

Agenda Item No. 51.06**FUTURE ACTION PLAN FOR MODERNISATION & UPGRADATION OF INSTITUTE (CREATION OF CAPITAL ASSETS) AND CIVIL WORKS FOR THE YEAR 2024-25 (TO BE IMPLEMENTED OVER A PERIOD OF TWO YEARS I.E. 2024-25 & 2025-26)**

FFDC, Kannauj has proposed Action Plan amounting to Rs. 526.75 lakhs (Rs. 524.37 lakhs carried forward from the year 2023-24 + Rs. 2.38 lakhs new Action plan for the year 2024-25 which is to be implemented over a period of two years i.e. 2024-25 & 2025-26. The proposed Action Plan is reviewed & vetted by local GC Members & Industry representatives, is as under:

S. No.	Description	Amount (in Lakh)
(A)	Plant & machinery:	
	(i) Carry forward	287.00
	(ii) New Action Plan	2.38
(B)	Civil works:	
	(i) Carry forward	237.37
	(ii) New Action Plan	—
	Total (A+B)	526.75

The detailed list of capital assets and machinery proposed to be created along with justifications is at Annexure 51.06 (Page 34-40).

Governing Council may kindly be approved the Action Plan of Rs. 526.75 lakhs for the year 2024-25 (to be implemented over a period of two years i.e. 2024-25 & 2025-26).

Action plan for Creation of Capital Assets**(A) Plant & machinery**

Carry forward Action Plan for Machines from the year 2023-24 to 2024-25.

S. No.	Name of the machine/equipment	Quantity (in nos.)	Estimated Amount (In lakh)	Location (Pls mention at main centre/Extension centre except TCEC)	Specification	Why needed / justification	Payback period (in years)	If carry forward, mention year of action plan
1.	Digital Polarimeter	01	15.0	FFDC, Kannauj	Measuring mode: Optical rotation, specific rotation, concentration, sugar degrees ⁰ Z(ISS); Measuring scale: Degrees Arc Optical Rotation; Resolution: 0.001 Arc Optical Rotation Accuracy: +/-0.004” Arc Optical Rotation, Reproducibility: 0.002 Arc Optical Rotation, Measuring Range: ±89.9 ⁰ Arc Optical Rotation, ±999.99 specific Rotation, 0-99.9% Concentration Wave lengths: 589nm, Measurement Time: 5 measurements in less than 25 seconds avg.; Sample chamber: Accepts sample tubes upto 200mm, Calibration: Automatic calibration via touchscreen Automatic sensitivity control	For Job work, testing and R&D purpose	5 years	2022-23
2.	Digital flash point apparatus	01	10.0	FFDC, Kannauj	Application range: upto 405 ⁰ C (⁰ C/ ⁰ F selectable); Ignition: Gas and electric (interchangeable); Heating: according to method or user-defined; Flash point detection: Thermocouple Sample temperature: Pt 100 glass probe; Barometric pressure correction: Automatic; Safety: overhead protection, automatic shut-off, fire extinguishing system	For Job work, testing and R&D purpose	5 years	2022-23

3.	G.C. for vegetable oils testing along-with accessories & columns with operator	01	25.00	FFDC, Kannauj	Capillary S/SL Inlet with EPC & Auto injector; 5in cage HP-88 100m, 0.25mm, 0.20um, Open lab CDS VL Work station software; GC connection-Gas Chromatography system vial, screw, 2ml, clr, LP 100PK; Screw Cap Blue PTFE/Silicone Septa Column Nut Assy, Finger Tight; Ferrule, 0.4mm G 0.05-0.25 col 10/PK Septa Bleed/Temp Optimized Inlt 5mm 50PK, GC Column required for fatty acid profiling of the vegetable oils, including gas distribution system & cylinders	For Job work, testing and R&D purpose	5 years	2022-23
4.	R.O. water system with accessories for Steam Boiler with alkaline water system	01	10.00	FFDC, Kannauj	Filter feed pump: 1.2 m ³ /hr @ 2.5 bar; Self-cleaning filter: 1.2 m ³ /hr @ 50 micron; Anti-scaling dosing pump: 0-6 LPH & 50 Ltr. Capacity; High pressure pump: 1.55 m ³ /hr @ 13.2 bar	For Job work, testing and R&D purpose	5 years	2022-23
5.	Water Softener Unit with accessories	01	3.00	FFDC, Kannauj	Capacity: 300LPH, 100 Litre resin, designed on 500 TDS water, automatic with auto recharge on 3 rd day of capacity 3.6m ³ /day with MGF & softener	For Job work, testing and R&D purpose	5 years	2022-23
6.	Development of IT Infrastructure, Books, Journals, e-books, software and Database etc. & up-gradation of website		10.00	FFDC, Kannauj	Development of IT infrastructure & Technical books	For trainees & staff	5 years	2022-23
7.	Thermic Fluid heater 2 lakh kcal	01	12.0	FFDC, Kannauj	Capacity: 2,00,000Kcal/hr; Max. outlet temperature: 300 ⁰ C; TF flow rate: 10 m ³ /hr; TF temperature rise: 42 ⁰ C; Firing system type: Monobloc; Burning light up: High voltage spark; Fuel: HSD/LPG/NG; LxWxH: 1.03 x 1.6 x 2.5 (m); Dry weight: 1500 Kg.; Chimney top diameter: 200mm	For training & job work purpose	5 years	2022-23

