ICAR-NATIONAL RICE RESEARCH INSTITUTE
(INDIAN COUNCIL OF AGRICULTURAL RESEARCH)
CUTTACK-753 006 (ODISHA), INDIA
Phone: +91-671-2367757; PABX: +91-671-2367768-783, Fax: +91-671-2367663
Email: director.nrri@icar.gov.in | crrictc@nic.in

Price for Analysis of Different Parameters

Sl. No.	Parameters	Method	Instrument Used	Total Cost
1.	Amino acid profiling (17 amino acids as mentioned above)	Acid hydrolysis method	UPLC with Fluorescence detector	8000.00
2.	Histidine	Acid hydrolysis method	UPLC with Fluorescence detector	7000.00
3.	Serine	Acid hydrolysis method	UPLC with Fluorescence detector	7000.00
4.	Arginine	Acid hydrolysis method	UPLC with Fluorescence detector	7000.00
5.	Glycine	Acid hydrolysis method	UPLC with Fluorescence detector	7000.00
6.	Aspartic acid	Acid hydrolysis method	UPLC with Fluorescence detector	7000.00
7.	Glutamic acid	Acid hydrolysis method	UPLC with Fluorescence detector	7000.00
8.	Threonine	Acid hydrolysis method	UPLC with Fluorescence detector	7000.00
9.	Alanine	Acid hydrolysis method	UPLC with Fluorescence detector	7000.00
10.	Proline	Acid hydrolysis method	UPLC with Fluorescence detector	7000.00
11.	Cysteine	Acid hydrolysis method	UPLC with Fluorescence detector	7000.00
12.	Lysine	Acid hydrolysis method	UPLC with Fluorescence detector	7000.00
13.	Tyrosine	Acid hydrolysis method	UPLC with Fluorescence	7000.00

			detector	
14.	Methionine	Acid hydrolysis method	UPLC with Fluorescence detector	7000.00
15.	Valine	Acid hydrolysis method	UPLC with Fluorescence detector	7000.00
16.	Isoleucine	Acid hydrolysis method	UPLC with Fluorescence detector	7000.00
17.	Leucine	Acid hydrolysis method	UPLC with Fluorescence detector	7000.00
18.	Phenyl alanine	Acid hydrolysis method	UPLC with Fluorescence detector	7000.00
19.	Identification of volatiles using scan mode	Lab developed SPME method	GC-MS/MS (Thermo Scientific)	B- 5000.00 M- 5500.00 P- 6000.00
20.	Volatile estimation (2-AP)	Lab developed SPME method	GC-MS/MS (Thermo Scientific)	6500.00
21.	Identification of volatiles in liquid sample using scan mode	Lab developed SPME method	GC-MS/MS (Shimadzu)	4000.00
22.	Quantification of pesticides by GC-MS/MS With sample preparation	QUECHERS Method	GC-MS/MS (Shimadzu)	6500.00
23.	Quantification of pesticides by GC-MS/MS Without sample preparation	QUECHERS Method	GC-MS/MS (Shimadzu)	4000.00
24.	Quantification of pesticides by LC-MS/MS With sample preparation	QUECHERS Method	LC-MS/MS (Perkin Elmer)	7000.00
25.	Quantification of pesticides by LC-MS/MS Without sample preparation	QUECHERS Method	LC-MS/MS (Perkin Elmer)	4500.00
26.	Quantification of pesticides using both GCMS and LC-MS/MS with sample preparation	QUECHERS Method	LC-MS/MS (Perkin Elmer) GC-MS/MS (Shimadzu)	10000.00
27.	Acephate	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
28.	Allyl isothiocyanate	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
29.	Anilophos	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
30.	Attrazine	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00

31.	Azoxistrobin	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
32.	Bensulfuron methyl	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
33.	Bifenthrin	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
34.	Bispyribac sodium salt	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
35.	Bromodiolone	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
36.	Buprofeizin	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
37.	Butachlor esa sodium salt	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
38.	Caproprmid	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
39.	Carbendazim	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
40.	Carbofuran	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
41.	Carbosulfan	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
42.	Chlorantraniliprole	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
43.	Chlorimuron ethyl	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
44.	Chlorpyrifos	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
45.	Cinmethylin	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
46.	Clomazone	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
47.	Flonicamid	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
48.	Flouropyram	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
49.	Flufenacet	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
50.	Flusilazole	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
51.	Hexaconazole	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
52.	Imidacloprid	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
53.	Indoxacarb	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
54.	Iprodione	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
55.	Isoprothiolane	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00

