CRITERIA 3: Curricular Aspects

KEY INDICATOR: Innovation Ecosystem

Matric no: 3.2.1

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Preliminary Survey of Sedge and Grass flora of GCW, Gandhi Nagar, College Campus, Jammu, J&K and their Ethno Botanical Uses

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Abstract

Govt. College for Women, Gandhi Nagar, Jammu is located in suburbs of Jammu, on the southern bank of Tawi river. The college spreads over 186 Kanals of land. The vegetation of the college campus is of a dry, mixed deciduous type and sedges and grasses form an important component of its wild flora. Although sedges and grasses represent the main wild plant component of the vegetation of college campus they have never been studied so far.

Taking into consideration taxonomic diversity of sedges and grasses and their functional role in the restoration of ecosystem, biogeochemical cycling and their ethnobotanical uses, a preliminary survey of sedge and grass species was conducted in the college campus from July 2019 to March 2020. The study revealed a total of 1 genus and 2 species of sedges and 17 genera and 22 species of grasses. Many of these sedge and grass species have known ethno botanical uses.

Keywords: Sedges, Grasses, Ethno Botanical Uses.

Introduction

The term "Grasses" commonly refers to monocotyledonous, annual and perennial herbs with narrow leaves growing from the base and having fibrous roots. They include both the "true grasses", from the Poaceae family and the sedges from Cyperaceae family. The true grasses include cereals, bamboo and the turf grasses, while sedges include many grass-like non grass plants particularly, wildmarsh and grassland plants from Cyperaceae family.

Poaceae and Cyperaceae are the two largest families of Monocotyledons. Cyperaceae is represented by 70-80 genera and 4000 species distributed throughout the world. The Family Poaceae comprises of about 11,290 species in approximately 707 genera [1] worldwide. Grasses and sedges are the dominant vegetation in many habitats, including grassland, marshes, reed swamp etc., and they form important part of almost every other ecosystem. Grasslands are among the largest ecosystems in the world. Their area is estimated at 52.5 million square Kilometers, or 40.5 percent of the terrestrial area excluding Greenland and Antarctica [2].Grasses are very important source of food and fodder. Many types of animals including many herbivorous mammals and insects are dependent on these grasses and grass like plants as their main food. In addition they also find their use in ethno medicinal and various religious practices. Many of grasses and sedges find their mention in ancient Indian medicine literature.

From the ecological point of view also they are very important as good soil binders as they make a carpet over the soil thus preventing soil erosion. They also add lot of Soil Organic matter (SOM), thus increasing fertility of soil. In addition they also play important role in biogeochemical cycling of Carbon, Nitrogen and Phosphorus [3]. They are an important component of the urban and suburban landscapes in most parts of the world. Despite the importance of grasses to humans in various ways, the grasses remain to be less studied plant groups as compared to other flowering plants especially in India. This may be due to difficulty in identification because of their small size of floral organs and complicated structure of inflorescence. Some important works on diversity of grasses in Indian include "A Handbook of some South Indian Grasses" by Achariyar

and Tadulinga, 1921 [4], "The Bombay Grasses" by Blatter, 1935 [5], "The Grasses of Burma, Ceylon, India and Pakistan" by Bor, 1960 [6], "The Grass flora of India" by Jain, 1986 [7], "Grasses of North-Eastern India" by Shukla, 1996 [8], and "Important grasses of Eastern Ghats"; Moulik, 2000 [9].

Jammu city is the winter capital of Indian Union territory of Jammu and Kashmir and the headquarters of Jammu district. It is located at 32°73' N and 74°87' E, at approximately 300m altitude above sea level on a sub hilly area. It is situated on the banks of Tawi River with an area of around 240 Km^2. There is large diversity of grass species growing in Jammu city as part of wild flora. Inspite of the great diversity of the grass species very less research work has been done in this direction [10].

Our study area, Government College for Women Gandhi Nagar Jammu campus is part of newly urbanized part of Jammu city situated on southern banks of river Tawi. It is part of outer plains which extend from Kathua up to Jammu. Total area of college campus is 186 kanals of land covered by a boundary wall on all sides. Flora of college campus comprises of variety of annual and perennial weeds in addition to large number of cultivated plant species. Sedges and grasses form a major component of college campus flora. Both annual and perennial grasses and other grass like species are observed. Most of these species are wild in addition to two species of cultivated grasses in college botanical garden. Taking into consideration the taxonomic diversity of grasses and sedges, their functional role in the restoration of ecosystem, biogeochemical cycling and their various ethno botanical uses,present study was initiated. Earlier sedge and grass flora from different parts of India and abroad have been studied by Bhat and Narayan, 2001[11], Ravi and Mohanan, 2002[12], Desai R, 2013[13], Ullah Z *et al.*, 2015[14], Dashahre *et. al.*, 2020 [15], Subramanian *et al.*, 2021 [16]

Aim of the Study

This study is very important, as it will form baseline for further research on identified spectes and their ecological and other elthnobotanical uses.

Materials and Methods

Primary data was obtained by extensive and exhaustive field survey conducted in different areas of college campus from July 2019 to March 2020. Study included all parts of college campus. Different sedge and grass species were collected in polythene bags to conserve moisture. These specimens were taken to laboratory for herbarium preparation. Specimens after drying in plant press were pasted on the herbarium sheets. After field survey and herbarium preparation, identification of collected plant specimens was done using available literature and confirmed with the help of experts.

Results and Discussion

In this preliminary investigation, a total of two species (2), belonging to one genus of sedges and 22 species belonging to 17 genera of grasses were identified. Out of these plant species 22 sedge and grass species were wild and two species of grasses are cultivated in college botanical garden (Table 1). These recorded sedge and grass species form an important part of the ecosystem and provide food to large number of graminivores including many species of insects, birds, rodents etc

Table 1: List of Sedge and Grass Species Identified from College Campus

S. No.	Name of species	Common Name/ Names	Family	Cultivation Status
1.	*Cyperus difformis*	Variable flat sedge, small flower umbrella-sedge, rice sedge	Cyperaceae	Wild
2.	*Cyperus rotundus*	Coco-grass, Java grass, Nut grass	Cyperaceae	Wild
3.	*Bothriochloa pertusa*	Indian couch grass, Indian-bluegrass.	Poaceae	Wild
4.	*Brachiaria ramosa*	Browntop Millet	Poaceae	Wild
5.	*Brachiaria reptans*	Running grass, Para grass	Poaceae	Wild
6.	*Cenchrus prieurii*	Large-Spike Buffel Grass	Poaceae	Wild
7.	*Cenchrus setigerus*	Birdwood Grass	Poaceae	Wild
8.	*Chloris barbata*	Swollen Finger Grass.	Poaceae	Wild
9.	*Cyanodon dactylon*	Bermuda grass, Dhoob grass	Poaceae	Wild
10.	*Cymbopogon citriatus*	Lemon grass	Poaceae	Cultivated
11.	*Cymbopogon martini*	Palmarosa, Indian Geranium	Poaceae	Cultivated
12.	*Dactyloctenium aegyptium*	Egyptian crowfoot grass	Poaceae	Wild
13.	*Desmostachya bipinnata*	Halfa grass, Big cordgrass	Poaceae	Wild
14.	*Digitaria ciliaris*	Wild Crabgrass	Poaceae	Wild
15.	*Digitaria sanguinalis*	Hairy crabgrass, Hairy finger-grass, Large crabgrass	Poaceae	Wild
16.	*Eleusine indica*	Indian goosegrass	Poaceae	Wild
17.	*Elymus repens*	Quackgrass.	Poaceae	Wild

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18.	*Eragrostis cilianensis*	Stinkgrass	Poaceae	Wild
19.	*Microstegium ciliatum*	Browntop grass	Poaceae	Wild
20.	*Oplismanus burmanii*	Burmann's basketgrass	Poaceae	Wild
21.	*Panicum antidotale*	Blue panicgrass	Poaceae	Wild
22.	*Paspaldium flavidum*	Yellow Watercrown Grass	Poaceae	Wild
23.	*Setaria pumila*	Yellow foxtail, yellow bristle-grass	Poaceae	Wild
24.	*Setaria viridis*	Green foxtail, Green bristlegrass	Poaceae	Wild

Many species of these identified sedges and grasses are known to have various Ethno botanical uses in addition to their role in various ecological processes (Table 2). In addition, many identified species are known to have ethno medicinal uses for curing various ailments Jain 1991[17], Katewa & Sharma 2004. [18], Phondani *et. al.,* 2010[19], Jakhar 2015[20], Kabeer *et. al.,* 2017 [21], Nacakci & Dutkuner 2018 [22], Sanjayrao and Sanjay [23] 2019. Earlier also ethno botanical and ethno medicinal properties of various grass and sedge species have been reported from different parts of the world (Simpson and Inglis, 2001[24], Mitra and Mukherjee, 2009, [25], Ahmad *et. al.,* 2010, [26], Chaudhri *et. al.,* 2013 [27], Kumari and Saggoo, 2015 [28], Harun *et. al.,* 2017 [29], Udari, 2018 [30].

Table 2: Ethno Botanical uses of Identified Sedge and Grass Species

S. No.	Name of species	Family	Ethno botanical Uses
1.	*Cyperus difformis*	Cyperaceae	Leaves used as antibiotic, paste applied externally for cutaneous infection.
2.	*Cyperus rotundus*	Cyperaceae	Root astringent, diuretic, used in jaundice, snake bite. Whole plant used in making mats.
3.	*Bothriochloa pertusa*	Poaceae	Used as fodder. Used for controlling soil erosion.
4.	*Brachiaria ramosa*	Poaceae	Used to provide ground cover, stabilize the soil and reclaim polluted soils
5.	*Brachiaria reptans*	Poaceae	Leaf used to treat anaemia. Juice obtained by Crushing and boiling.
6.	*Cenchrus prieurii*	Poaceae	Seeds used as substitute cereals during scarcity and famine.
7.	*Cenchrus setigerus*	Poaceae	Grain edible, plant used as fodder.
8.	*Chloris barbata*	Poaceae	Juice used as antimicrobial to treat skin disorders, fever, diarrhea, rheumatism and diabetes.
9.	*Cyanodon dactylon*	Poaceae	Leaf used to cure dropsy, whole plant for relieving menstrual cramps. Root for dysentery and hysteria. Leaf for piles and bleeding, urinary complaints, vomiting etc.Used in various religious practices.
10.	*Cymbopogon citriatus*	Poaceae	As flavouring agent. In folk medicine used as antispasmodic, hypotensive, anticonvulsant, analgesic, antiemetic, antiseptic and for treatment of nervous and gastrointestinal disorders.
11.	*Cymbopogon martini*	Poaceae	For treating ringworm, leaf powder is mixed with mustard oil and rubbed on infected part.
12	*Dactyloctenium aegyptium*	Poaceae	Grain used as medicine for stomachache.
13.	*Desmostachya bipinnata*	Poaceae	Medicinal uses to treat Asthma, kidney stone, diarrhea, wound healing etc. Very important in ethno religious practices in hindu dharma.
14.	*Digitaria ciliaris*	Poaceae	For forage, assists in protecting soil against erosion.
15.	*Digitaria sanguinalis*	Poaceae	Mostly used as fodder. A fiber obtained from the plant is used in making paper. A decoction of the plant is used in the treatment of gonorrhea.
16.	*Eleusine indicia*	Poaceae	To treat fever, influenza and hypertension
17	*Elymus repens*	Poaceae	Roots are boiled and consumed for diabetes.

18.	*Eragrostis cilianensis*	Poaceae	Seed used as cereal as famine food, root decoction used against Flu.
19.	*Microstegium ciliatum*	Poaceae	Preferred as fodder grass.
20.	*Oplismanus burmanii*	Poaceae	Leaf used as pain killer
21.	*Panicum antidotale*	Poaceae	Smoke of burning plant used to fumigate wound and as disinfectant in small pox. Leaves have antibacterial property.
22.	*Paspaldium flavidum*	Poaceae	Leaves antiseptic, paste used externally for cutaneous infections. Antioxidant activity.
23.	*Setaria pumila*	Poaceae	Seeds used for flour which is mixed with other flours for consumption.
24.	*Setaria viridis*	Poaceae	Seed diuretic, febrifuge, emollient tonic. Paste of plant with water applied to bruises externally.

Conclusion

This preliminary study revealed large diversity of grasses and sedges in Govt. College for Women Gandhi Nagar Jammu campus. Specimens of different grass species observed were collected, dried and mounted on herbarium sheets and were identified with the help of relevant literature. The plant species were tabulated alphabetically. This study revealed a total of 24 sedge and grass species, out of which two (2) are from Cyperaceae and 22 species are from Poaceae family. During analysis of these grass species it was found that some of these grass species have got various ethno botanical uses in addition to their ecological role. Some of the species are used for preparation of different medicines or for general consumption and fodder in different parts of the world. Hence this study will provide the baseline for future research on different aspects like ecological, ethno pharmacological studies of these plant species of the area.

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REVERSE OSMOSIS (RO) FILTERED WATER: RANDOM SAMPLING, ANALYSIS AND CONCLUSION

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ABSTRACT

Reverse Osmosis (RO) is a membrane based process technology to purify water by separating the dissolved solids from stream resulting in permeate and reject stream for a wide range of application in domestic as well as industrial applications. It is seen from literature review that RO technology is used to remove dissolved solids, colour, organic contaminants, and nitrate from feed stream. RO-filtered water, samples were collected from different commercial points from Jammu, Samba district and Kathua district of Jammu Division of J & K (UT). In all these samples the mineral nutrients were either within limits or below limits it reflects that use of such type of filtered water is not providing proper nutrients to the populations and may be cause of health issue to the public at large.

INTRODUCTION

Minerals are essential for health and many important minerals like magnesium, calcium and potassium are found in tap water. Minerals contribute to strong teeth, bones, healthy skin and hair. They are also very important for the growth and development of the body. When pure water in the form of rainfall lands on the soil, it passes through the earth and gets mineralized with important minerals like calcium, potassium and sodium. However, while these are minerals that are good for health, the water could also get contaminated with substances that are toxic. To remove traces of such harmful chemicals, biodegradable waste and bacteria, we use water purifiers. While water purifiers ensure that we drink only pure water, most RO water purifiers also remove the essential minerals from the water. WHO has been updating quality parameters for drinking water and setting guidelines for the same. Maximum acceptable concentrations of inorganic and organic substances and microorganisms have been established internationally and in many countries to assure the safety of drinking water. WHO guidelines on various parameters for drinking water quality are laid down in standard references.[1–4] The Indian standards of drinking water have been laid down as per IS 10500:1991, Ed 2.1 published by Bureau of Indian Standards.[5] For health calcium and magnesium are both essential elements. Although drinking water is not the major source of our calcium and magnesium intake, the health significance of supplemental intake of these elements from drinking water may outweigh its nutritional contribution expressed as the proportion of the total daily intake of these elements. Even in industrialized countries, diet that is not deficient in terms of the quantity of calcium and magnesium may not be able to fully compensate for the absence of calcium and in particular, magnesium in drinking water.[6] Demineralized soft water, when used for cooking is known to cause substantial losses of all essential elements from food (vegetables, meat, cereals). Such losses may reach up to 60% for magnesium and calcium or even more for some other microelements (e.g., copper 76%, manganese 70%, cobalt 86%). In contrast, when hard water is used for cooking, the loss of these elements is much lower, and in some cases, even higher calcium content was reported in food as a result of cooking.[6–9] Since most nutrients are ingested with food, the use of low-mineral water for

cooking and processing food may cause a marked deficiency in total intake of some essential elements that was much higher than expected with the use of such water for drinking only. Drinking water soft or hard has been a subject of debate and discussion and controversies. Extremes of both are neither good for health nor acceptable by peoples primarily on grounds of taste. The amount of TDS and hardness has effect on taste of water. Water with low TDS is flat and insipid while with high TDS (>2000 mg/L) become objectionable and unpalatable. The palatability with TDS level up to 600 mg/L is considered good.[6] Expert Consensus Meeting Group Report on potential health consequences of long-term consumption of demineralized, re-mineralized and altered mineral content drinking water has concluded that the hypothesis that consumption of hard water is associated with a somewhat lowered risk of cardiovascular disease was probably valid, and that magnesium was the more likely contributor of that benefits.[10] Recent studies also suggest that the intake of water low in calcium (reverse osmosis water), may be associated with higher risk of fracture in children[11], certain type of neurodegenerative diseases [12], the intake of water low in magnesium seems to be associated with a higher risk of motor neuronal disease[13], some types of cancer[14], risk of death from acute myocardial infarction [15-16] etc. In the present work we have collected RO-filtered water from thickly populated areas of Jammu, Samba and Kathua districts of J& K UT(India) for investigation of Mineral contents.

EXPERIMENTAL

[A]. Sample collection: During the collection of samples we make sure that bottles used to collect samples for bacteria should be properly sterilized. The size of the container is important to ensure enough sample to run the analysis needed. Bottles should be labelled with sample numbering and date of collection and area specifically. Parameters should depend on the type of analysis. In physico-chemical analysis, physical and chemical properties like colour, temperature, BOD, COD, etc. are used. On site examination of temperature, pH, conductivity and turbidity can be performed using established techniques at the sample collection location. The most common type of preservation is temperature, sample for analysis should be collected at room temperature. Holding time is another important consideration and the sample should be analysed within 24 hrs. Storage tank water run for several minutes so that sample collected is directly from the storage tank and not from a source. It is important to record information such as date, time of collection of samples so that samples are analysed with in proper holding time.

[B]. Source of Sampling

1. RO water of a Restaurant of Jammu East city area of Jammu District.
2. RO water of a Food point of Samba District.
3. RO water from Gagwal Mandi, Hira Nagar of Kathua District.
4. RO water from SIDCO, Baribharmana Industrial Area of Jammu District.

[C]. Instrumentation

The Atomic Absorption Spectrophotometer (PinAAcle AA), Spectrophotometer(UV5Nano), titration and didital analysers (HI5222,HANNA)were used for analysis of samples

RESULTS, DISCUSSION AND CONCLUSIONS

During present course of work, the fourteen parameter of RO filtered water were analysed by comparing their data to Bureau of Indian Standard (BIS). According to Bureau of Indian Standards (BIS), the limits for drinking water are:

S. No.	PARAMETERS	Acceptable Limits according To BIS
1.	Colour	5
2.	Odour	Agreeable
3.	Turbidity	1
4.	pH ,at 25°c	6.5 to 8.5
5.	Total Dissolved solid	500
6.	Total Hardness	200
7.	Residual Free chlorine	0.2
8.	Chloride as Cl, mg/I	250
9.	Sulphate as SO_4, mg/I	200
10.	Total Iron, mg/I	1.0
11.	Fluoride as F, mg/I	1.0
12.	Calcium as Ca, mg/I	75
13.	Magnesium as Mg, mg/I	30
14.	Total alkalinity as $CaCO_3$, mg/I	200

Result of Analysis of RO filtered water from various areas.

Table 1: RO filtered water of a Restaurant of Jammu East city District Jammu

S. No.	Parameters	Acceptable Limits according To BIS	Observed value	Variation
1.	Colour	5	<2	Below limit
2.	Odour	Agreeable	Agreeable	Within limit
3.	Turbidity	1	<1	Below limit
4.	Ph at 25°c	6.5 to 8.5	6.81	Within limit
5.	Total Dissolved solid	500	82	Below limit
6.	Total Hardness	200	34	Below limit
7.	Residual Free chlorine	0.2	<0.2	Below limit
8.	Chloride as Cl, mg/I	250	13.1	Below limit
9	Sulphate as SO_4, mg/I	200	3.4	Below limit
10.	Total Iron, mg/I	1.0	0.151	Below limit
11.	Fluoride as F, mg/I	1.0	0.185	Below limit
12.	Calcium as Ca, mg/I	75	9.4	Below limit
13.	Magnesium as Mg, mg/I	30	2.6	Below limit
14.	Total alkalinity as $CaCO_3$, mg/I	200	13.6	Below limit

Table 2: RO filtered water of a Food point, District Samba.

S. No.	Parameters	BIS Standard value	Observed value	Difference
1	Colour	5	<2	Below normal
2	Odour	Agreeable	Agreeable	Limit
3	Turbidity	1	<1	Below normal
4	pH at 25°C	5.8-8.5	6.62	Within limit
5	Total Dissolved Solids	500	170	Below normal
6	Total Hardness	200	116	Below normal
7	Residual Free Chlorine	0.2	<0.1	Below normal
8	Chloride as Cl, mg/l	250	17.1	Below normal
9	Sulphate as SO_4, mg/l	200	5.7	Below normal
10	Total Iron, mg/l	1.0	0.192	Below normal
11	Fluoride as F, mg/l	1.0	0.169	Below normal
12	Calcium as Ca, mg/l	75	39	Below normal
13	Magnesium as Mg, mg/l	30	4.5	Below normal
14	Total alkalinity as $CaCO_3$, mg/l	200	145	Below normal

Table 3: RO filtered water from Gagwal Mandi, Hira Nagar District, Kathua

S. No	Parameters	Acceptable Observed Limit Value According to BIS	Observed Value	Variation
1	Colour	5	<2	Below normal
2	Odour	Agreeable	Agreeable	Within limit
3	Turbidity	1	<1	Below normal
4	pH at 25°C	6.5 – 8.5	6.87	Within limit
5	Total Dissolved Solids	500	145	Below normal
6	Total Hardness	200	116	Below normal
7	Residual Free Chlorine	0.2	<0.1	Below normal
8	Chloride as Cl, mg/l	250	15.9	Below normal
9	Sulphate as SO_4, mg/l	200	5.5	Below normal
10	Total Iron, mg/l	1.0	0.233	Below normal
11	Fluoride as F, mg/l	1.0	0.154	Below normal
12	Calcium as Ca, mg/l	75	38	Below normal
13	Magnesium as Mg, mg/l	30	5.1	Below normal
14	Total alkalinity as $CaCO_3$, mg/l	200	102	Below normal

Table 4: RO filtered water from SIDCO, Baribharmana, Industrial Area of Jammu District.

S. No	Parameters	Acceptable Observed Limit Value According to BIS	Observed Value	Variation
1	Colour	5	<2	Below normal
2	Odour	agreeable	agreeable	Within limit
3	Turbidity	1	<1	Below normal
4	pH at 25°C	6-5 – 8.5	7.3	Within limit
5	Total Dissolved Solids	500	139	Below normal
6	Total Hardness	200	95	Below normal
7	Residual Free Chlorine	0.2	<0.1	Below normal
8	Chloride as Cl, mg/l	250	12.6	Below normal
9	Sulphate as SO_4, mg/l	200	4.8	Below normal
10	Total Iron, mg/l	1	0.217	Below normal
11	Fluoride as F, mg/l	1	0.166	Below normal
12	Calcium as Ca, mg/l	75	29	Below normal

13	Magnesium as Mg, mg/l	200	91	Below normal
14	Total alkalinity as $CaCO_3$, mg/l	30	6 1	Below normal

Discussion and conclusions: Values set by Indian standards and WHO are taken into consideration when checking the quality of drinking water whether it is good for drinking purpose or not[5]. After collecting samples from different areas, it is studied through various parameters and after the analysis, the result is compared with safe standards.

(i) Colour: According to BIS, the acceptable limit value is 5 but observed value is <2. The variation is below normal. Therefore, the colour of drinking water below normal effects human health. If drinking water contains unsafe levels of contaminants, it can cause health effects, such as gastrointestinal illnesses, nervous system or reproductive effects, and chronic diseases such as cancer.

(ii) Odour: According to BIS, the odour of drinking water is agreeable and our observed value is also agreeable. The variation of odour is within limits and have no major effect on human health.

(iii) Turbidity: According to BIS, the acceptable limit value of drinking water is 1 but our observed value is <1. The variation is below normal. Therefore, the turbidity below normal in drinking water effects human health. it can increase the cost of water treatment for drinking and food processing. It can harm fish and other aquatic life by reducing food supplies, degrading spawning beds, and affecting gill function.

(iv) pH value at 25°C: According to BIS, the acceptable limit value is 6.5 to 6.8 but our observed value of drinking water is 6.8. The variation is within the limits.

TDS (total dissolved solids), mg/L: According to BIS, the acceptable limit value is 500 but our observed value is 82. The variation between BIS and TDS is major which is not good for human health. Water that has a TDS level of more than 1000mg/L is unfit for consumption. A high level of TDS in water can lead to a number of health problems. The presence of potassium, sodium, and chlorides increases the TDS level in the water.

(v) Total Dissolved Solid (TDS): According to BIS, the acceptable limit value is 500 but our observed value of drinking water below the acceptable limit. The variation is below normal, low TDS water is not harmful, a low TDS water actually you have high quality water but it may have flat taste.

(vi) Total hardness: According to BIS, the acceptable limit value,is 200 but our observed value is below the acceptable limit. The variation is below normal which has many side effects on our health if we drink unsafe water. The diseases are Cardiovascular disease, Cancer, Cerebrovascular mortality, Malformations of central nervous system, Alzheimer's disease, Diabetes, Childhood atopic dermatitis, Kidney stones.

(vii) Residual Free Chlorine, mg/l: According to BIS, the acceptable limit value is 0.2 but our observed value is below the acceptable limit. The variation is below normal. it has not major effect on human health. The amount of chlorine in the water is too low to cause breathing problems. Some people who are very sensitive to chlorine could experience skin problems.

(viii) Chlorides as(cl), mg/l: According to BIS, the acceptable limit value of chloride in drinking water is 250 but the observed value is below the acceptable limit. Therefore, the variation between BIS and observed value is below normal. The effect of below normal variation of chloride is Chloride is generally not considered a health risk but at relatively low concentrations this ion in drinking water can affect its taste, however, a high chloride intake can result in high levels of chloride in the bloodstream, i.e., hyperchloremia.

(ix) Sulphate as SO_4,mg/l: According to BIS, the acceptable limit value of Sulphate in drinking water is 200 but the observed is below the acceptable limit. The variation between BIS and observed value is below normal. Therefore the effect of sulphate below Normal on human health include reduced lung function, aggravated asthmatic symptoms, and increased risk of emergency department visits, hospitalizations, and death in people who have chronic heart or lung diseases.

(x) Total Iron as Fe, mg/l: According to BIS, the acceptable limit value of total iron in drinking water is 1.0 but the observed value is below the acceptable limit. The variation between BIS and observed value is below normal. Therefore, the effect of total iron below normal on human health is that it harm skin cells, leading to infection and wrinkles. Moreover, such water does not rinse off the soap residue from the body, causing clogged skin pores and build-up of oil in the skin, result in many skin problems such as eczema or acne.

(xi) Fluoride as F, mg/l: According to BIS, the acceptable limit value Fluoride n drinking water is 1.0 but the observed value is below the acceptable limit. The variation between BIS and observed value is below normal. Therefore the effect of fluoride below normal on human health in drinking water cause dental fluorosis, skeletal

fluorosis, arthritis, bone damage, osteoporosis, muscular damage, fatigue, joint-related problems, and chronicle issues.

(xii) Calcium as ca, mg/I: According to BIS, the acceptable limit value calcium in drinking water is 75 but the observed value is below the acceptable limit. The variation between BIS and observed value is below normal. Therefore, the effect of calcium below normal on human health in drinking water can cause extreme fatigue, which involves a lack of energy and an overall feeling of sluggishness. It can also lead to insomnia. Fatigue associated with a calcium deficiency can also involve light-headedness', dizziness, and brain fog — characterized by a lack of focus, forgetfulness, and confusion.

(xiii) Magnesium as Mg, mg/I: According to BIS, the acceptable limit value Magnesium in drinking water is 30 but the observed value is below the acceptable limit. The variation between BIS and observed value is below normal. Therefore the effect of Magnesium below normal on human health in drinking water can weaken your bones, give you bad headaches, make you feel nervous, and even hurt your heart. It can also lead to low levels of other important minerals like calcium and potassium. High levels of magnesium are much less common than low levels.

(xiv) Total Alkalinity as $CaCO_3$, mg/I: According to BIS, the acceptable limit value total alkalinity in drinking water is 200 but the observed is below the acceptable limit. The variation between BIS and observed value is below normal. Therefore, the effect of total alkalinity below normal on human health in drinking water will often drive the pH level in the pool down, turning the pool water more acidic, resulting in itchy dry skin and irritated eyes.

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पद्मश्री पद्मा सचदेव राजकीय स्नातकोत्तर
महिला महाविद्यालय, गांधी नगर, जम्मू

پدم شری پدما سچدیو گورنمنٹ پی-جی کالج
برائے خواتین ,گاندھی نگر,جموں

PADMASHRI PADMA SACHDEV GOVT. P.G COLLEGE FOR WOMEN, GANDHI NAGAR, JAMMU
(A CONSTITUENT COLLEGE OF CLUSTER UNIVERSITY OF JAMMU)

G20 भारत 2023 INDIA

ONE DAY NATIONAL SEMINAR ON IPR

ORGANISED BY COLLEGE ***IQAC*** IN COLLABORATION WITH OFFICE OF CONTROLLER GENERAL OF PATENTS, DESIGNS AND TRADEMARK(**CGPDTM**), DEPARTMENT FOR PROMOTION OF INDUSTRY AND INTERNAL TRADE (**DPIIT**) NEW DEHLI, ON 2ND OF MARCH-2023 IN BLENDED MODE

PROF. MINU MAHAJAN
PRINCIPAL
(Patron)

"Innovation without protection is simply Philanthropy"

INTELLECTUAL PROPERTY **INDIA**

Registration link:
https://forms.gle/rUh2HnWuc486PJ1D8

E-certificates will be given to all participants

Key Speakers: Chhavi Garg Group A officer, Examiner of Patents and Designs, NIPAM officer, Ministry of commerce and industry Government of India.

Dr Yash Paul

13

GOVT COLLEGE FOR WOMEN GANDHI NAGAR

INTERNAL QUALITY ASSURANCE CELL

NOTICE

01.03.23

This is for the information of all the students that IQAC of the College in Collaboration with the office of Controller General of patents, Designs and Trademark (CGPDTM), is going to organize One Day National Seminar on Intellectual Property Rights (IPR) on 02.03.2023. All the students should actively participate and attend.

Dr Yash Paul

GOVT COLLEGE FOR WOMEN GANDHI NAGAR JAMMU
INTERNAL QUALITY ASSURANCE CELL

MINUTES OF THE MEETING

Date: 27.02.2023

Time: 10.00 am

Venue: Principal Chamber

A meeting of Internal Quality Assurance Cell was held on 27.02.23 at 10.00 A.M in the Principal Chamber of the worthy Principal of the college, Prof. MinuMahajan.

Agenda: The agenda of the meeting was to discuss the plan of action pertaining to the upcoming Seminar on Intellectual Property Rights (IPR).

The following points were discussed:

1. It was decided that the Seminar's Theme would be "One Day National Seminar on Intellectual Property Rights (IPR).
2. The proposed date for the seminar was confirmed as 02.03.23.
3. Venue for the event was finalized. Seating arrangement and audio-visual equipment for the event were also discussed.
4. Seminar schedule and topic were finalized.

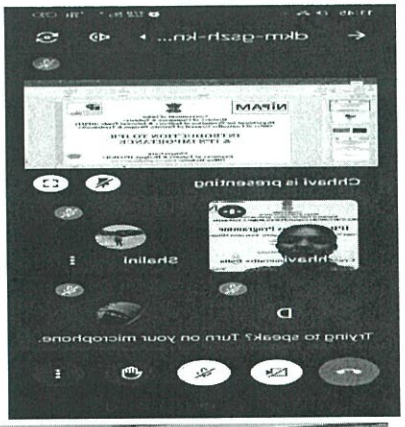
Following members attended the meeting:

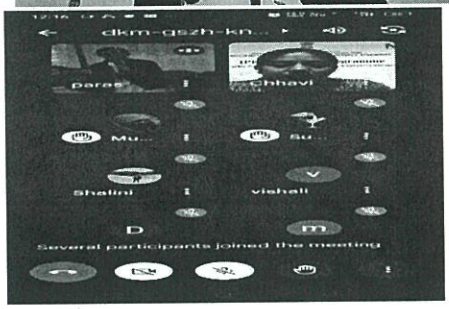
Dr. Yashpal Sharma (Coordinator IQAC)

1. Prof. Anjali Bhat
2. Prof. RupinderKour
3. Prof. RenuAnand
4. Prof. Mohinder Pal
5. Prof. Deepika Gupta
6. Prof. AnuradhaGandotra
7. Prof. Aran Kumar
8. Prof. Yash Paul (Coordinator IQAC)
9. Prof. Ashima Gupta
10. Prof. NehaAnthal

The meeting concluded with the vote of thanks to the chair.

PADMA SHRI PADMA SACHDEV GOVT COLLEGE FOR WOMEN GANDHI NAGAR ORGANISED ONE DAY NATIONAL SEMINAR ON INTELLECTUAL PROPERTY RIGHTS



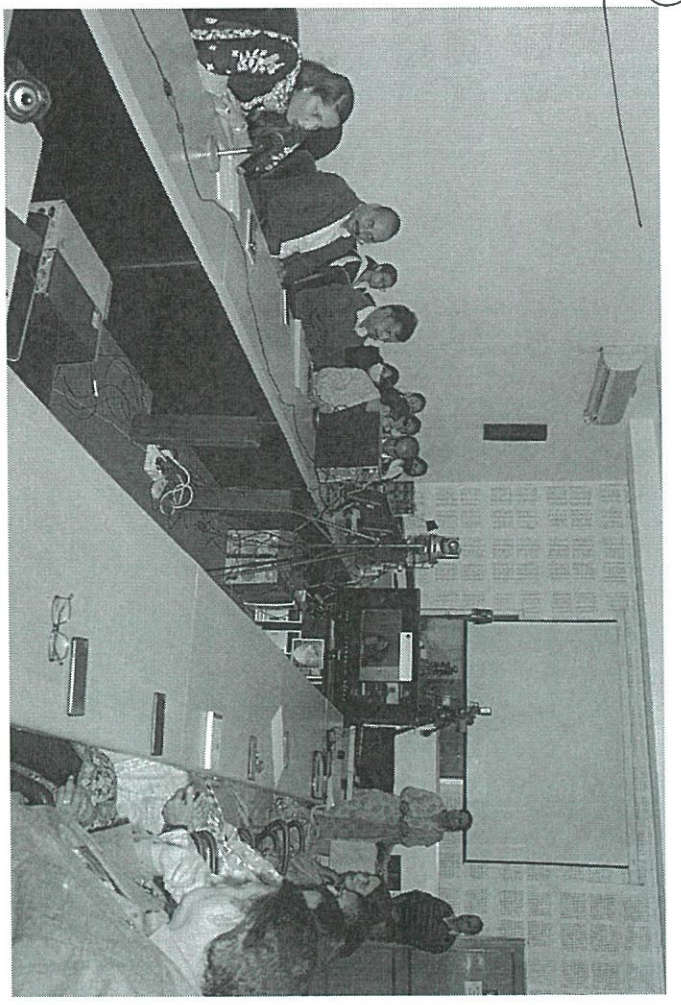


The Internal Quality Assurance Cell (IQAC) of the PSPS Govt College for Women Gandhi Nagar organised a one-day national seminar on Intellectual Property Rights in collaboration with Office of Controller General of Patents, Designs and Trademark (CGPDTM), Department for Promotion of Industry and Internal Trade (DPIIT), New Delhi on 2nd of March 2023 In blended mode.

The chief guest for the event was Prof. Minu Mahajan, worthy Principal of PSPS Govt College for Women Gandhi Nagar. The key note speaker for the seminar was Ms. Chhavi Garg, Group A officer, Examiner of Patents and Designs, NIPAM officer, Ministry of Commerce and Industry Government of India. Dr Ashma Gupta, on behalf of IQAC welcomed Deans of the college, staff secretary of the college, faculty members and students from different colleges across the division who joined offline as well as in online mode.

The programme started with a formal welcome of the chief guest Prof Minu Mahajan by IQAC committee members. Prof. Minu Mahajan Principal of the college briefed the audience about the importance to protect our intellectual property i.e., the ideas of one's own mind. The key note speaker Ms. Chhavi Garg gave a detailed presentation on the six steps of IPRs i.e., patents, Designs, Trademarks, Copyrights, Geographical indications and semi-conductor integrated circuit layout designs. She also cleared the doubts of the audience regarding IPRs in the question answer session. More than 125 participants attended the seminar. Dr Neha Antal and Dr Rohit Gupta handled all issues related to the technical aspects for organising the seminar.

The programme ended with a formal vote of thanks by Prof. Renu Anand, IQAC member and Head of mathematics department of the college.



(19)

Director Sports reviews arrangements for finals of historic LG Rolling Trophy

■ STATE TIMES NEWS

JAMMU: Director Youth Services and Sports, Subash Chander Chibber reviewed the arrangements for the finals of the prestigious LG Rolling (Cricket) Trophy to be organised by the Department of Youth Services and Sports on March 9, 2023 at MA Stadium here.

Director Sports Subash Chander Chibber chairing a meeting at MA Stadium in Jammu.

The Director Sports chaired the meeting of the officers and the conveners of various committees and served strict directions to them with regard to holding the finals of this cricketing extravaganza in a most befitting manner.

Director Sports along with Secretary J&K Sports Council, Nuzhat Gul visited the venue and took stock of the preparations.

Chibber said that LG Rolling (Cricket) Trophy despite involving around 42,000 youth across the UT in its first edition, has witnessed the matches being conducted smoothly and the event has been a grand success so far, adding that the heads of various committees should leave no stone unturned to help this historic finals set an example.

It is pertinent to mention here that before the finals between Jammu and Anantnag on March 9, the (hardliner) for the third place will be played between Doda and Ganderbal on March 8, 2023.

The meeting was attended by Joint Director Youth Services and Sports (J) Sriram Chand Sharma (Overall Incharge of the event); Joint Director YS&S (K), Bashir Ahmed on virtual mode (Chairman), Deputy Director Youth Services and Sports (C) Jitender Mishra (Organising Secretary), Deputy Director YS&S F&S, Ravi Kumar (Joint Organising Secretary), Accounts Officer Directorate, Sunil Kumar (Convener Finance Committee); Divisional Sports Officer J&K Sports Council, Ashok Singh, District Youth Services and Sports Officer Jammu, Sukhdev Raj Sharma (Convener Reception/Ceremony Committee), Altaf Hussain (Convener Lodging & Boarding); Mushtaq Ahmad (Convener Transport Committee), Rajesh Dhar (Match Referee and Convener Press & Publicity Committee); Dharamvir Singh (Convener Control Room), Vijay Sharma (Convener Liaison Committee), Sanjay Rana (Convener Tech Committee) and Nazir Hussain (Convener Equipment Committee).

Ravinder Raina felicitates gold medal winner Yogeshwar Singh

■ STATE TIMES NEWS

JAMMU: Bharatiya Janata Party (BJP) State president Ravinder Raina along with Surinder Bhagat National Executive and Chandigarh Prabhari BJP SC Morcha and Balwant Mankotia former MLA Udhampur facilitated Yogeshwar Singh from Bishnah who won national gold medal in a competition organized by "Performing Art India" Association at Delhi.

BJP J&K President Ravinder Raina and others felicitating gold medal winner Yogeshwar Singh.

Ravinder Raina said that Yogeshwar Singh is a specially abled person who became an inspiration for Jammu and Kashmir youth.

He said that Yogeshwar Singh is a God gifted child who became an inspiration for the youth of Jammu and Kashmir. He said that no one is disabled physically but a person is disabled from mind. He appreciated and honoured Yogeshwar Singh for his extraordinary performance and for his poetry and blessed him for making the whole Jammu and Kashmir proud.

Balwant Mankotia also blessed Yogeshwar Singh for his extraordinary performance. He said that the whole society should come forward and promote the extraordinary talent in the deserving persons.

Body Building trials on March 6

■ STATE TIMES NEWS

JAMMU: Body Building Association of Jammu and Kashmir (BBAJK) is holding selection trial at International Gym , Rehari Colony here on March 6 between 9.00 to 11.00 AM.

The trial will be held to pick the team for 12th Federation Cup Mr. India scheduled to be held from April 14 to 15, 2023 at Haldwani, Nainital District, Uttarakhand.

For further information the body builders can contact organizers on Mob. No. 9419124126.

JKP to organise 'Jammu Marathon-2023' on March 5

■ STATE TIMES NEWS

JAMMU: J&K Police is scheduled to organize Run for Fun "Jammu Marathon-2023" on March 5, 2023 at Jammu under its Civic Action Programme (CAP). The event shall take place at Gulshan Ground, Jammu.

Nisha Nathyal, DIG Armed chairing a meeting at Jammu.

A meeting was held on Thursday at APHQ Conference Hall Jammu under the chairmanship of Nisha Nathyal, DIG Armed Jammu to finalize the arrangements for conducting the event successfully.

Nisha, who is the organizing secretary of the event, issued necessary instructions to the officers having different areas of responsibility for accomplishment of their respective assignment meticulously without any flaws.

Earlier, Kuldeep Handoo, DySP Sports APHQ J&K apprised the house about all the activities being carried out for successful conduct of the event through a visual presentation.

The event is organized for the people of all walks of life including children of different schools. Various events which are scheduled to take place during Run for Fun "Jammu Marathon-2023" on March 05, 2023 at Gulshan Ground Jammu include 1st Category 21 KM Half Marathon (MEN), 2nd Category 10 KM Road Race Women (Above 18 years), 3rd Category 10 KM Road Race Boys (Under 18 years), 4th Category 10 KM Road Race Girls (Under 18 years), 5th Category 10 KM Road Race Veteran Men (Above 45 years), 6th Category 10 KM Road Race Veteran Women (Above 45 years), 7th Category 05 KM Sub Jr Boys (Under 14 years), 8th Category 04 KM Sub. Jr Girls (Under 14 years), 9th/10th Category 2 KM Specially abled (Male/Female) and 11th Category 3 KM Run for Fun for all Senior Citizens/Men/Women & Children.

The participants shall have to assemble at the venue on 0500 hours for scrutiny and distribution of Chest Numbers/T-shirts.

The Half Marathon Men 21 KM and other categories shall be flagged off by the Chief Guest and the Senior officers at 0645 hours onwards one after another on March 5 from Gulshan Ground Jammu.

After the conclusion of the Marathon, a prize distribution/ presentation ceremony shall take place at Gulshan Ground, Jammu. This shall follow a raffle draw of Chest Nos in which each 1st, 2nd and 3rd winners shall get a bicycle.

Six registration counters have already been established in Jammu city for registration of the participants who may like to participate in the marathon.

Among others the meeting was attended by Dr. Koshal Sharma SSP CO IRP 19th Bn, Mahmood Ahmad SSP SO to ADGP Armed J&K, Amita Sharma CO IRP 14th Bn, Kulbir Singh SSP CO IRP 18th Bn, Shahzad Ahmad Salaria SSP APCR Jammu, P K Modi SSP, Surjeet Kumar SSP DyCO IRP 15th Bn, Nasir Ahmed SP Dy.CO IRP 7th Bn, Balwant Raj Bhagat Dy.CO AP 8th Bn, Perbeet Singh Dy.CO IRP 12th Bn, Mamta Sharma SP South Jammu, Rakesh Gupta I/C AC/S, Imran Malik DySP Crime Branch Jammu, Reyaz Ahmad DySP Security Jammu, Sunil Kumar DySP IRP 12th Bn, Surinder Pal DySP IRP 18th Bn, Sharat Chander Singh Gen. Secy. J&K Athletics Association, Manzoor Ahmad DySP Telecom Hqrs., Bikram Kumar DySP Traffic City Jammu, Mohinder Paul DySP SDRF 2nd Bn Jammu, Kuldeep Handoo DySP Sports APHQ J&K, Ashwani Kumar Accounts Officer APHQ J&K, Dr. Sunil Physician Police Hospital Jammu, Ramesh Pandita Inspr IT Branch APHQ J&K, Rashid Ahmed Inspr JKP CST, Sh. Madhupal Singh Inspr JKP CST, Inspr. Younis Ahmad MTO APHQ J&K, Krishan Saroop Rathore SI Incharge Research & Development Branch APHQ J&K and athletic coaches Reyaz Ahmad CST and Tahir Ahmad CST.

Govt SPMR College of Commerce men lift Pencak Silat title

Winner team posing with dignitaries.

■ STATE TIMES NEWS

JAMMU: Government SPMR College of Commerce Thursday lifted the men's trophy in the Inter collegiate Pencak Silat competition of the Cluster University of Jammu (CLUJ) in GGM Science College Jammu, here.

On the final day, SPMR College of Commerce remained Champion by obtaining 47 points, GGM Science College remained runner-up with 28 points and Govt. MAM College was declared third with 13 points.

Dr. Naveen Anand, Dean Academic Affairs CLUJ was the Chief Guest and Prof. Anil Verma was the Guest of Honour on the occasion, who gave away trophy to winner teams.

The tournament was organized under the overall supervision of Dr. Vinod Bakshi, Sports Coordinator of CKUJ and Physical Director of GGM Science College.

Prof. Rajeev, Ajjaz Malik Physical Director Govt. SPMR College of Commerce, Dr. Roopali Slathia Physical Director GCW Gandhi Nagar, Neelam Sawhney Physical Director Govt. MAM College, Nellam Chalotra Assistant Physical Director Govt. MAM College, Neelam Sharma and Rohnik Bhargav were among the various dignitaries present during the occasion.

The matches were officiated by Karan Watkal, Wajid Hussain Shah, Aadhishwar Vaid, Rohain Gill and Komal Dhiman.

Gymnastics trials on March 5

■ STATE TIMES NEWS

JAMMU: The Gymnastics Association of Jammu & Kashmir is conducting the selected trials for sub junior girls in Rhythmic Gymnastics & Aerobic Gymnastics boys & Girls in all age groups on March 5, 2023 at 11.00 AM in the Gymnastics Academy, MA Stadium, Jammu.

These trials are being conducted to finalize the J&K Gymnastics Contingent for its participation in the Sub Junior National Rhythmic Gymnastics Championships & National Aerobic Gymnastics Championship (All age groups) being held at Gopalan Sports Centre, Bangalore, Karnataka from 29-31 March, 2023.

All the Interested Gymnasts (Girls) in Rhythmic Gymnastics born in the year & Gymnasts (Boys & Girls) for Aerobic Gymnastics in Seniors, Juniors & Sub juniors category can participate in these selection Trials.

All interested Players are advised to report to the S. Ravinder Singh General Secretary, GAJK or S. P Singh along with their copy of Aadhaar Card on or before 4th March, 2023 at Venue.

GDC Kathua wins District Handball Championship 2023

■ STATE TIMES NEWS

KATHUA: Principal Government Degree College (GDC) Kathua Prof. Anirudh Sharma on Thursday felicitated the winners of overall trophy of District Kathua Handball Championship 2023 in the felicitation ceremony organized by the Department of Physical Education at Sports Ground of the college.

GDC Kathua Principal and faculty members felicitating winner team on Thursday.

He felicitated the 12 outstanding players including Akash (Captain of the Handball Team) in the recently held Kathua District Handball Championship 2023 organized by the Jammu and Kashmir Sports Council, District Kathua.

The winner team was led by the Dr. Joginder Singh Soodan, Physical Director GDC Kathua.

Prof. Anirudh was accompanied by the senior faculty members of the college Sports Board Prof. Raj Kiran Convenor, Prof. Jaswinder Singh, HOD Physics and Convenor College IQAC, Prof. Rakesh Singh Jasrotia, HOD Chemistry, Convener NAAC, Controller Examination and Coordinator IGNOU, along with college Sports Board Members Dr. Sumit Dubey, Dr. Rachana HOD Psychology, Dr. Verinder Singh Head PG Department of Geography, Dr. Kamaldeep singh HOD Punjabi, Dr. J S Soodan Physical Director GDC Kathua and Dr. Pinky Sharma.

While addressing to the players, the Principal GDC Kathua Prof. Anirudh Sharma, praised the students for keeping the winning morale of the team at all levels. It is pertinent to mention that these handball players have been trained in the 10 days training camp organized by Department of Physical Education and Sports before the inter-college gaiate competitions.

Their marvelous achievements are highly appreciated by the college sports board and senior faculty members under the supervision of their Physical Director Dr. J.S Soodan.

Principal also congratulated the Physical Director for creating a Sports Culture in the college and for the participation of large number of students in sports activities in the college.

This Overall Trophy in the Sports Discipline of Handball Men was second consecutive win for the college after Inter-collegiate Competitions held at University of Jammu, where GDC Kathua fetched third place in the pool of 57 teams from different colleges of Jammu University.

The felicitation ceremony was witnessed by the other members of College Sports Board Dr. Sumit Dubey, Dr. Rachna Devi, HOD Psychology, Dr. Kamaldeep Singh and Dr. Pinky Sharma. GDC Kathua defeated the seven teams to clinch the District Handball Championship at District Sports Stadium Kathua.

CCI Jammu President flags-off Rajesh Gill for participating in World Cup

President CCI, Arun Gupta flagging-off Rajesh Gill for taking part in world cup.

■ STATE TIMES NEWS

JAMMU: President CCI, Arun Gupta on Thursday flagged off Rajesh Gill, who is selected to represent Indian Cricket Team for the legends World Cricket, scheduled to be held at Cape Town South Africa.

The flag off ceremony was organized at the Chamber House which was attended by Haseeb Ur Rehman DIG Railway Jammu, RK Bhat SSP, Anil Gupta Sr. Vice President CCI, Rajesh Gupta Jr. Vice President, Gourav Gupta Secretary General CCI, Rajesh Gupta Secretary, Rajesh Gupta treasurer and Avinash Uttam.

Arun Gupta greeted Rajesh Gill for his selection in the world cup.

He further said that Veterans Cricket JK will involve more and more senior cricketers in the forthcoming events which will be organized at Jammu.

He also said that the main aim to form the Veterans Cricket Association of JK is to provide platforms for the senior cricketers so that senior Cricketers and Cricket loving persons above the age of 50 years remain healthy and fit.

He also announced that Veterans Cricket J&K will invite foreign Countries Veterans teams at Jammu and we will organize IPL pattern league at Jammu in the month of Oct.

In this regards Invitation letters to the Presidents of Australia and England Veterans Cricket Association has already been sent for their participation in the JK Masters Cricket League at Jammu.

During the occasion Veterans Cricket JK also felicitated Hardeep Singh, former Ranji player of JK who is recently selected in the New Zealand Cricket team to participate in the cricket event at Australia.

PSPS GCW Gandhi Nagar organises national seminar on Intellectual Property Rights

■ STATE TIMES NEWS

JAMMU: The Internal Quality Assurance Cell (IQAC) of PSPS Government College for Women Gandhi Nagar organized a one-day national seminar on Intellectual Property Rights in collaboration with the Office of Controller General of Patents, Designs, and Trademark (CGPDTM), Department for Promotion of Industry and Internal Trade (DPIIT) on Thursday.

Faculty members presenting bouquet to resource person.

The Chief Guest for the event was the Principal of PSPS Government College for Women Gandhi Nagar, Prof. Minu Mahajan.

The keynote speaker for the seminar was Chhavi Garg, a Group A officer, Examiner of Patents and Designs, NIPAM officer, Ministry of Commerce and Industry, Government of India.

Prof. Minu Mahajan briefed the audience about the importance of protecting our intellectual property, i.e., the ideas of one's own mind.

The keynote speaker, Chhavi Garg, gave a detailed presentation on the six steps of IPRs, i.e., patents, designs, trademarks, copyrights, geographical indications, and semiconductor integrated circuit layout designs. She also cleared the doubts of the audience regarding IPRs in the question-answer session.

More than 125 participants attended the seminar. Dr. Neha Antal and Dr. Rohit Gupta handled all issues related to the technical aspects of organizing the seminar.

The vote of thanks was presented by Prof. Renu Anand, IQAC member and Head of the Mathematics Department of the college.

Div Com reviews land issues of Jammu Airport expansion

■ STATE TIMES NEWS

JAMMU: Divisional Commissioner Ramesh Kumar on Thursday reviewed the status of land acquisition and issues related to the Jammu Airport Expansion Project in a meeting. The concerned officers provided details about the project and reported that the land acquisition process was almost complete. However, a few patches of land containing structures and buildings belonging to the Animal Husbandry Bahcharas were not yet handed over. They added that alternative land in Nagrota and Chatha areas had been provided to the Animal Husbandry Department for the relocation of their hatchery and office buildings. The Div Com also inquired about the progress of the construction of the Animal Husbandry buildings in Nagrota and Chatha. Director Animal Husbandry informed about minor issues on the allotted land at both locations. The Div Com instructed the DC Jammu to resolve the issues on the allotted land to facilitate the timely shifting of Animal Husbandry buildings. Furthermore, the Div Com directed all concerned departments to conduct a joint visit to the Animal Husbandry building site and prioritize the buildings to be vacated mutually. The Div Com stressed the importance of vacating the prioritized buildings promptly to ensure the smooth execution of work on the airport expansion project.

The meeting was attended by Deputy Commissioner Jammu, Avny Lavasa, Vice Chairman JDA, Pankaj Magotra; Director Animal Husbandry Shubhra Sharma, Chief Engineer PWD, P C Tanoch, Chief Engineer, Irrigation and Flood Control, Manoj Gupta, Assistant Commissioner Central, Pritam Lal Thappa, besides officers of Airport Authority, Civil Aviation and other concerned officers.

JKABA holds Poonch Boxing meet

■ STATE TIMES NEWS

POONCH: Jammu and Kashmir Amature Boxing Association (JKABA) organised day-long District Poonch Boxing Championship involving around 50 boxers in different age and weight categories at Sports Stadium, here today.

JKSC member, Saqlain Tariq presenting certificate to a participant.

The competition held in senior, youth, junior and sub-junior age groups of boys and girls. International volleyball player and member J&K Sports Council, Saqlain Tariq was chief guest, who interacted with the participating boxers and later presented the winners with medals and certificates of participation. He appreciated the role of boxing coaches, especially Mushtaq Ahmed of J&K Sports Council. Ranjit Rao (SHO Poonch) was guest of honour. Among other dignitaries were Nirdosh Kumar Sharma, Mohd Tariq (chairman Shaheed Manjeet Singh Volleyball Club Poonch), Mohinder Bali, Pervaz Ahmed Afridi, Ramdit Singh, Tanveer Ahmed Dar, Mohd Raiz, Gourav Sharma, Rohit Sharma.

SPS GCW Gandhi Nagar organises national seminar on Intellectual Property Rights

ATE TIMES NEWS

MU: The Internal y Assurance Cell) of PSPS Government e for Women Gandhi organized a one-day al seminar on ctual Property Rights llaboration with the of Controller General of ts, Designs, and mark (CGPDTM), tment for Promotion of ry and Internal Trade T) on Thursday.

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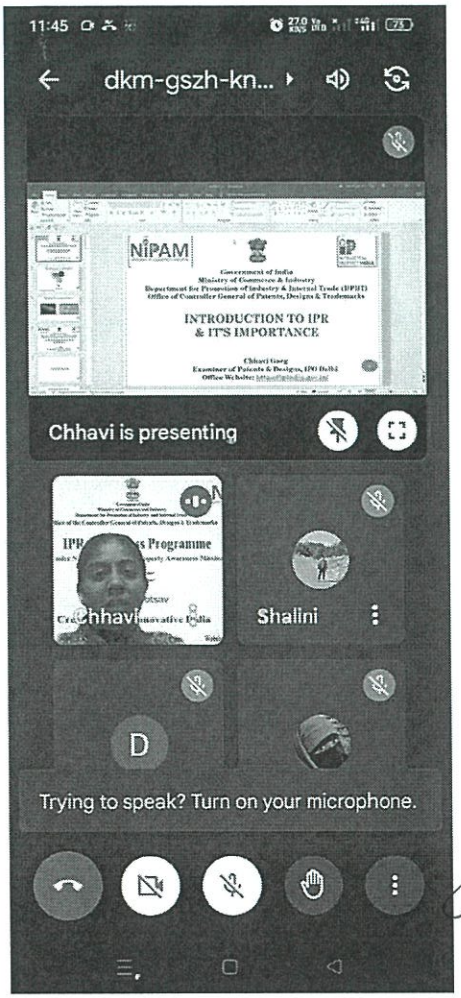
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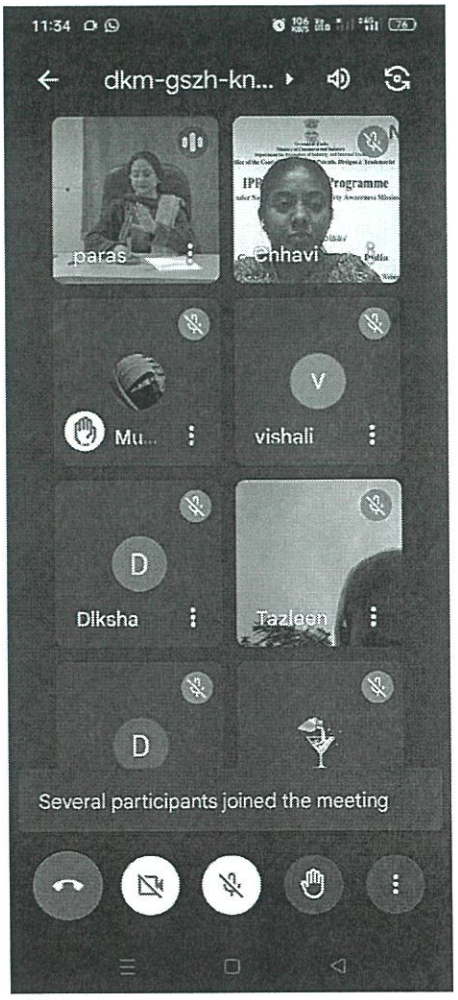
NIPAM
Government of India
Ministry of Commerce & Industry
Department for Promotion of Industry & Internal Trade (DPIIT)
Office of Controller General of Patents, Designs & Trademarks
INTRODUCTION TO IPR
& IT'S IMPORTANCE
Chhavi is presenting
Shalini
D
Trying to speak? Turn on your microphone.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Several participants joined the meeting


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Several participants joined the meeting

02/03/2023

(22)

Staff members	Signature
1. Dr. Renu Anand	
2. Dr. Deepika Gupta	
3. Dr Amrendra Chandra	
4. Dr. Rupinder Kour	
5. Kamlesh Salathia	
6. Mala Bhasin	
7. Surinder Singh Pathania	
8. Dr Maharaj Krishen Mussa	
9. Dr. Vijender kumar	
10. Dr Neha Antal	
11. Dr. Ashma Gupta	
12. Dr Mohinder Pal	
13. Dr. Arun kumar	
14	

Dr. Yash Paul

Attendance Sheet

Roll No.	Sec. A	Class	Name	Signature
97	A	V	Anita Devi	
96	A	V sem	Navjyot kour.	
50	A	5th	Tehmina Tabassum	Tehmina Tabassum
127	A	V	Nazia Akhtare	Nazia
170	A	5th	Sheeza Tabassum	
177	A	5th	Shanu Chondkary	Shanu ch.
183	A	5th	Anjali Sharma	Anjali
94	A	5th	Anjali Sharma	Anjali
74	A	5th	Rakshika Sharma	Rakshika
81	A	5th	Bharti	Bharti
91	A	5th	Parul Bargotra	Parul
89	A	5th	Surpreet Kour	Surpreet
48	A	5th	Shriya Sharma	
83				
46	A	5th	Deepti Verma	
82	A	5th	Ananya Sudan	Ananya
80	A	5th	Prabhjot Kour	Prabhjot
90	A	5th	Urvashi Devi	Urvashi
78	A	5th	Ruchika Bharti	Ruchika
93	A	5th	Smarika	Smarika
77	A	5th	Priya	Priya
31	A	5th	Arti	Arti

Program Outcomes of One Day National Seminar On Intellectual Property Rights (IPR)

Date: 02.03.2023

1. **Increased Awareness:** Participants gained a heightened understanding of the concept of Intellectual Property Rights (IPR).

2. **Knowledge Enhancement:** Attendees acquired in depth knowledge about various types of intellectual property, including copyrights, patents, trademarks, and trade secrets.

3. **Protection Strategies:** Participants learned about the strategies for protecting their intellectual property and the steps involved in obtaining patents, trademarks and copyrights.

4. **Role in Innovation and Creativity:** The seminar highlighted the role of IPR in fostering innovation and creativity, encouraging participants to explore new ideas and protect their innovations.

5. **Practical Insights:** Practical insights and real-life case studies, were shared,, allowing participants to apply IPR concepts in practical scenarios.

6. **Awareness of Challenges:** Attendees were made aware of the challenges and issues related to intellectual property in various industries.

7. **Feedback And Evaluation:** Feedback was collected from participants to assess the quality of the seminar and identify areas for improvement in future events.

8. **Continues learning:** Participants were encouraged to continue their learning journey in the filed of IPR through recommended readings, courses and workshops.

ACTIVITY REPORT OF ENTREPRENEURSHIP DEVELOPMENT PROGRAMME

20/12/2022- 30/12/2022

INSTITUTIONAL INNOVATION CLUB GCW
GANDHINAGAR

Gmail

dir.he jk <dir.he.jk@gmail.com>

Conduction of Entrepreneurship Development Program at SMVDU Kakryal, Katra

Dean FOM <dean.fom@smvdu.ac.in>
To: dir.he.jk@gmail.com

Wed, Dec 7, 2022 at 5:06 PM

Prof. (Dr.) Yashmeen Ashai,
Director Colleges,
Higher Education Department
Jammu.

With reference to telephonic discussion with you on Monday , please find enclosed the **head-wise budget of the program**, furthermore as enquired in this project we have remaining funds available with us of **Rs.6,70000/-**(Approximately).
Regards
[Quoted text hidden]
--
Warm Regards
Dr. Supran Kumar Sharma,
I/c Dean, Faculty of Management,
Shri Mata Vaishno Devi University, Kakryal, Katra, J&K-182320

3 attachments

- **Letter to Director Colleges 02122022.pdf** 461K
- **SCHEDULE EDP FINAL 01dec 2022.pdf** 43K
- **BUDGET dec.pdf** 30K

(27)

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Government of Jammu and Kashmir
Directorate of Colleges,
Higher Education Department
(12-C Extension Gandhinagar Jammu)

Convenor DPC to do the needful
12.12.2022

Principal Secretary to Government,
Higher Education Department,
Civil Secretariat, Jammu/Srinagar.

No: DC-HE/2022/1795 Dated: 09 -12 -2022

Sub: Conduction of Entrepreneurship Development Program at SMVD University, Kakryal, Katra.

Sir,

This is to inform your goodself that SMVDU in collaboration with HED has in the past conducted Entrepreneurship Development Programs in the online as well as offline mode. This office has received a revised DPR for the HED, J&K Sponsored project (HEDSS2020100363) entitled 'Entrepreneurship Programs for students of Jammu Division Colleges''
Entrepreneurship Development Program (EDP)' in the offline mode at SMVDU campus proposed to be conducted from 20th – 30th December, 2022. This program of 30 hours has to be delivered in this skill enhancement program for a batch of 90 students. This program will be conducted in continuation to a batch of fresh students. The detailed schedule of EDP is attached for your ready reference.
Pertinent to mention that Department of HED has already sanctioned and released money to the said University. It is out of the remaining funds that a headwise budget of program amounting to Rs. 2,70000 has been projected. The remaining funds to the tune of Rs. 6,70000 are still pending with them which will be utilised for another batch of students for a different training program.

Thanking You

Sincerely Yours

Director colleges
Higher Education Department

Copy to the:
1. Director Finance, Higher education Department.
2. Nodal Principal, Govt. College for Women, Parade, Jammu.
3. Master file/ Office record.

GCW GANDHINAGAR

Dated:-12/12/2022

Notice

A meeting of institution innovation club will be held in the computer Department on 12th of December 2022 at 2.00 pm to discuss about the selection of the students for skill development/Training programme scheduled to be organised on 20/12/2022 to 30/12/2022 at SMVDU. All the members of innovation club are directed to attend the above said meeting.

CONVENOR

PSPS GCW GANDHINAGAR

Minutes of Meeting

A meeting of Institution innovation club of the College was held in the Computer Department on 12th of December 2022. The agenda of the meeting was to discuss about the selection of the students for skill development/Training programme scheduled to be organised on 20/12/2022 to 30/12/2022 by SMVDU in collaboration with HED at SMVDU Katra. After Threadbare discussions following points were discussed:

- Entrepreneurship Development Programme at SMVDU is going to be held on 13th of Dec 2022.
- Interested students can submit their names to Prof. Poonam Deptt Of Hindi.
- Students from all streams whether Arts, Sciences or Commerce can participate in this programme.
- Students from all the three semesters will participate in the EDP.
- College Bus will drop the students to Prade College where Bus of SMVDU Pick up the participants.
- Prof. Anupama Sharma will be the convenor of the said event.
- Members of the Institution innovation club will help and assist the students regarding any query related to this programme.
- Meeting ended with formal vote of Thanks.

Convenor

Members

1. Poonam
2.
3.
4.

(30)

GCW GANDHINAGAR

Dated:-13/12/2022

Notice

All the students who are willing and interested to take part in EDP i.e Skill development/Training programme scheduled to be organised on 20/12/2022 to 30/12/2022 at SMVDU can give their names to prof. Poonam Deptt of Hindi positively by 15th of Dec. 2022

CONVENOR

Schedule of Higher Education Department J&K, UT Sponsored Entrepreneurship Development Program at SMVDU, Katra

(20th to 30th December, 2022))

Days	Session I (9.30 AM -11.30 AM)	Break	Session II (11.45 AM 1.45 PM)
Day 1	Registration/Inauguration followed by Why Entrepreneurship: Entrepreneurship- Concept	(11.30 AM - 11.45 AM)	Entrepreneurship-A Practical Way
Day 2	Measurement of Entrepreneurial Competencies/Traits		Entrepreneurship- Myths & Practicalities
Day 3	MSMEs & Start-Ups in India- Challenges & Opportunities		Artificial Intelligence, Big Data Analysis & Business Opportunities
Day 4	Financial Aspects of MSME Unit- Project Cost, Source; Profitability; Projections, BEP, Fixed/working capital		Traditional Marketing vs MSMEs Marketing
Day 5	From Idea to Start-up - Business Plan Formulation		Business Model Canvas
Day 6	Business Ideas & Opportunities in the field of Sciences		Communication Skills for Entrepreneurs - Interacting with people for better results
Day 7	Frugal Innovations & Social Entrepreneurship		Session-III (2.15 PM to 3.45PM Interface with successful entrepreneur.

PROGRAMME-OUTCOMES

- Students gain solid concepts and theories of Entrepreneurship, After the completion of this Training Programme which includes learning about the entrepreneurial mindset. Opportunity, recognition, business planning & financial management.
- Students by attending this programme can develop their creative power and ability & Generate innovative business ideas.
- It helps to develop Problem solving skills.
- Students find opportunity to connect with developing Enterpreneur building a strong network which helps to provide valuable resources & support for their start ups & Collaboration opportunities.
- Identify potential challenges and opportunities.
- Students can get Practical hand on experience through this programme.

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E

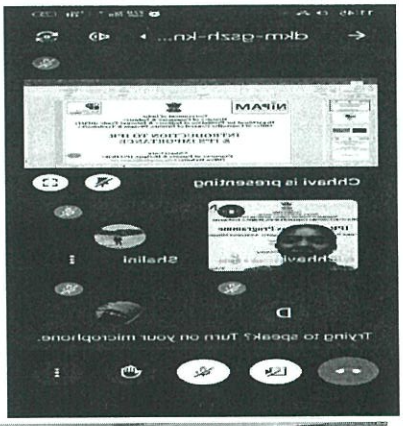
List of students Participated in EDP at SMVDU

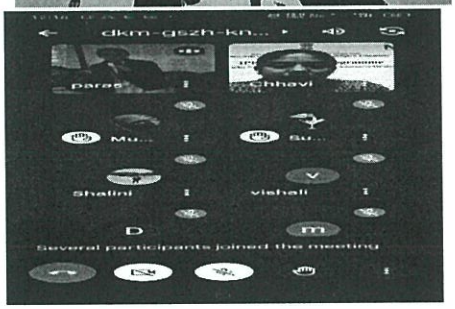
Name	Class	Father's name
Amisha Mothra	B.sc Non Medical Sem 4th	Naresh kumar
Gurneet kour	B.sc Non Medical Sem 4th	Jagjeet singh
Tanveer kour	B.sc Non Medical Sem 4th	Gurkirat singh


Entrepreneurship Development Program
Shri Mata Vaishno Devi University (J&K)


Bench

PADMA SHRI PADMA SACHDEV GOVT COLLEGE FOR WOMEN GANDHI NAGAR ORGANISED ONE DAY NATIONAL SEMINAR ON INTELLECTUAL PROPERTY RIGHTS





The Internal Quality Assurance Cell (IQAC) of the PSPS Govt College for Women Gandhi Nagar organised a one-day national seminar on Intellectual Property Rights in collaboration with Office of Controller General of Patents, Designs and Trademark (CGPDTM), Department for Promotion of Industry and Internal Trade (DPIIT), New Delhi on 2nd of March 2023 in blended mode.

The chief guest for the event was Prof. Minu Mahajan, worthy Principal of PSPS Govt College for Women Gandhi Nagar. The key note speaker for the seminar was Ms. Chhavi Garg, Group A officer, Examiner of Patents and Designs, NIPAM officer, Ministry of Commerce and Industry Government of India. Dr Ashma Gupta, on behalf of IQAC welcomed Deans of the college, staff secretary of the college, faculty members and students from different colleges across the division who joined offline as well as in online mode.

The programme started with a formal welcome of the chief guest Prof Minu Mahajan by IQAC committee members. Prof. Minu Mahajan Principal of the college briefed the audience about the importance to protect our intellectual property i.e., the ideas of one's own mind. The key note speaker Ms. Chhavi Garg gave a detailed presentation on the six steps of IPRs i.e., patents, Designs, Trademarks, Copyrights, Geographical indications and semi-conductor integrated circuit layout designs. She also cleared the doubts of the audience regarding IPRs in the question answer session. More than 125 participants attended the seminar. Dr Neha Antal and Dr Rohit Gupta handled all issues related to the technical aspects for organising the seminar.

The programme ended with a formal vote of thanks by Prof. Renu Anand, IQAC member and Head of mathematics department of the college.