

Analytical Tests & Services

Food Testing Laboratory · Nuclear Institute for Food & Agriculture (NIFA), Peshawar

Proximate Composition Analysis

S. No.	Analytical test / service	Rate (PKR)
1	Moisture (%)	500
2	Fat (%)	700
3	Ash (%)	500
4	Protein (%)	800
5	Fiber (%)	700
6	Total Carbohydrates (%)	300
	Package total	3,500

Biochemical Tests (Antioxidants)

S. No.	Analytical test / service	Rate (PKR)
1	Total Phenols	600
2	DPPH	1,500
3	Flavonoids	700
	Package total	2,800

Oil and Fat Analysis

S. No.	Analytical test / service	Rate (PKR)
1	Specific Gravity	300
2	Peroxide Value	600
3	Free Fatty Acid (FFA)	800
4	UV Absorbance Test	500
	Package total	2,200

Mineral Contents in Food Samples

S. No.	Analytical test / service	Rate (PKR)
1	Calcium (Ca), mg/L	250
2	Potassium (K), mg/L	250
3	Sodium (Na), mg/L	250
4	Lithium (Li), mg/L	250
5	Sample Digestion	250
	Package total	1,250

Food and Water Microbial Analysis

S. No.	Analytical test / service	Rate (PKR)
1	Total Plate Counts (CFU/mL)	1,000
2	Total Fungal Counts (CFU/mL or g)	1,000
3	Total Coliform Bacteria (MPN/100 mL)	1,000
4	Total Fecal Coliforms (MPN/100 mL)	1,000
5	E. coli (MPN/100 mL)	1,000
	Package total	5,000

Water Testing for Domestic Users

S. No.	Analytical test / service	Rate (PKR)
1	Package: pH, electrical conductivity, TDS, total coliforms, fecal coliforms and E. coli	3,000

Complete Water Test		
S. No.	Analytical test / service	Rate (PKR)
1	Color / Odor / Taste	150
2	pH	300
3	Electrical Conductivity ($\mu\text{S}/\text{cm}$)	300
4	Hardness (mg/L)	200
5	TDS (mg/L)	200
6	Total Alkalinity (mg/L)	200
7	Chlorides (Cl) (mg/L)	250
8	Sulphate (SO_4) (mg/L)	250
9	Carbonate (CO_3) (mg/L)	200
10	Bicarbonate (HCO_3)	200
11	Phosphate (PO_4) (mg/L)	250
12	Calcium (Ca) (mg/L)	250
13	Sodium (Na) (mg/L)	250
14	Total Coliforms ($\text{MPN}/100 \text{ mL}$)	1,000
15	Total Fecal Coliforms ($\text{MPN}/100 \text{ mL}$)	1,000
16	E. coli ($\text{MPN}/100 \text{ mL}$)	1,000
	Package total	6,000

Juices / Squashes / Syrups		
S. No.	Analytical test / service	Rate (PKR)
1	pH	300
2	Total Titratable Acidity	500
3	Vitamin C (Ascorbic Acid)	700
4	Total Soluble Solids (TSS) ($^\circ\text{Brix}$)	400
5	Viscosity (Juices)	300
6	Specific Gravity	300
7	Minerals (Ca , Na , K)	1,000
8	Sensory Evaluation (appearance, color, aroma, taste, mouthfeel and overall acceptability)	1,500
9	Microbial: TPC, T. Coli., F. Coli., TFC & E. Coli.	5,000
	Package total	10,000

Honey Quality Analysis (Basic)		
S. No.	Analytical test / service	Rate (PKR)
1	Reducing Sugar	800
2	Total Invert Sugar	1,000
3	Ash (%)	800
4	Moisture (%)	500
5	Total Titratable Acidity	500
6	Electrical Conductivity	300
7	Hydroxymethylfurfural (HMF)	1,000
	Package total	4,900

Salt Analysis		
S. No.	Analytical test / service	Rate (PKR)
1	Iodine	600
2	Moisture	400
	Package total	1,000

Flour Analysis		
S. No.	Analytical test / service	Rate (PKR)
1	Moisture (%)	500
2	Total Ash (%)	500
3	Physical Appearance	200
4	Iron	700
5	Crude Fat (%)	600
6	Dry Gluten (%)	500
7	Microbial: total plate count, total coliform count, fecal coliform, total fungal count and E. coli	5,000
	Package total	8,000