All the UG and PG programmes of JMJ College attain high level of result and academic achievements with enriching programme outcomes. The students empower themselves from department learning to independent learning by the end of III year degree programmes and II year PG programmes.

The Programme Outcomes (PO), Programme Specific Outcomes (PSO) are given below.

**PO1: B.Sc. Programme:** The B.Sc programme enabled the students to enhance their critical thinking, during the three year period of study and the curriculum stimulates the mental thoughts and assumptions of the students. This helps the students to take up practical work and compare the results with their assumptions, there by leading to accuracy and validity of the practical knowledge. This Analysis leads to take decisions at intellectual, organizational and personal from different perspectives of life. Most of the students are getting selected for placements.

**The level of attainments for BSc Programme is : 86%**

**PO2:** All the UG programmes have English and Telugu / Hindi / Sanskrit as compulsory language subjects. The motto behind is to improve the language skills like listening, speaking, reading and writing of all students in the class. The college established an English language laboratory to give practice in vocabulary, accent, usage and communicative skills. This program is carried out with the help of Oral Software. This helped the students to develop better communication skills in English. The second language is generally the mother tongue i.e. Telugu or Sanskrit or Hindi or Tamil. These subjects promoted culture, customs, moral and literary values in the students.

**PO3: B.A. Programme:** The curriculum of the B.A programme mainly focuses on social interaction, specially History and Political Science. It helped the students to know history, culture, traditions of India as well as other countries in the world.

**PO4:** The programmes with humanity subjects specifically political science throws light on effective citizenship. This enabled the students to develope an ideal society with social concern and equity cantered nation. This type of learning triggered the spirit of the students to act upon social issues and participate in civic life through volunteering.

**PO5:** All UG programmes curriculum emphasise on values and ethics. The students learnt to value their life and others and to give importance to values and coustems and maintaining good rapport with others like harmony in the family and society – harmony in human – human relationship, understanding the harmony in the family – the basic unit of human interaction.
Trust and respect as the foundational values of relationships. This course is covered in the I semester of the UG degree.

**PO6:** All UG programs throw light on to awake the students regarding a concept on “Environment and Sustainability”. The curriculum is designed in such a way to understand the issues of environmental contexts and sustainable development. To mention a few topics included are environment and natural resources, basic principles of ecosystem functioning, environmental pollution, human population and environment.

**PO7:** All UG programs offer elective papers in the V and VI semesters, namely importance of human values, professional ethics, a better understanding on Environmental studies, communication and soft skills information and communication technology. It improved analytical skills, entrepreneurship and leadership qualities in the students. These concepts are self directed and lifelong learning. The application of the learned skills by the candidates is everlasting context of socio-technological changes.

**The level of attainments for B.A Programme is : 93.4%**

**PO8: B.Com Programme:** A three year programme train the students to know Commerce and its applications in daily life.

- The students gained the knowledge financial accounting, management functions, budget and its preparation.
- They came know about the commercial geography of soil types, commercial crops, transportation facilities like land, air and water etc.
- Most of the students are getting placements in various reputed companies and banks.

**PO9:** The **B.Com programme with Computer Applications** enabled the students to gain skills in preparing the budget, computation of tax, preparation of balance sheet etc. with the help of computer system.

**The level of attainments for B.Com Programme is : 82.75%**

**PO10: B.B.A Programme** helped the students to know thw basics of management education

- This course improved their knowledge on international business, finance, real estate, computer information system, marketing or accounting.
- B.B.A programme Trained the students to work successfully in large or small organizations. i. e. sales executives, management trainees, research assistants, office executive officers, assistant managers.

**The level of attainments for BBA Programme is : 80%**
Course Outcomes for Certificate Courses

Course- Beauty Care Science-
CO1: Employment in Beautycare Centers.
CO2: Students learned to give beauty treatements like Waxing, Manicures, Use of products and Make-up as well as other cosmetic treatments.
CO3: The students learned different types of Hair-cuts, Color and Style

Course- Multimedia- Adobe Photoshop
CO1: Students learned Multi-media tools and Graphics File Formats
CO2: Learned Shadows, Highlights and Midtones of an image
CO3: Acquired the knowledge to use the elements and principles of design in multi-media.
CO4: Learned to demonstrate an advanced knowledge of Photo-editing including image, manipulation, color correction and compositions.

Course- Web Technologies
CO1: Students learned to employ fundamental computer theory to basic programming techniques.
CO2: They came to know the use of Fundamental skills, its maintain web server services required to host a website.
CO3: Students learned to incorporate aesthetics and formal concepts of layout and organization to design a website that effectively communicate using Visual elements.
CO4: Students learned the concepts of rollover buttons, multiple pages in single window, so as to use it in development of web pages.

Course- Tailoring
CO1: Students learned about commonly used small sewing tools, equipments for dress making process.
CO2: They learned to stitch their own garments like chudidhars, pant, frocks, napkins etc.
CO3: Students learned to run a tailoring business on their own.

Course- Medical Laboratory Assistant Training Program
CO1: Students are able to perform routine clinical laboratory procedures
CO2: Explored the job opportunities MLT programmes.
CO3: Learned to operate and maintain Laboratory Equipment, utilizing appropriate quality control and safety procedures.
CO4: Learned to do Blood grouping and Rh typing and Blood cross matching.
Course- NCC-I Degree
CO1: Students came to know about the job opportunities for B and C certificate holders like directly joining the defense courses as officers.
CO2: Developed character, comradeship, discipline, secular outlook, spirit of adventure and the ideas of selfless service and leadership skills.
CO3: Students understood the importance of joining in NCC to become responsible and confident person in their practical life.

