

## Editorial Board



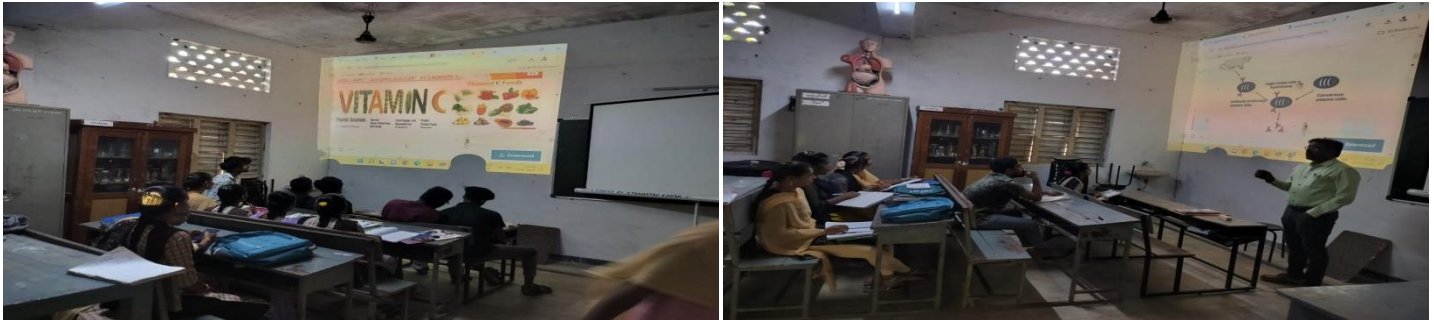
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## NEWSLETTER NOVEMBER 2024

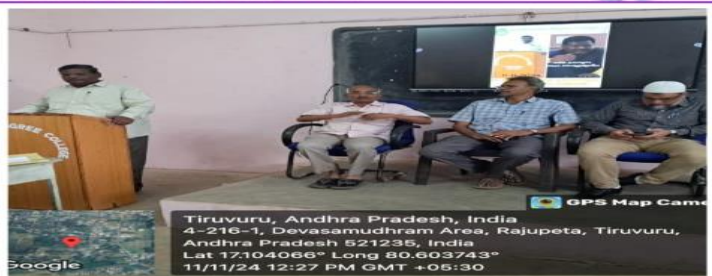
The Member of legislative Assembly, Dr..K.SrinivasaRao visited GDC, Tiruvuru, on 7<sup>th</sup> Nov, 2024, and engaged in a detailed discussion with the principal regarding various aspects of the institutions infrastructure. During the meeting, the MLA also emphasized the crucial requirements that must be addressed in preparation for the forthcoming visit of the NAAC peer team. After the meeting, he interacted with teaching & non-teaching staff, fostering a deeper understanding of their roles & concerns. As students progression and placement play a key role in NAAC intuitional assessment, the principal requested him to do some favor for the students to improve progression and placements.



An Internship awareness program was organized for the students of 5<sup>th</sup> Semester at 11.am on 08-11-24. During the session the internship- coordinator, Dr.R.Praveen Duttu, lecturer in Zoology, presented an in. depth overview of the various facets involved in successfully completing an internship. He emphasized the significance of maintaining consistent attendance and upholding a professional work culture through the duration of the internship. He also provided detailed guidelines on how to effectively undertake the internship as well as the proper procedures for documenting and submitting the internship records, The students from BSC, B.Com & BA programs are participated in this awareness program.



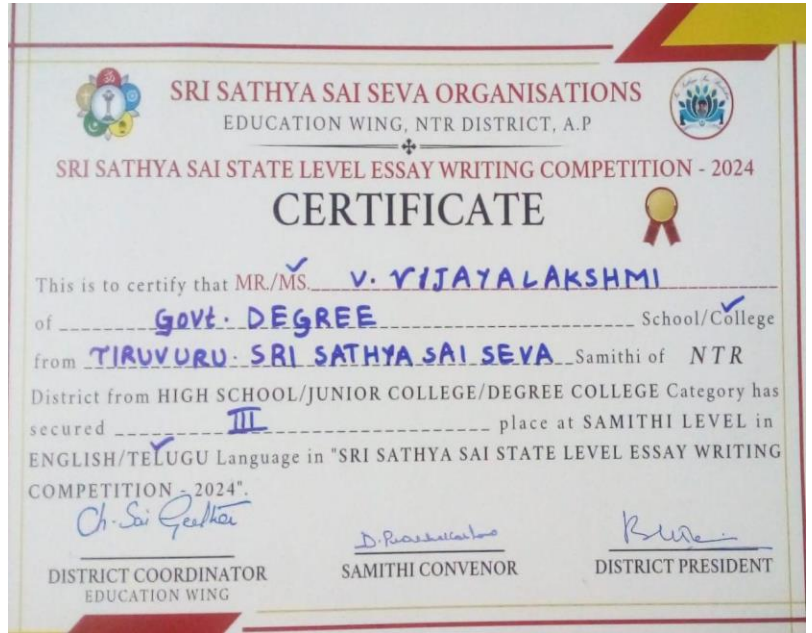
National Education Day is observed annually on Nov 11<sup>th</sup>, 2024 in commemoration of Maulana Abul Kalam Azad, the first Education minister of Independent India. On this occasion, Dr. P.Srinivasa Rao, the principal of Govt Degree College, chintalapudi, delivered an insightful lecture highlighting the unique aspects of tribal literature, emphasizing its cultural richness and educational value. The vice Principal, Sri. Syed. Abubakar, addressed the gathering, and spoke on the theme of the event. Promoting inclusive, high- quality education for all. He elaborated on the importance of equitable educational opportunities as essential for national development & unity. Dr.Y.Vijayananda Raju, lecturer in Telugu, spoke on the Maulana Azad's pioneering efforts towards advocating for free and accessible education for every individual, irrespective of their social or economic background- The IQAC co-ordinator Sri.D.Raghuram Prasad, spoke on the enduring legacy of Maulana Abul Kalam Azad, reinforcing the on-going need for educational reform and inclusivity in contemporary India. The staff and students actively participated in this program.