8.	Oil Vacuum Pump 5000 Ltr. capacity (2 Nos.)	02	7.0	FFDC, Kannauj	Rotary High Vacuum pump oil immersed type capacity 5000LPM free air displacement 5000LPM V belt driven complete with 12HP 3phase 1440RPM electrical motor vacuum	For training & job work purpose	5 years	2022-23
9.	Vacuum Pump with accessories (600 Ltr. Capacity) (01 No.)andPlatform Weighing machine (200 Kg.) & (30 Kg.) (02 Nos.)	03	2.00	FFDC, Kannauj	Rotary High Vacuum pump oil immersed type capacity 600LPM free air dis-placement 600LPM V belt driven complete with 3HP 3phase 1440RPM electrical motor vacuum 30" (-760) Weighing machine: Capacity: 200 Kg. & 30 Kg.; Type: Platform type; mains operated battery operated electronic weighing scale	For job work, training demo purpose	5 years	2022-23
10.	Glass reaction unit Capacity 20 Liters	01	3.5	FFDC, Kannauj	5 neck vessel, centre stirring neck 100DN side, vapor line neck 80DN, thermometer pocket neck 40DN, D-pipe neck 40DN, Went wall neck 40DN x 100DN extra neck, bottom flush 50DN x 40DN, Glass heat exchanger triple coil 100DN x 600mm long, C.I. coupling complete with PTF Eropecloth + Metal Insert + PTFE Rope O ring Size 25DN (A Class) for high vacuum and high temperature operations; MS Digital, 50L Heating Bath + Cooling Coils 4.5 KW 3Phase with immersion oil heaters	For training & job work purpose	5 years	2022-23
11.	Glass fractional distillation unit Capacity 20 Liters	01	3.5	FFDC, Kannauj	Glass 20 Litre, High neck spherical vessel, centre vapor line, neck 80DN, side TP Neck 25DN, Feed Neck 25DN, Extra Neck 25DN, Bottom Neck 50DN x 40DN, Glass funnel receiver 5 Litre 3neck, Glass first receiver 5Litre 3 neck, Glass product cooler 50DN x 25DN; MS Digital, 50L Heating Bath + Cooling Coils 4.5 KW 3Phase with immersion oil heaters	For training & job work purpose	5 years	2022-23

12.	Furnishing of Training Hall & office	01	4.00	FFDC Extn. Unit Berhampur	Furniture & fixtures for training hall	for training purpose	5 years	—
13.	Electrically operated Agarbatti Machine, other items & accessories	01	2.00	FFDC Extn. Unit Berhampur	Motor Power:1 HP; Speed:180 to 240 stick per minute; Capacity: 10 to 15 Kg. per hour; Power supply : 1 phase 220V; Dimension (in mm) : 1100-1200x 750-800 x 900-950; Diameter of incense : 2.8 mm to 5.5 mm; Weight:100 to 125 Kg.; Bamboo stick can be used : 8 to 12 inch Material : Iron; Type of stick: Round; Fully Automatic	for training& demo. Purpose	5 years	—
14.	Laboratory Glasswares& Equipments	01	2.50	FFDC Extn. Unit Berhampur	To run the office, training & quality job work services smoothly	For Testing & Training	5 years	—
15.	Audio Visual aids, smart classrooms, computers, laptops & accessories	02	25.0	FFDC, Kannauj	Projector, conference panel, smart classrooms, computers, laptops and other accessories for training purpose	For training purpose	5 years	—
16.	Software like (MS Office, Corel Draw, Page Maker & Photoshop etc.)	01	10.0	FFDC, Kannauj	MS Office, Corel Draw, Page maker, photoshop& other software for routine office work.	For training purpose	5 years	—
17.	Power Tiller & Electrical Bush Cutter with other agri. Equipments	01	2.50	FFDC, Kannauj	Engine power: 10 HP; Type of Fuel used: Diesel; Engine Emission Compliance: Bharat (Term III A) stage IV or as per GOI Norms to be supported with ARAI/ICAT; Type of Engine: 4-stroke; Horizontal: single cylinder engine; Engine Cooling system: Water cooled; Fuel Injection System: Direct Injection; Type of Air Cleaner: Multi Stage Oil Bath type	For training purpose	5 years	—
18.	Mobile FDU Unit	01	15.0	FFDC, Kannauj	Capacity: 0.5 Ton; Made of S.S. with cohobation system, condenser, furnace, overhead & water storage tank, receiver mounted on trolley	For demo. & extraction of essential oil	5 years	—