56.	Kresoxim methyl	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
57.	Lamda cyhalothrin	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
58.	Malathion	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
59.	Metconazole	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
60.	Methamidophos	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
61.	Metsulfuran methyl	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
62.	Oxadiargyl	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
63.	Oxadiazone	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
64.	Oxyflurofuran	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
65.	Pencycuran	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
66.	Pendimethalin	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
67.	Phenthoate	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
68.	Phosalone	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
69.	Picoxystrobin	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
70.	Pirimiphos methyl	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
71.	Pretilachlor	QUECHERS Method	GC-MS/MS (Shimadz)	6000.00
72.	Profenofos	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
73.	Propiconazole	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
74.	Prothioconazole	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
75.	Pymetrozine	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
76.	Pyraclostrobin	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
77.	Pyrazo sulfuron methyl	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
78.	Quinalphos	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
79.	Tebuconazole	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
80.	Tricyclazole	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00

81.	Trifloxystrobin	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
82.	Triflumezopyrim	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
83.	Alpha -BHC	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
84.	Beta -BHC	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
85.	Lindane	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
86.	Delta-BHC	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
87.	Heptachlor	QUECHERS Method	GC-MS/MS (Shimadzu)	6000.00
88.	Acephate	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
89.	Allyl isothiocyanate	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
90.	Anilophos	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
91.	Attrazine	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
92.	Azoxystrobin	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
93.	Bensulfuron methyl	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
94.	Bifenthrin	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
95.	Bispyribac sodium salt	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
96.	Bromodiolone	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
97.	Buprofeizin	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
98.	Butachlor esa sodium salt	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
99.	Caproprmid	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
100.	Carbendazim	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
101.	Carbofuran	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
102.	Carbosulfan	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
103.	Chlorantraniliprole	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
104.	Chlorimuron ethyl	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
105.	Chlorpyrifos	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00

106.	Cinmethylin	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
107.	Clomazone	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
108.	Flonicamid	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
109.	Flouropyram	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
110.	Flufenacet	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
111.	Flusilazole	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
112.	Hexaconazole	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
113.	Imidacloprid	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
114.	Indoxacarb	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
115.	Iprodione	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
116.	Isoprothiolane	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
117.	Kresoxim methyl	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
118.	Lamda cyhalothrin	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
119.	Malathion	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
120.	Metconazole	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
121.	Methamidophos	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
122.	Metsulfuran methyl	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
123.	Oxadiargyl	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
124.	Oxadiazone	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
125.	Oxyflurofuran	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
126.	Pencycuron	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
127.	Pendimethalin	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
128.	Phenthoate	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
129.	Phosalone	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
130.	Picoxystrobin	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00

131.	Pirimiphos methyl	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
132.	Pretilachlor	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
133.	Profenofos	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
134.	Propiconazole	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
135.	Prothioconazole	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
136.	Pymetrozine	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
137.	Pyraclostrobin	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
138.	Pyrazo sulfuron methyl	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
139.	Quinalphos	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
140.	Tebuconazole	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
141.	Tricyclazole	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
142.	Trifloxystrobin	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
143.	Triflumezopyrim	QUECHERS Method	LC-MS/MS (Perkin Elmer)	6500.00
144.	Fatty acid profiling	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	5000.00
145.	Methyl butyrate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
146.	Methyl hexanoate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
147.	Methyl octanoate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
148.	Methyl decanoate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
149.	Methyl undecanoate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00

150.	Methyl laurate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
151.	Methyl tridecanoate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
152.	Methyl myristate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
153.	Methyl myristoleate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
154.	Methyl pentadecanoate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
155.	Methyl *cis*-10-pentadecenoate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
156.	Methyl palmitate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
157.	Methyl palmitoleate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
158.	Methyl heptadecanoate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
159.	*cis*-10-Heptadecanoicacid methy lester	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
160.	Methyl stearate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
161.	*trans*-9-Elaidic acid methyl ester	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00

162.	*cis*-9-Oleicacid methyl ester	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
163.	Methyl linolelaidate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
164.	Methyl linoleate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
165.	Methyl arachidate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
166.	Methyl □-linolenate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
167.	Methyl *cis*-11-eicosenoate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
168.	Methyl linolenate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
169.	Methyl heneicosanoate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
170.	*cis*-11,14-Eicosadienoicacid methyl ester	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
171.	Methyl behenate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
172.	*cis*-8,11,14-Eicosatrienoicacid methyl ester	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
173.	Methyl erucate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00

174.	*cis*-11,14,17-Eicosatrienoicacid methyl ester	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
175.	*cis*-5,8,11,14-Eicosatetraenoicacid methyl ester	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
176.	Methyl tricosanoate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
177.	*cis*-13,16-Docosadienoicacid methyl ester	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
178.	Methyl lignocerate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
179.	*cis*-5,8,11,14,17-Eicosapentaenoicacid methyl ester	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
180.	Methyl nervonate	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
181.	*cis*-4,7,10,13,16,19-Docosahexaenoic acid methyl ester	Method described by Metcalfe et al. 1966	GC-FID (Thermo)	4000.00
182.	Solvent evaporation from mixture	Instrument manual	Rotary vacuum evaporator	200.00
183.	Solvent evaporation from mixture	Instrument manual	Nitrogen evaporator	200.00
184.	Moisture%, Protein% Amylose%	Calibration based NIR method, C.V.K. Kandala et al. 2008, ISO 12099	NIR Spectroscopy	600.00
185.	Moisture %	Calibration based NIR method, C.V.K. Kandala et al. 2008, ISO 12099	NIR Spectroscopy	500.00

186.	Protein %	Calibration based NIR method, ISO 12099	NIR Spectroscopy	500.00
187.	Amylose %	Calibration based NIR method, ISO 12099	NIR Spectroscopy	500.00
188. 4.	Estimation of Color Index by using Hunter Lab Colorimeter L A b Whiteness Index, ΔL Δa Δb ΔE	Hunter Lab Colorimeter Method CIE 15;2004, ISO 7724/1, ASTM E1164, DIN 5033, Teil 7 and JIS Z 8722	Hunter Lab Colorimeter	B- 500.00 M-700.00 S-400.00
189.	Rapid visco- analyzer (RVA) parameters (Peak viscosity, Pasting properties of rice and rice-based products using RVA, Break down viscosity, Set back viscosity (in RVU), Peak temperature (°C).)	Goode DL, Wiltschko EA, Ulmer HM, Arendt EK (2005) Application of the Rapid Visco Analyser as a rheological tool for the characterization of mash viscosity as affected by the level of barley adjunct. J Inst Brew 111(2):165–174	Rapid visco-analyzer (RVA)	B- 1600.00 M-2000.00
190.	FN value (in Centipoise): starch properties	Alpha-Amylase Activity Test — AACCCI Method No. 56-81.03, ICC No. 107/1, ISO 3093, ASBC	Falling Number Machine	B- 1500.00 M-1700.00
191.	Estimation of Textural property of rice and Rice based value added products (PTA, Hardness, Fracturability, Extensibility, Adhesiveness)	AACC (1991) Bourne 1978	Texture Analyzer	B- 500.00 M-700.00 P-900.00
192.	Estimation of Textural property (PTA)	AACC (1991) Bourne 1978	Texture Analyzer	B- 500.00 M-700.00

				P-900.00
193.	Estimation of Textural property (Hardness)	AACC (1991) Bourne 1978	Texture Analyzer	B- 500.00 M-700.00 P-900.00
194.	Estimation of Textural property (Fractur ability)	AACC (1991) Bourne 1978	Texture Analyzer	B- 500.00 M-700.00 P-900.00
195.	Estimation of Textural property (Extensibility)	AACC (1991) Bourne 1978	Texture Analyzer	B- 500.00 M-700.00 P-900.00
196.	Estimation of Textural property (Adhesiveness)	AACC (1991) Bourne 1978	Texture Analyzer	B- 500.00 M-700.00 P-900.00
197.	Total reducing sugar in the sample expressed in mg/g or percentage	Reducing sugar estimation by Nelson-Somogyi Method Breuil C. and Saddler J.N. (1985)	Manual	1400.00
198.	Total sugar content in the sample expressed in mg/g or percentage	Total Sugar estimation by Anthrone Reagent method	Manual	1400.00
199.	Starch content in the sample will be provided in mg/g or percentage	Starch estimation by Perchloric Acidmethod Rose et al., (1991)	Manual	1500.00
200.	Amylose in rice sample expressed in mg/g or as percentage.	Amylose in rice sample and rice-based products using iodine solution (Juliano 2003)	Manual	B- 1300.00 M-1500.00
201.	Hulling%,	Razavi, S. M. A and Farahmandfar, R (2008)	Manual	(H%)-250.00
202.	Milling%	Manual method Farahmandfar, R (2008)	Manual	(M%)-250.00
203.	Head Rice recovery%	Lab Developed method	Manual	(HRR%)-400.00