జాతీయ విద్యా దినోత్సవం సందర్భంగా "గిరిజన సాహిత్య ప్రత్యేకతలు" అను అంశం పై మాట్లాడుతున్న చింతలపూడి ప్రభుత్వ కళాశాల ప్రధానాచార్యులు డా. పొట్లూరి శ్రీనివాస రావు



Kum. V.Vijayalakshmi of II MCS, GDC, Tiruvuru, was awarded memento in essay writing competition organized by Satya Sai. Organization on 10-11-2024. The principal, staff & students appreciated her for her outstanding performance and commitment of participation as well as her impressive achievement in securing 3<sup>rd</sup> prize.



The honorable MLA of Tiruvuru Dr.Kolikapudi.Srinivasa Rao laid the foundation stone for additional buildings to be constructed at a cost of 1.40 lakh at the Government Degree College, Tiruvuru, on 14-11-24. He emphasized that such buildings are crucial for providing an optimal learning environment as students are the backbone of any generation and the future of the country is shaped in the classroom. The MLA assured that the Govt would allocate the necessary funds for the development of higher education, including provisions for free education, scholarships for economically disadvantaged students, and text books. He encouraged students to make use of the most of the opportunities offered by the government. The panchayat chairperson G. Kasturi bai, vice chairperson Smt.G.Venkateswaramma, the college principal Dr.M. Suseela Rao, staff & students participated in this programme.



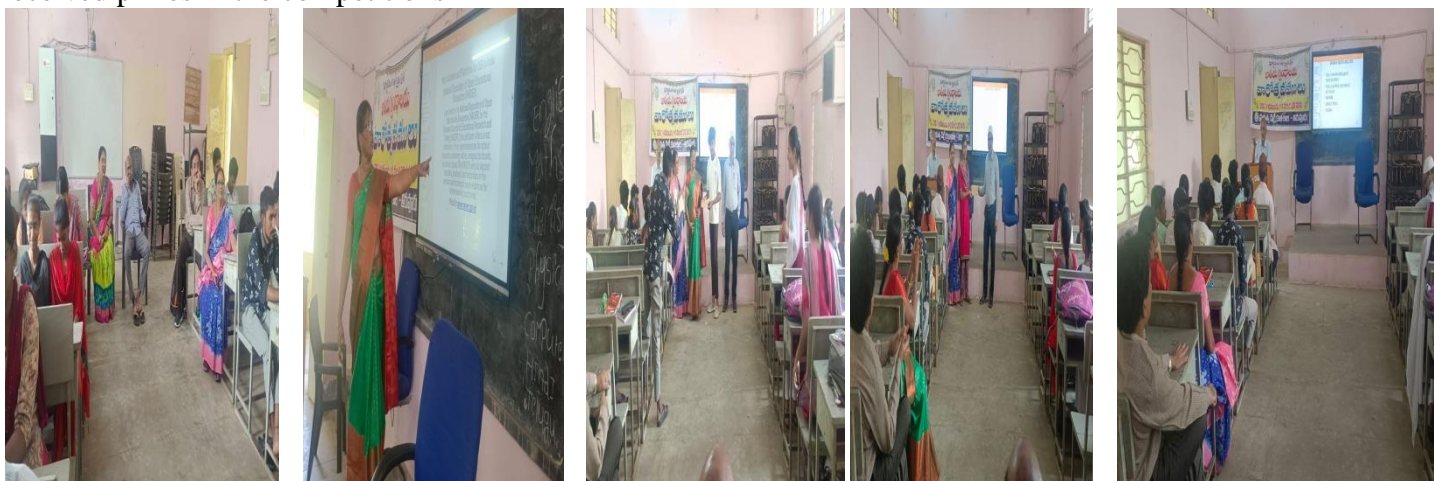
శంకుస్థాపన వేళ పూజానంతరం నిర్వహించిన సమయంలో సీఎంఎంఓ వేసి నూతన భవన నిర్మాణానికి శ్రీకారం చుట్టిన సానిక శాసన సభ్యులు గౌ.కొలికపూడి శ్రీనివాసరావుగారు 14.11.2024



A representative of flipkart e - Commerce Company, visited GDC, Tiruvuru on 18-11-2024 to conduct the selection process of internship for V Semester students. During the session, the executive provided comprehensive guidelines on how to successfully complete the six- month internship program. He emphasized on the benefits and opportunities associated with flipkart's programs & offers highlighting their value in shaping the professional careers of Interns.



The 57<sup>th</sup> National library week celebrations commenced at GDC, Tiruvuru on Nov-14, 2024. The College principal, Dr.M.Suseelarao, addressed the gathering, emphasizing the significance of reading books and effectively utilizing library resources. on the second day an essay writing competition was held on the topic “Social media and Emerging Trends” on the third day, an elocution competition took place, with the topic “Analysis of Amravati” as the proposed capital on the 4<sup>th</sup> day a competition was organized based on theme “seeing and telling”. The essence of the book. On the 5<sup>th</sup> day a variety of books were displayed in the library for viewing. On the concluding day, the principal, vice-principal and IQAC co-ordinator shared their perspectives on the optimal use of library resources. During the event, a PPT presentation was given by Smt.K.Adilakshmi Lecturer in Computer Science on how to use various websites for useful, research information. IQAC co-ordinator, Sri. D. Raghuram Prasad explained on how to utilize library resources under learning management system and E- resources in en- list for career development and to enhance their knowledge and broaden their intellectual horizons. The program concluded with vote of thanks. Faculty & students actively participated in the weeklong celebrations.Y.Sowmya of II MCS & S.Bharath of II B.Com received prizes in the competitions



The Principal of GDC, Tiruvuru, Dr.M. Suseela Rao shared exciting news with all the faculty members, announcing that the college had received an email on November 12, 2024, confirming the acceptance of the DVV (data verification and validation) data. He expressed sincere appreciation for the remarkable efforts put forth by the NAAC Team, recognizing their dedication, teamwork, and unwavering commitment in successfully securing the acceptance. Furthermore, the principal emphasized the importance of maintaining up-to-date departmental records and instructed all criteria co-ordinators and faculty members to ensure that these records are well- organized and readily available in preparation for the upcoming NAAC visit.




The Krishna University examinations for UG III & V Semester were conducted at GDC, Tiruvuru from November 21<sup>st</sup> to 28<sup>th</sup>, 2024. The examination cell, along with the faculty members ensured that all exams were conducted smoothly and efficiently maintaining a high standard of organization and adherence to the schedule.






The mid exams for the UG Ist & III Semester were held from Nov 4-11-2024 to 7-11-2024. The examination cell and faculty members co-ordinate in conducting all exams smoothly & carefully.

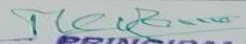


**Government Degree College**  
 Affiliated to Krishna University  
 Tiruvuru, NTR Dt, Andhra Pradesh 521235



**Examination Cell**  
 BA/B.Com/B.Sc I Year I Semester – 2 Mid-Term examinations, Dec-2024  
**TIME-TABLE** Dt.27-11-2024

Date	Time	Title of the Course
02-11-2024	10AM-11AM	A Course in Communication and Soft Skills
	2PM-3PM	సాహితీ సారభం/ हिन्दी गद्य साहित्य
03-11-2024	10AM-11AM	Essentials and applications of Mathematical, Physical and Chemical Sciences (CS,CHE) Fundamental of Commerce (CA) Fundamentals of Social Sciences (HIS) Introduction to Classical Biology (ZOO)
	2PM-3PM	Advances in Mathematical, Physical and Chemical Sciences (CS,CHE) Business Organisation (CA) Perspectives on Indian Society (HIS) Introduction to Applied Biology (ZOO)

  
**PRINCIPAL**  
 GOVERNMENT DEGREE COLLEGE  
 TIRUVURU-521 235, Krishna Dist.

The esteemed member of the legislative assembly (MLA) Dr. Kolikapudi. Srinivasa Rao graciously donated 12 bicycles to female student of Govt.Degree College, Tiruvuru o Nov, 23, 2024. At the inauguration ceremony of the newly constructed building held at the college recently a few hostel students approached him & requested for bicycles. They explained the difficulty they faced in walking the two- and- a half kilometers distance from their hostel to the college. In response to their concerns, the MLA kindly fulfilled their request and presented 12 bicycles as promised. The college, principal Dr.M. Suseela Rao, staff & students expressed their heartfelt gratitude for his generosity and encouragement deeply appreciating his thoughtful support.



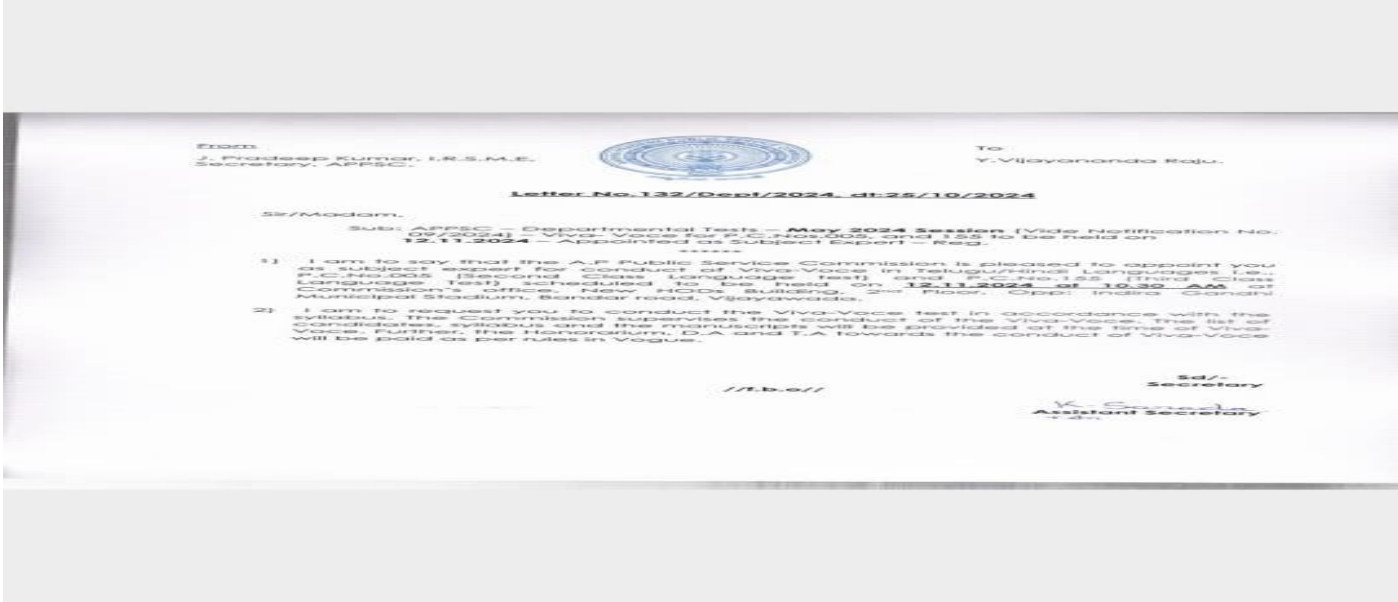
**డిగ్రీ విద్యార్థినులకు సైకిళ్ల పంపిణీ**  

తిరువూరు, న్యూస్టుడే: పట్టణంలోని ప్రభుత్వ డిగ్రీ కళాశాలకు చెందిన 10 మంది విద్యార్థినులకు ఎమ్మెల్యే కె.శ్రీనివాసరావు శనివారం సైకిళ్లు వితరణగా అందించారు. ఇటీవల కళాశాలలో జరిగిన నూతన భవన నిర్మాణాల శంకుస్థాపనలో పాల్గొన్న ఆయన్ను కొందరు విద్యార్థినులు రాజుపేట వసతిగృహం నుంచి దూరంగా పాత తిరువూరులోని కళాశాలకు నడిచి రావడానికి ఇబ్బంది పడుతున్నామని సైకిళ్లు కావాలని కోరారు. స్పందించిన ఎమ్మెల్యే ఇచ్చిన హామీ మేరకు సైకిళ్లు అందజేశారు. బాలికలు ఆయనకు కృతజ్ఞతలు తెలిపారు.

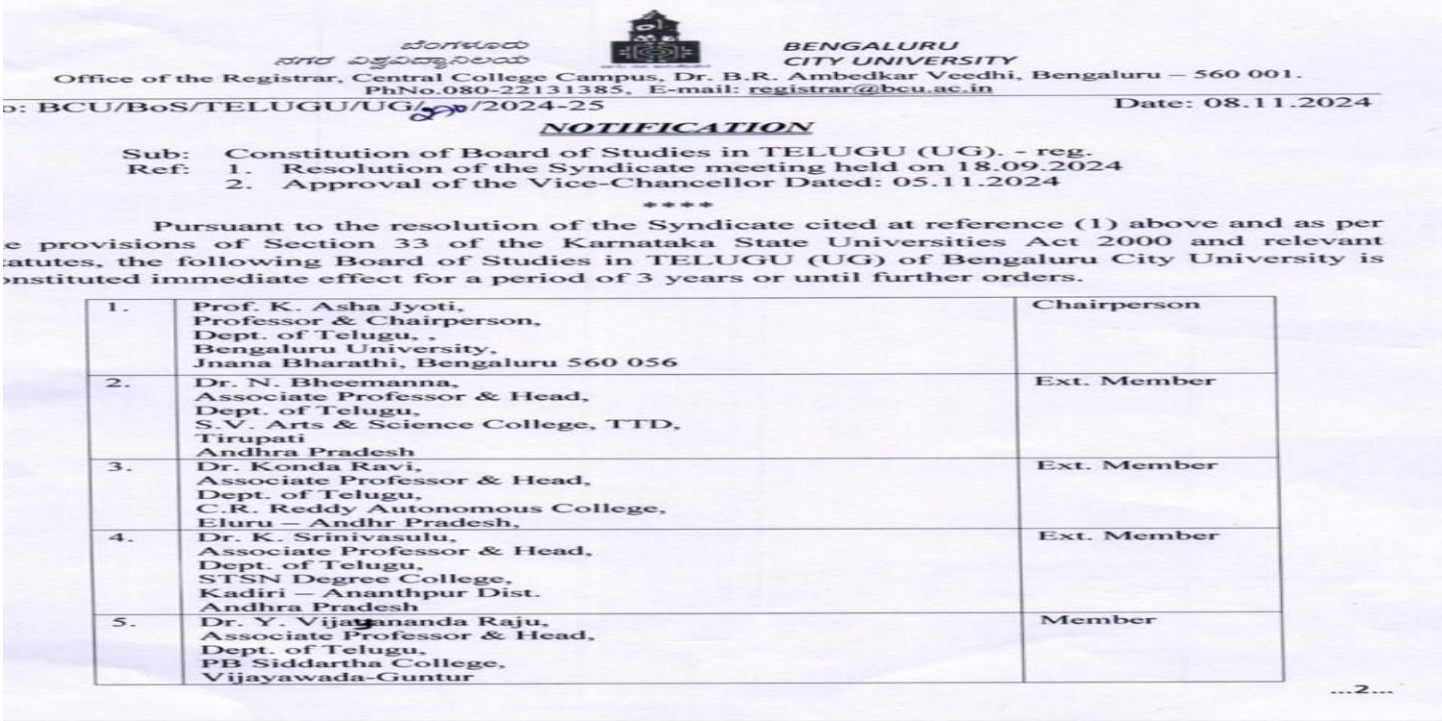


సైకిళ్లు అందుకున్న బాలికలతో ఎమ్మెల్యే శ్రీనివాసరావు

Dr.Y.Vijayananda Raju, lecturer in Telugu, has been appointed as a subject expert by the Andhra Pradesh Public Service Commission (APPSC) for the conduct of the vivavoce examination in the Telugu language. The examination was scheduled on 12-11-2024, at the commission's office. He has been requested to conduct the viva voce in accordance with the prescribed syllabus, under the supervision of APPSC, chairman. The APPSC supervise the overall conduct of the examination. The principal & staff of the college extended their congratulations to him for being selected to participate in this prestigious role.



Dr.Y.Vijayananda Raju, lecturer in Telugu has been selected as a subject expert for the board of studies inTelugu for undergraduate (UG) programs at Bangalore City University this prestigious appointment will be effective for a period of three years from 2024 to 2027. The college principal and faculty members extended their heartfelt congratulations to him on this significant achievement, recognizing his expertise and the honor of being selected for the Board of Studies (BOS) meeting.





Dr.Y, Vijayananda Raju, lecturer in Telugu, and Dr.J.Sunitha Rani, lecturer in physics. Generously donated kits to the college volleyball team- Their thoughtful contribution was warmly appreciated by the principal, staff & students, who recognized their magnanimity and the encouragement they provided to the volleyball players team. Everyone recognized their generosity and the positive encouragement they extended to the players but also uplifted the morale of the entire college community.



A research article of Dr.Y.Vijayananda Raju, lecturer in Telugu, has been published in the International Journal of Academic research on Aadhana Pradhanalu, which holds the ISSN 2348-7666 and an impact factor of 6.023. The article appears in volume II, Issue,3, during the period of July to September,2024.The college principal, staff & students, expressed their admiration for his exceptional enthusiasm and dedication to research.

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Volume-11, Issue-3, July-Sep-2024

Research Article

### ఆధాన ప్రధానాలు

డా. ఎల్. విజయనాథరావు, ప్రొఫెసర్, ఆధానాలు, తెలంగాణ, విజయవాడ, పిన్: 524108 88634

మానవుడు సంఘజీవి. ఆ సంఘంలో జీవించాలంటే మానవునికి భాష అవసరం. ఆ భాషతోనే మానవుడు తన అభిప్రాయాలను, అలోచనలను, అనుభూతులను, ఆవేదనలను, ఆవేశాలను, ఇతరులతో పంచుకుంటాడు. మానవుడు తన జీవిత గమనంలో సాంఘిక, రాజకీయ, సాంస్కృతిక భౌగోళిక, వ్యాపార సంబంధ కారణాల వలన భిన్న భావాలతో, భిన్న వర్గాలతో, భిన్న భాషా వ్యవహారాలతో కలిసి వయస్సిస్తాడు. ఈ ప్రపంచంలో ఇతర భాషలతో సంవర్ధం చెల్చుకుంది. దాని వలన భాషల మధ్య అదాన ప్రధానాలు ఆరుగుతాయి.

అదాన ప్రధానాలు - నిర్వచనాలు :

అదానము అనగా గ్రహించుట, వ్యవస్థీకరించుట అనీ; ప్రధానము అనగా ప్రత్యక్ష దానము, గొప్ప యాచి అని చెప్పవచ్చును. ఇతర భాషల నుంచి పదజాలాన్ని పుచ్చు (Loan) తెచ్చుకోవడాన్ని అదానముని (Borrowing) ఇతర భాషలకు పదజాలాన్ని యివ్వడాన్ని ప్రధానముని (lending) అంటారు.

1. అదానాలు అరగదానికి కారణాలు :

అ) భౌగోళిక సాన్నిహిత్యం:

ఒక భాషా ప్రాంతాన్ని అనుకుని మరొక భాషా ప్రాంతము ఉంటే ఆ రెండు భాషల సరిహద్దులలోని ప్రజలకు సన్నిహిత సంబంధం ఏర్పడుతుంది. ఆ కారణంగా ఒక భాషలోని పదాలు మరొక భాషలోకి ప్రవేశిస్తాయి.

ఉదా : ఆంధ్రప్రదేశానికి కమిశ, కన్యూలర్, మహారాష్ట్రలో భౌగోళిక సాన్నిహిత్యం ఉంది. అందువల్ల ఆయా భాషలోని పదాలు తెలుగులో ప్రవేశించాయి.

ఆ)రాజకీయ కారణాలు :

ఒక భాషా ప్రాంతాన్ని మరొక భాషా ప్రాంతం వారు జయించి రాజకీయధికారాన్ని స్థాపించుకోవడం వలన పాలక భాష పాఠశాల భాషను ప్రభావితం చేస్తుంది.

ఉదా : మధ్యయుగంలో మహమ్మదీయ పాలన వలన పర్షియన్-అరబిక్ భాషలు, ఉర్దూ భాషల ప్రభావం తెలుగు భాషపై ప్రసరించింది. ఆంగ్లేయుల పాలన వలన వేలకొద్దీ ఆంగ్ల పదాలు తెలుగులోకి ప్రవేశించాయి. అలాగే స్పాన్ మరయు దర్ పదాలు కూడా ప్రవేశించాయి.

ఇ)మత కారణాలు :

మత ప్రధానానికి భాష ప్రధాన సాధనం. ఒక భాషా ప్రాంతంలోకి ఇతర భాషలకు చెందిన మతన్యూత కమ మత ప్రధానం చేసుకునేటప్పుడు వారి యొక్క భాషా పదాలు స్థానిక భాషలలో ప్రవేశిస్తాయి.

<https://doi.org/10.5281/zenodo.13983129>

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ఉదా : ఆంధ్ర ప్రదేశ్ లో అర్ధ మతం వలన సంస్కృత పదాలు, బౌద్ధమతం వలన ప్రాకృత పదాలు, ఇస్లాం మతం వలన పారశీక మరియు అరబ్ పదాలు, క్రైస్తవ మతం వలన ఆంగ్ల మరియు బోర్గుగీను పదాలు తెలుగు భాషలోకి ప్రవేశించాయి.

(ఈ) వాణిజ్య సంబంధాలు :

ఒక భాషా ప్రాంతీయంతో మరొక భాషా ప్రాంతీయులు వాణిజ్య సంబంధాలు ఏర్పరచుకుంటే ఆ రెండు భాషల మధ్య అదాన ప్రధానాలు ఆరుగుతాయి.

ఉదా : తెలుగులో గిడ్డంగి, గోదాము, బొప్పాయి, అనాన మొదలగు బోర్గుగీను పదాలు వాణిజ్యం వలన చేరినవే.

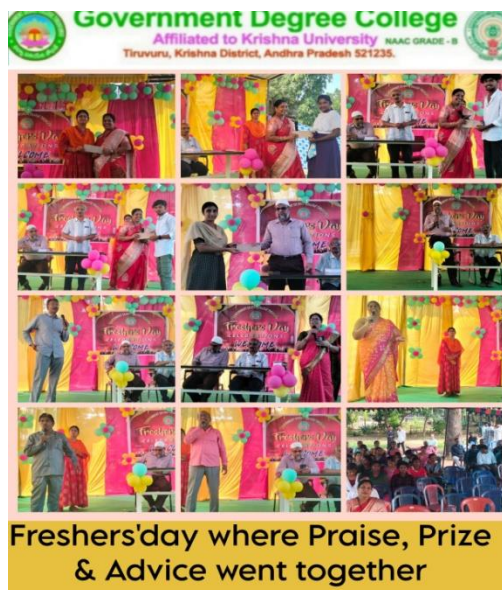
(ఎ) వలనలు :

ఒక ప్రదేశంలో నివసించిన ప్రజలు అల్పంగా అభివృద్ధి చెందిన మరొక ప్రదేశానికి విద్యా వ్యాపారాలకు నిమిత్తమౌ మరియు ఉపాధి విమిత్తమౌ వలన వెళ్ళడం నహజము. అప్పుడు ఆ రెండు భాషల మధ్య అదాన ప్రధానాలు ఆరుగుతాయి.

ఉదా : కమిశలు, కన్యూగీలు, మహారాష్ట్రలు మన రాష్ట్రంలోనికి మన ఆంధ్రులు ఇతర ప్రాంతాలకు



Fresher's Day celebrations – 2024 Nov-2. The Fresher's Day celebrations at GDC, Tiruvuru were held with great enthusiasm on Nov, 2, 2024. The college premises were filled with a festive atmosphere as both new and old students gathered in celebrations. The event was presided over by the principal Dr.M.suseela Rao who emphasized the significance of the student phase in one's life. He noted that upon entering a degree program students are regarded as mentally mature individuals. He further discussed the importance of assessing key factors in every subject understanding the future and making plans for success. The principal also highlighted the college's rich history and infrastructure, and stressed the need for NAAC recognition. The vice principal Sri.Syed. Abubakar IQAC co-ordinator, Sri.D. Raghuram Parasad , Telugu lecturer, Dr.Y.Viajayananda Raju NSS unit officer. Dr.B. Veeraju highlighted the leadership qualities, potential and career prospects available to students, along with opportunities for higher education. During the event, Smt.R.Deepa, lecturer in English presented cash prizes to students who secured the top two positions in English semester end exams and various cultural performances were organized by the students.

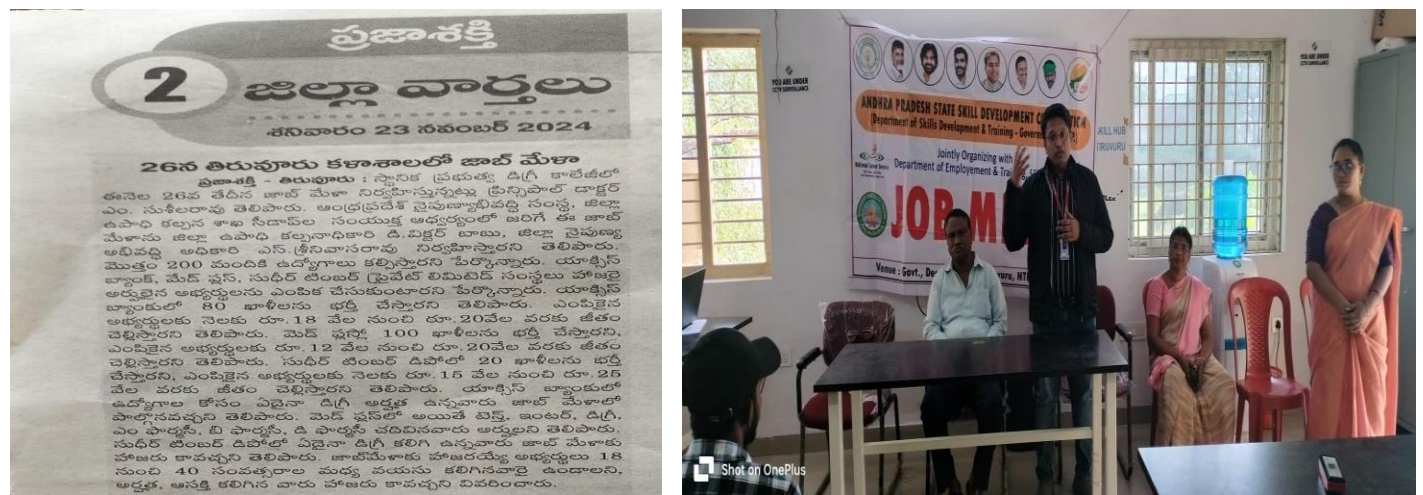




The 75<sup>th</sup> Constitution Day was celebrated by the Dept of political science on 26<sup>th</sup> Nov, 2024. This day is observed to commemorate 75 years of the adoption of the Indian constitution during the event, the principal, Dr.M. Suseela Rao, highlighted the significant contribution of Dr. B.R.Ambedkar the chief architect of the Indian constitution, particularly in advocating for the rights of backward classes. He encouraged the students to draw inspiration from. Dr. Ambedkar's teaching Ravindra Babu lecturer in political sciences explained the theme of for constitution day 2024, which centered on the relationship the constitution and national unity. The vice principal, IQAC co-ordinator, faculty members and students participated in the program, contributing to its grand success.



**Job mela:-**26<sup>th</sup> Nov, 2024. A Job fair was orgained at GDC, Tiruvuru on 26<sup>th</sup> Nov, 2024, under the auspices of the District Employment generation Dept, AP Skill Development Agency DRDA and the SEED app to provide Job opportunities for unemployment youth. The district employment generation officer victor babu, district Skill Development Institute officer, and the college principal, Dr.M. Suseela Rao addressed the participants. They highlighted the participation of leading companies such as Axis Bank, Med Plus and Sudhir Timber Pvt.LtD which conducted interviews. A total of 37 candidates attended the interviews of which 18 were selected in the Job drive.





A Research Article of Dr.R.Praveen Dattu has been accepted in web of science Journal and will be published in January 2025. His paper on current trends, in fish vaccination will be published in web science journal of exp. Zool. India with ISSN0972-0030, volume -28, No.1. The college principal, staff & students expressed their admiration for his exceptional enthusiasm and zeal towards research work.

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## CURRENT TRENDS, INNOVATIVE ADVANCEMENTS AND FUTURE PROSPECTS OF FISH VACCINATION: PREVENTIVE AND CONTROL STRATEGIES OF VACCINES AGAINST INFECTIOUS DISEASES IN FISH

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**ABSTRACT :** Fish farming is rapidly becoming one of the pivotal sectors in the agriculture economy all over the World. Continuously escalating human population, good quality and healthy animal protein (especially with the healthy fats) at reasonably low costs are driving forces for the ever-increasing demand for aquaculture industry. However, the intensive culture of fish with high density of fish populations in culture ponds also make them vulnerable to the hasty transmission and spread of pathogenic agents in aquaculture. During the dawn period, when infectious diseases encountered the aquaculture ponds, in general, antibiotics or chemotherapeutic drugs were the only option for disease treatment and even sometimes for disease control and prevention. Preventive procedures have become more and more substantial as part of bio-security in aquaculture. Prevention of infectious diseases by administering vaccines is primarily important in aquaculture industry where the high density of population are at greater risk and where treatment is a very challenging task in terms of practical, procedural and economic points of view. Vaccination is in general, considered as a safe and cost-effectively adequate preventive method as vaccines are natural biological components and that they have no residue in the product or environment and therefore they do not generate a disease resistant organisms. Thus it contributes to a sustainable aquaculture with little or no use of antibiotics. Vaccination is the well-ordered method to prevent viral, bacterial diseases and some extent parasitic diseases. In the year 1938 Sniieszko *et al.*, initially reported about protective immunity in carp fish, which were previously immunized with *Aeromonas punctata*. In 1942, the first inactivated vaccine, *Aeromonas salmonicida* made available for commercial use in aquaculture. After that a subsequent technological advancement in vaccine production in aqua-farming has developed very rapidly. Fish vaccination widely used in aquaculture since the 1980s to prevent infectious diseases. In recent days, reasonably large number of vaccines commercially available in the market for fish which including mono-valent, multi-valent, or mixed vaccines and live attenuated, inactivated or heat killed and genetically engineered vaccines for viral and bacterial diseases. Currently, most commercially available vaccines in aqua-farming are inactivated. Still, the basic technology for vaccine manufacturing is inactivation of virulent particles of wild-type pathogens. However, in aquaculture, live attenuated vaccines provides a lot of benefits over inactivated vaccines viz., simple vaccination, manufacturing costs are low, long-drawn-out immunity, delivery mechanism is quick and required immunization dose is in little amount. In current era, more advancement in immunology, molecular biology and biotechnology, there more scientific means for the manufacturing of aquatic vaccines including recombinant technology, live vector vaccine preparation through genetic engineering and nucleic acid vaccine technology, vaccine preparation through gene deletion attenuated technology and edible plant based vaccine manufacturing technology, etc. Continuous diminution in costs of technological innovations (for example, sequencing of genome, sophisticated antigen screening, extensive progress in cell culture techniques etc), the progress in antigen expression and delivery mechanisms, and the immense growth of fundamental knowledge on mucosal immunity of fish, vaccines in aqua field are jump to make out rapid advancement in the coming years. Advancement in emergent greatly efficient mucosal vaccines and subsequent adjuvants is a significant direction for future hope and optimizing delivery methods of vaccines will certainly facilitate the progress of new vaccines. Lack of research reviews on new and recent innovative technologies on fish vaccine, there is a wish for a comprehensive outline of where the field is currently. This paper aims to review insights into the present status of available licensed vaccines against bacterial, viral and parasitic diseases of fish, vaccine administration techniques, and also addresses recent innovations in advancements of vaccine development and future insights.

**Key words :** *Aeromonas punctata*, Aqua-farming, immunity, monovalent vaccines, vaccination.

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## INTRODUCTION

Although, intensive aquaculture is progressing in high scale industrial production, it is also open the doors for disease outbreaks including several viral, bacterial and parasitic pathogens. Fish are susceptible to a wide range of bacterial, viral, fungal and parasitic diseases and it is further enhanced by high density fish population in intensive culture practices. Fish health is strongly influenced by the quality of the aquatic environment. Early detection of diseases can head of the most common conditions, but as with humans, prevention is always better than cure. So, it requires effectual vaccination mechanism in order to avert importunate and emerging parasitic diseases in aquaculture field. When illness set in aqua-farming operations antibiotics and chemotherapeutics were used to relieve symptoms and even disease prevention which leads to antibiotic resistance along with other side effects. To overcome these consequences, vaccination is emerging as a reliable and standardized method to induce immunity in host organism against viral and bacterial outbreaks. The ideal vaccine is expected to be safe, effective, economical, and easily administered. The fish vaccination industry continually publishes new information on fish immunology and vaccinology, contributing to the development of vaccine formulation and efficacy (Rathor and Swain, 2024). The initial experiments were done by Sniieszko *et al.* (1938) on protective immunity in carp which were previously immunized with *Aeromonas punctata*. In the year 1942, after introduction of the *Aeromonas salmonicida* vaccine in aqua-farming there is a rapid growth in vaccination. And after that, in 1976 the first fish vaccine approved by Department of Agriculture, United States, which is for

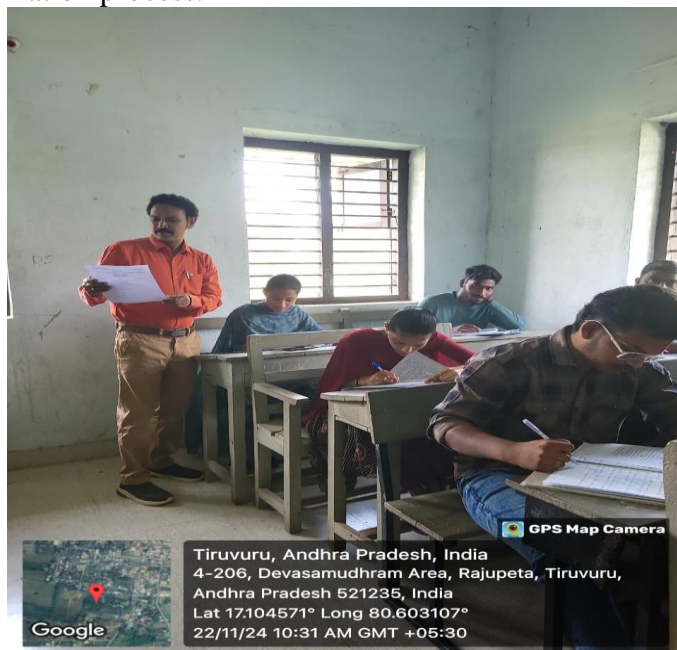
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2022; Velazquez-Meza *et al.*, 2022). *Aeromonas hydrophila* is the most prevalent causative pathogen, many of the times which create outbreaks in aquaculture. Meanwhile, viruses like beta-nodavirus and iridovirus and bacteria including *Vibrio vulnificus*, *Cryptocaryon irritans* are more commonly affect the marine cultured fish species and in recent times the emerging diseases of tilapia lake virus (TiLV) outbreaks were reported to affect both wild (Stentiford *et al.*, 2020) and cultured tilapia (Gudding and Van Muiswinkel, 2013). A great economical loss occurring in the aquaculture practices due to disease causing microorganisms. However, at some level spread of these infectious agents could be controlled by using of brood stock from specific pathogen free (SPF) organisms, optimization in the feed, improved management practices like good quality sanitation (Grisez and Tan, 2007). In general, antibiotic drugs or chemotherapeutics are using for disease treatment. But, there are some clear drawbacks in such treatment including drug resistance issues and safety concerns (Sneeringer *et al.*, 2019). Now a day, aquaculture farmers are aware of vaccination importance and have been practicing vaccination in aquaculture to prevent the spread of several bacterial and viral diseases (Ma *et al.*, 2019). Many mono-valent or multi-valent bacterial and viral vaccines have been manufactured productively and commercialized (Mohamed and Soliman, 2013). In earlier reports of Ma *et al.* (2019) and Mondal and Thomas (2022), they mentioned that the vaccination had turn into not only the most cost-effective but also sustainable approach of controlling numerous infectious fish diseases.

Vaccination plays a central role in large scale commercial aquaculture industry and has been a key



Dr. N. ChandraBabu, lecturer in Botany was appointed as a member of the university squad responsible for inspecting examination centers at Tiruvuru. From 21 November to 30th Nov, 2024. This position involves ensuring that the examination centers comply with all necessary regulations, maintaining academic integrity, and addressing any issues that may arise during the examination process.



Dr. B. Veeraju, distinguished lecturer in Commerce delivered a guest lecturer on the topic “**Social Media Abuse and Cyber Bullying**”. On Dec-30, 2024. During the session, he addressed the students of BA, B.Com, & BSC and emphasized the significant harm caused by cyber bullying, particularly in the context of sending messages on whatsapp and sharing personal information online. He stressed the importance of being vigilant and cautious when communicating through text messages and sharing content on social media platforms. His insightful talk underscored the need for individuals to safeguard their privacy and well- being in the digital age. He emphasized the importance of the government taking prompt and decisive measures to effectively regulate ethical hacking practices & combat the growing issue of cyber bullying, ensuring protection of individuals privacy and security in the digital world. The faculty and students actively participated in the program by engaging and discussing the potential consequences of online misconduct.