19.	Advanced Processing & production facility	01	125.0	FFDC, Kannauj	1. Short Path Distillation Unit Capacity 1 to 5 lit/hour, MOC – contact parts SS316. 2. Multipurpose Steam distillation unit Still capacity 50 lit. MOC – SS304 along with cooling tower and portable steam generator. 3. Attar manufacturing plant Extractor Capacity 50 Lits .along with de-oiling system, MOC SS304. 4. Oil dehydration plant capacity 30 lits, MOC SS304. 5. Fractional Distillation Column with adjustable column height Reboiler capacity 5 Lits and 2 Lits, MOC SS304. 6. Perfumery ingredient dispensing and compound blending system for 25 No items, Storage capacity 5 Lits and 10 lits. MOC SS304	For job work, R&D and training demo. Purpose	5 years	–
TOTAL			287.00					

(B) Civil works

Carry forward Action Plan for Civil works from the year 2022-23 to 2023-24.

S. No.	New civil works / renovation	Whether PE obtained from CPWD (Yes / No)	Estimated Amount (In lakh)	Location (Pls mention at main centre / Extension centre except TCEC)	Why needed / justification	If carry forward, mention year of action plan
1.	Upgradation of electrical flame proof copper cable & LT panels within the pilot plant with fixation flameproof light, sensor etc.	Yes	40.0	FFDC, Kannauj	To upgrade the existing electrical cables in pilot plant unit, which was installed/ fitted since the installation of pilot plant.	2022-23
2.	Development Herbal Garden & Landscaping Horticulture work at FFDC Extn. Unit Kanpur	Yes	20.0	FFDC Extension Unit Kanpur	There is need to develop the herbal garden & landscaping	2022-23

	Replanting of Aromatic and medicinal plants at Herbal Garden for demonstration. Preparing & Maintenance of land for aromatic and medicinal plantation etc. Making of different lane plants Preparation of land for plantation of carpet grass				horticulture work for replanting of aromatic plants for demonstration of training & sell of saplings of the aromatic plants to the farmers to generate revenue.	
3.	Renovation of office building & Training Hall including white wash & general maintenance at FFDC Extn. Unit Kanpur	Yes	8.50	FFDC Extension Unit Kanpur	The existing office building & training hall was very old constructed and badly damaged due to heavy rain so there is a need of renovation of the same for proper organization of training programme at FFDC Extension Unit Kanpur.	2022-23
4.	Upliftment of plinth floor, C.C. Pavement, Tiles Flooring, Wall Tiles, Brick works, Cement plaster, wood work & other required civil jobs	Yes	28.00	FFDC Extension Unit Berhampur	Due to the cyclone the building has been damaged and water lodging has been started in the area. For the safety of the building, these works are required.	—
5.	Prefabricated Boundary wall and gate at Udaitapur Farmland of FFDC Kannauj	Yes	60.00	FFDC Kannauj	Centre owns around 7 Acre farmland for agriculture purpose at Udaitapur and for security of the farmland from wild animals the prefabricated boundary wall & gate is proposed.	—
6.	Horticulture work at FFDC Kannauj	Yes	40.92	FFDC Kannauj	There is need to maintain the horticulture work within the campus for beautification.	—
TOTAL			197.42			

(A) Plant & machinery

New Action Plan for machines for the year 2024-25 (to be implemented over a period of two years i.e. 2024-25 & 2025-26)

S. No.	Name of the machine/ equipment	Quantity (in nos.)	Estimated Amount (In lakh)	Location (Pls mention at main centre/Extension centre except TCEC)	Specification	Why needed / justification	Payback period (in years)	If carry forward, mention year of action plan
1.	Furnishing of Training Hall & office	01	2.38	FFDC Extn. Unit Kanpur	Chairs & tables for classroom, office chair, table with storage, induction, multifunction printer, visitor chairs, Almirah etc.	For organizing training programme smoothly	5 years	—
TOTAL			2.38					

S. No.	Description	Amount (in Lakh)
	Plant & machinery: (i) Carry forward (ii) New Action Plan	287.00 2.38
(B)	Civil works: (i) Carry forward (ii) New Action Plan	237.37 —
	Total (A+B)	526.75