a particular equipment/consumable will provide the exact details of delivery period and required packaging format for the same.
- The sample submission date will be communicated after opening of pre-qualification bid. (Usually it is within one week of last day of submission of bid). Please keep visiting our website <a href="https://www.rchips.org/nfhs">www.rchips.org/nfhs</a> for more info.
- IIPS does not have any GST exemption certificate.
- For price bid, each item should be quoted for single unit inclusive of GST.