204.	Length and breadth of grain in millimetre, Grain type determination as per American standards Chalky grain%.	Scanning based automated method	Manual	B- 700.00 M-900.00
205.	Alkali spreading value of the grain based on visual comparison with standard chart.	KOH Method Mariotti et al., (2010)	Manual	B- 800.00 M-1000.00
206.	Gel consistency (in mm) of the rice sample as per method described by Juliano B.O, 1980.	Juliano B.O. method.	Manual	B- 1000.00 M-1200.00
207.	Thousand grain weight of the sample is reported (in mg) by manual method.	Thousand grain weight	Manual	B- 600.00 M-800.00
208.	Water uptake of rice sample expressed in ml/100g.	Lab Developed method	Manual method using Wate rbath	B- 800.00 M-1000.00
209.	Initial volume before cooking and final volume after cooking are expressed in milliliters and volume expansion ratio is calculated.	Lab Developed method	Manual	B- 800.00 M-1000.00
210.	Kernel length after cooking is expressed in mm.	Manual method using graph paper	Manual	B- 800.00 M-1000.00
211.	Initial Kernel length before cooking and final kernel length after cooking are expressed in mm and Kernel elongation ratio is calculated.	Lab Developed method	Manual	B- 800.00 M-1000.00
212.	Total crude protein in the rice sample in mg/g or percentage.	Kjeldahl Method	Manual	B- 1000.00 M-1200.00
213.	Zinc content in grain/ straw/ rice-based product expressed in ppm par sample of brown rice or milled rice.	Zinc estimation in Rice sample (grain or straw) using AAS (Atomic Absorption Spectrophotometer)	AAS (Atomic Absorption Spectrophotometer)	B- 2300.00 M-2500.00

214.	Non-destructive estimation of Iron (Fe) in paddy, brown or milled rice grains, paddy straw and rice-based products expressed in mg/g.	Rice grain Iron (Fe) and Zinc (Zn) concentrations estimation through pre-calibrated methods in ED-XRF	ED-XRF	B- 500.00 M-700.00 (With three calibrations)
215.	Non-destructive estimation of Zinc (Zn) concentrations in paddy, brown or milled rice grains, paddy straw and rice-based products expressed in mg/g.	Rice grain Iron (Fe) and Zinc (Zn) concentrations estimation through pre-calibrated methods in ED-XRF	ED-XRF	B- 500.00 M-700.00 (With three calibrations)
216.	Total anthocyanin content expressed as mg per 100g.	Methanol-HCL method	Spectrophotometer	1000.00
217.	Gamma-oryzanol in sample expressed as mg per 100g.	HPLC grade isopropanol method. Chen and Bergman (2005 content	Spectrophotometer	1000.00
218.	Total phenolic content in the sample expressed as mg catechol equivalent per 100g.	Folin & Ciocalteus Method Zilic et al. (2011)	Spectrophotometer	1000.00
219.	Total flavonoid content in the sample expressed as mg Catechine equivalent per 100g.	Eberhardt et al. (2000)	Spectrophotometer	1100.00
220.	Total oil or fat content in the sample will be provided in mg/g or percentage	Total Fat/Oil estimation by Soxhlet apparatus	Soxhlet apparatus	900.00
221.	Electrophysiological response using EAG	Instrument manual	EAG	1200.00
222.	Electrophysiological response using GC-EAD	Lab developed method	GC-EAD	11000.00
223.	Observation of plant or Insect sample	Lab developed method	Stereo Zoom Microscope	50.00
224.	Observation of plant tissues, microbial cultures, protoplast imaging	Lab developed method	Fluorescence stero zoom Microscope	300.00