Course - NCC-II Degree
CO1: Students learned about the various kinds of Civil and Defense services.
CO2: Students got the knowledge about the role of NCC cadets during disasters moment.
CO3: Acquired the technique for Fire fighting and the elementary precautions to combat and tragedy.
CO4: Learn to apply the trainings in practical situations.

Course: Quantitative Aptitude
CO1: Students learned to evaluate critically the real life situations by resorting to analysis of key issues and factors.
CO2: Able to read between lines and understand various language structures.
CO3: Able to demonstrate various principles involved in solving mathematical problems, mixed number coding and letter coding.

Course: Android Applications
CO1: Learned to use the development tools in the Android Applications.
CO2: Students received to create Apps for distribution on the Google play store.
CO3: Learned to send and receive SMS programmatically.
CO4: Students learned how to use Java Programming Language in Android Applications.

Course - Mushroom Cultivation
CO1: Students acquired Self Employment Skills
CO2: Learned to identify the fruiting stage and apply the life cycle and culture needs of many mushrooms to the garden.
CO3: Learn to apply Laboratory techniques to capture, culture and fruiting of many types of mushrooms in the home kitchen.
CO4: Students gained the knowledge of cultivated mushrooms, areas and production systems and production planning

Course- Yoga
CO1: Improved Physical Condition of the students through yoga
CO2: Students realized the value and benefits of an ongoing yoga practice.
CO3: Learned to do Asanas specific to students desired health benefits.
CO4: Learned to explore relaxation techniques to observe thoughts and to manage emotions and stress.

Course - Journalism
CO1: Students learned to write a variety of mass Media Products, including new stories, press releases and advertising copy.
CO2: Gained the knowledge to create and design emerging media products like blogs, digital video, social media and Multimedia.
CO3: Comprehended to apply relevant case law involving in journalism and other mass media issues.

Course - Fabric Embellishment
CO1: Students gained the knowledge of surface embellishment as used on innovative, fashion products.
CO2: Learned to know the significance of surface embellishment on textiles as value additions.
CO3: Students learned to prepare a sample of Screen Printing design by using Normal binder and Foil Binder
CO4: Students came to know the significance of embellishments on fashion and apparel products.

Course - Travel & Tourism
CO1: Students came to know various career opportunities in travel industry, especially in Andhra Pradesh.
CO2: Students learned about the travel Agencies, usages, Tourist accommodation, food catering and tourist Places in Andhra Pradesh.
CO3: Learn the skills necessary to achieve guest satisfaction and supervisory level job functions in travel and tourism careers.
CO4: Learned various Local and Global impact of tourism and industry.

Course - MS Office
CO1: Students learned to create documents in Microsoft Word and Presentations in Microsoft PowerPoint.
CO2: Students learned to create table and use them in real time applications.
CO3: Gained the knowledge to minimize, Maximize, move and resize the windows.
CO4: Access and work with calendars in Microsoft outlook.

Course - Tally
CO1: Students possess required skill to be employed as Tally Data Entry Operator.
CO2: Learned to enter accounting voucher entries bank statement and print financial statements.
CO3: Acquired the knowledge about company creation with two partners
CO4: Students came to know the importance of continuous practice to gain required skills for employability in the job market.

U.G - English Programme:
PSO1: Developing and integrating the use of four language skills, i.e. Reading, Listening, speaking and writing.
PSO2: Using English Language effectively for written and oral communication.
PSO3: Gaining the Knowledge of British and American Literature.

Course Outcomes:
- Learn to prepare Curriculum Vitae, Letter Writing and other communication skills.
- Students learn to communicate effectively and appropriately in real life situations.

U.G – Telugu Programme:
PSO1: Empower the knowledge of Telugu Language and Literature.
PSO2: Improve writing skills like short stories, stories, novels etc.,

Course Outcomes:
- Differentiate the methods of old and modern poetry thoughts.
- Understand the culture of old society and comparison with modern trends.

U.G – Hindi Programme:
PSO1: Students learn to read and write basic Hindi characters and their combinations.

Course Outcomes:
- Learn to communicate in everyday written and spoken contexts.
- They gained the knowledge of rich cultural resources available in Hindi which range from Hindi Literature to the world Films.

U.G – Sanskrit Programme:
PSO1: Learners gained advanced knowledge of ancient Indian religion, literature and History through the study of Sanskrit texts.
PSO2: Gained advanced command of the Sanskrit Language through advanced text reading.

Course Outcomes:
- Translation of Sanskrit literature into Telugu and vice-versa.
- Gained competence in writing skills and learned to do textual analysis of texts in Sanskrit.
B.Sc. Mathematics Programme:
PSO1: Students acquired the Knowledge of Differential Equations of first order and first degree Orthogonal Trajectories, Differential Equations of the first order, Understand the Concept of the Plane, The Line, Sphere, Cones, Cylinders and Conicoids.
PSO2: Learned the concept of Groups, Subgroups, Understand the Concept of Real Numbers, Sequences, Continuous Functions, