



NATIONAL INSTITUTE OF FOOD TECHNOLOGY ENTREPRENEURSHIP AND MANAGEMENT
Deemed to be University (De-novo Category) under Section 3 of the UGC Act, 1956
An Autonomous Institution under Ministry of Food Processing Industries, Govt. of India, Sonapat

F. No. N/S/K/1546/2018/295

Dated: 20.03.2019

Notice

Subject: Recruitment Notification - Advertisement No. N/S/K/1546/2018 dated 24.04.2018 for the post of Foreman (Pilot Plant), Syllabus for the Objective Test – Reg.

Dear Candidate,

With reference your application for the post of Foreman (Pilot Plant), it is informed the Selection Process provides scheme of Examination as under:

Scheme of Examination: Objective (multiple choice OMR/Computer based) test comprising of 100 questions of one mark each.

Test	Number of Multiple choice questions	Duration of Test
Subject area (Food processing/ Pilot Plants and related subjects)	50	60 minutes
General Intelligence & Reasoning	15	60 minutes
General Awareness	10	
Quantitative Aptitude	10	
English Comprehension	15	

There will be negative marking of 0.25 for each wrong answer.

Merit list will be drawn with 50% weightage of the marks obtained in score card and objective test taken together. In case two or more candidates secure same marks (i.e. score card + objective), the tie will be resolved by the following procedures:

- On the basis of date of birth with older candidate placed higher in merit failing which;
- Alphabetical order of first letter of name of the candidates placed higher in merit.

The Syllabus for Subject Area of Food Processing, Pilot Plants and related subjects is as under for the Objective type test.

(A) Fruits and Vegetable Processing Technology:-

Composition and nutritive value of fruits and vegetables; spoilage of fruits and vegetables. Maturity standards for storage and desirable characteristics of fruits and vegetables for processing, Supply chain management of Fruits and vegetables. Pack house operations, conditions for transportation and storage. Drying of Fruits and Vegetables. Physical and chemical changes in food during drying and dehydration. Quality of dried products. Thermal processing of fruits and vegetables. Process of blanching, Canning and bottling, Effect of canning and bottling on nutritive value, spoilage of canned foods, detection and control. UHT processing: Aseptic processing and packaging. Juice extraction and clarification, preparation of syrups, and chemical preservation. Preparation of squashes, cordials, nectars, Jam, jelly, marmalade, fortified fruit drinks, Candies, chutneys; fruit juice concentrates and

powders. Tomato product: sauce and ketchup, Cut fruits and vegetable, fruit toffee, fruit leather. Preservation by fermentation. Pickles, Vinegar, Fruit wine. Minimally processed fruits and vegetables, Hurdle technology, emerging technologies for fruits and vegetables processing.

(B) Bakery and Confectionery Technology:-

Introduction and definition of bakery products as per FSSAI-bread, biscuit, cake, pastries, rusk, crackers, bun and their specifications. Bread- types; role of major and minor ingredients; processes of bread making; problems associated with bread; equipment for bread manufacturing; Processing steps for biscuit, cookies, cracker, cakes and their major and minor ingredients; equipment for biscuit manufacturing. Rheological testing of dough-Farinograph, mixograph. Extensograph, Amylograph/ Rapid- visco analyzer, Falling number and interpretation of data. Cakes: Flour specifications-, ingredients, manufacturing process and quality evaluation. Preparation of other bakery products - rusks, crackers, buns, muffins, pizza; raw materials, methods of production, quality parameters.

(C) Dairy & Milk Products:-

Fluid Milk: Physico-chemical properties, Production, collection, cooling and transportation practices of milk. Clarification, filtration, pasteurized and homogenization of milk. Whole, Standardized, Toned, Double toned, skim and special milk. Test for milk quality and detection of dairy adulterant for milk products: cream, butter, Butter oil/Ghee, Cheeses, Curd and Yoghurt, Ice cream. Evaporated and Condensed milk, milk powders and traditional Dairy Products. Causes and prevention of defects in dairy products. Utilities required for a dairy plant operation.

(D) RTE and Bakery/Confectionary Products:-


Baked products: Bread, Biscuits and cakes, Breakfast cereals. confectionary products. Pastes/Macaroni products, extruded products. Technology of Traditional savory items like Papad, Bhujia, and Chakli. Technology of Traditional fermented items like Idli, and Dosa. Technology of Traditional Sweets like Laddu, Gulabjamun, and Rosogulla. Packaging of Traditional Items. Causes and defects in manufacturing of Traditional items.

(E) Meat and Poultry Processing:-

Status of meat and poultry industries and processing industries; Meat cuts and portions of meat; Inspection of meat; Physico-chemical composition of muscle; Post-mortem changes in muscle; Conversion of muscle to meat. Nutritional and organoleptic quality of meat - color, water holding capacity (WHC) and juiciness, texture and tenderness, odour and taste; Meat microbiology and safety; HACCP, FSMS and other certifications in meat processing plant, Spoilage characteristics of meat, Hurdle technology; Preventive measures for avoiding meat spoilage.

Meat production, processing and consumption trends; Meat processing- comminution, emulsification, curing, smoking, cooking, ageing and tenderization; Meat products - meat emulsion, fermented meats, sausages, ham, bacon and comminuted meat products; traditional meat products; Meat storage and preservation- by temperature control, by moisture control, by microbial inhibition and by other means.

Factors affecting quality of poultry meat; Poultry slaughter and dressing; Composition and nutritional value of poultry meat; Processing of poultry meat; spoilage and control; By-product utilization.



Packaging of meat products. Organic Meat; Meat plant sanitation and waste disposal; By-products from meat industries and their utilization.

(F) Storage and Food Packaging:-

Losses in storage, storage of perishable and non-perishable foods. Storage environment and its interaction with stored product; temperature and moisture migration. Fumigation and Aeration. On farm or traditional storage practices, Bulk storage structures (bins and silos). Concept of food packaging, polymeric, glass, metal packaging materials, FFS, shrink/wrapping, Aseptic Packaging. Package printing, Evaluation of food packaging materials. Modified and Controlled atmosphere storage systems. Analysis of head space gas composition, WVTR, OTR.

(G) FSMS:-

Quality Assurance, Legislation for food safety: National and International criteria, sampling, records, risk analysis and management. Permitted food additives. Relevant Foods laws: Ag-Mark, and BIS Standards. Food Safety and Standard Act (FSSAI). HACCP system, food Safety management systems. Allergen Management.

The Objective Type test as indicated above is likely to be conducted in the month of April, 2019. The date of Examination would be notified in advance in the website of NIFTEM.


Registrar