225.	Observation of plant cells and tissues, insect pests & microorganisms	Lab developed method	Compound Microscope	50.00
226.	PS-II efficiency of Chlorophyll a, Maximum Fluorescence & Minimal Fluorescence	Lab developed method	Fluorescence imaging system	50.00
227.	Estimation of NDF, ADL ADF (Neutral detergent fiber)	Lab developed method	Fibre Analyzer	700.00
228.	HPLC for organic acids estimation using PDA Oxalic acid	Lab developed method	HPLC PDA	500.00
229.	Tartaric acid	Lab developed method	HPLC PDA	500.00
230.	Quinic acid	Lab developed method	HPLC PDA	500.00
231.	Ascorbic acid	Lab developed method	HPLC PDA	500.00
232.	Lactic acid	Lab developed method	HPLC PDA	500.00
233.	Maleic acid	Lab developed method	HPLC PDA	500.00
234.	Succinic acid	Lab developed method	HPLC PDA	500.00
235.	Isocitric acid	Lab developed method	HPLC PDA	500.00
236.	Adipic acid	Lab developed method	HPLC PDA	500.00
237.	Citric acid	Lab developed method	HPLC PDA	500.00
238.	Malonic acid	Lab developed method	HPLC PDA	500.00
239.	Maleic acid	Lab developed method	HPLC PDA	500.00
240.	Phytic acid	Lab developed method	HPLC PDA	500.00
241.	Shikimic acid	Lab developed method	HPLC PDA	500.00
242.	Adipic acid	Lab developed method	HPLC PDA	500.00
243.	Propionic acid	Lab developed method	HPLC PDA	500.00
244.	Quantification of CH_4 concentration by GC	Lab developed method	GC	600.00
245.	Quantification of N_2O concentration by GC	Lab developed method	GC	600.00
246.	Quantification of CO_2 concentration by GC	Lab developed method	GC	600.00

247.	Glycemic Index estimation	Lab developed method invitro & invivo methods	Manual	5500.00
248.	Phytic acid assay in rice grain	Lab developed Phytase & alkaline phosphatase method	Manual	4500.00
249.	Estimation of Total Carbon in soil, straw & water sample	Lab developed method	TCTN	600
250.	Estimation Total Nitrogen in soil, straw & water sample	Lab developed method	TCTN	600
251.	Observation of VAM spores, soil nematode, soil tiny macroflora/ insects etc.	Lab developed method	Trinocular Stereo Microscope	100
252.	Quantification of micronutrients and trace elements in soil, plant and water samples by using AAS Cu	DTPA extract/ Direct Filtered Sample method	Atomic Absorption Spectrophotometer	1000.00
253.	Pb	DTPA extract/ Direct Filtered Sample method	Atomic Absorption Spectrophotometer	1000.00
254.	Zn	DTPA extract/ Direct Filtered Sample method	Atomic Absorption Spectrophotometer	1000.00
255.	Mn	DTPA extract/ Direct Filtered Sample method	Atomic Absorption Spectrophotometer	1000.00
256.	Ni	DTPA extract/ Direct Filtered Sample method	Atomic Absorption Spectrophotometer	1000.00
257.	Co	DTPA extract/ Direct Filtered Sample method	Atomic Absorption Spectrophotometer	1000.00
258.	Cd	DTPA extract/ Direct Filtered Sample method	Atomic Absorption Spectrophotometer	1000.00
259.	Cr	DTPA extract/ Direct Filtered Sample method	Atomic Absorption Spectrophotometer	1000.00
260.	Fe	DTPA extract/ Direct Filtered Sample method	Atomic Absorption Spectrophotometer	1000.00

261.	As	DTPA extract/ Direct Filtered Sample method	Atomic Absorption Spectrophotometer	1000.00
262.	Acid digestion for sample i.e. soil, plant, sewage & slag	Lab developed method	Microwave Digestion System	200.00
263.	For Soil sample analysis of Na by using Flame photometer	Lab developed method	Flame Photometer	400.00
264.	For Soil sample analysis of K by using Flame photometer	Lab developed method	Flame Photometer	400.00
265.	For Soil sample analysis of Ca by using Flame photometer	Lab developed method	Flame Photometer	400.00
266.	Quantification of intensity of light emitted by atoms or ions of the elements of interest at specific wavelengths and can be used for the determination of various elements in soil, plant and water samples following elements.	DTPA extract/ Direct Filtered Sample method	Inductively coupled plasma - optical emission spectrometry	3000
267.	Cu	DTPA extract/ Direct Filtered Sample method	Inductively coupled plasma - optical emission spectrometry	2000
268.	Pb	DTPA extract/ Direct Filtered Sample method	Inductively coupled plasma - optical emission spectrometry	2000
269.	Zn	DTPA extract/ Direct Filtered Sample method	Inductively coupled plasma - optical emission spectrometry	2000
270.	Mn	DTPA extract/ Direct Filtered Sample method	Inductively coupled plasma - optical emission spectrometry	2000
271.	Ni	DTPA extract/ Direct Filtered Sample method	Inductively coupled plasma - optical emission spectrometry	2000
272.	Co	DTPA extract/ Direct Filtered Sample method	Inductively coupled plasma - optical emission spectrometry	2000

273.	Cd	DTPA extract/ Direct Filtered Sample method	Inductively coupled plasma - optical emission spectrometry	2000
274.	Cr	DTPA extract/ Direct Filtered Sample method	Inductively coupled plasma - optical emission spectrometry	2000
275.	Fe	DTPA extract/ Direct Filtered Sample method	Inductively coupled plasma - optical emission spectrometry	2000
276.	As	DTPA extract/ Direct Filtered Sample method	Inductively coupled plasma - optical emission spectrometry	2000
277.	Genotyping and single nucleotide polymorphism detection based on the principle of (MALDI-TOF) mass spectrometry.	Principle of (MALDI-TOF) mass spectrometry.	SNP Genotyping Platform	50.00 (Per sample Per data point)
278.	Microbial community analysis with ecoplates by using Biolog Microstation	Lab developed method	Biolog Microstation	3000.00
279.	Quantification of nucleic acid by using Nanodrop Spectrophotometer	Nano drop Spectrophotometry method	Nano drop Spectrophotometer	25.00
280.	Quantification of Protein by using Nanodrop Spectrophotometer	Nano drop Spectrophotometry method	Nano drop Spectrophotometer	25.00
281.	Visualization of nucleic acids (in Agarose gel, Polyacrylamide gel)	Lab developed method	Gel Documentation system	700.00
282.	Cellular organelle isolation/Subcellular fractionation	Lab developed method	Ultracentrifuge	400.00
283.	Vacuum Concentration of DNA, RNA, Nucleotides, proteins and other liquid or wet sample	Lab developed method	Vacuum Concentrator	50.00
284.	Ultrapure water (per lit)	Instrument manual	Water Purification system	300.00
285.	Measurement of Surface Area of leaves (Minimum 50 samples)	Lab developed method	Portable Lear Area Meter	30.00
286.	Gas exchange parameter by using portable photosynthesis system (photosynthetic rate, Stomatal conductance,	Lab developed method	Portable Photosynthesis system	500.00

	Transpiration)			
287.	Gas exchange parameter by using portable photosynthesis system (photosynthetic rate)	Lab developed method	Portable Photosynthesis system	400.00
288.	Gas exchange parameter by using portable photosynthesis system (Stomatal conductance)	Lab developed method	Portable Lear Area Meter	400.00
289.	Gas exchange parameter by using portable photosynthesis system (Transpiration)	Lab developed method	Portable Photosynthesis system	400.00
290.	Measurement of Soil Moisture Content by using Time Domain Reflectometry (minimum 100 samples)	Lab developed method	Time Domain Reflectometry	20.00
291.	Measurement of Root length, radius, volume by Root Analyzer (Minimum 50 samples)	Lab developed method	Root Analyzer	50.00
292.	Measurement of Canopy Temperature by using Infrared Camera (Minimum 100 samples)	Lab developed method	Infrared Camera	10.00
293.	Transmission Electron Microscope for plant and animal tissues	Lab developed method	Transmission Electron Microscope	7000.00
294.	Quantification of DNA & transcript by using RTPCR	Lab developed method	Real Time PCR	1400.00
295.	Ultramicrotome of resin embedded plant tissues, animal tissues & fungal mycelium	Lab developed method	Ultramicrotome	900.00
296.	pH	Lab developed method	pH meter	300
297.	EC	Lab developed method	pH and EC meter	300

****** All the above prices are excluding of GST**

Price fixation of new parameters (in addition of 297 parameters)

S.I. No.	Parameters	Sample type	Price (Rs/Sample)
1	Bacterial, fungal and actinomycetes counts	Soil	300
2	Dehydrogenase activities	Soil	300
3	FDA activities	Soil	300
4	Beta glucosidase activities	Soil	300
5	Acid phosphatase	Soil	300
6	Alkaline phosphatase	Soil	300
7	Microbial Biomass Carbon (MBC)	Soil	300
8	Readily Mineralizable Carbon (RMC)	Soil	300

Note: The rate of sample analysis (297+8=305 parameters) will be 50% for the students. However, minimum 20 samples must be booked (at a time) for analysis for getting the discount/ rebate. A letter of the competent authorities needs to be submitted by the students for studentship verification.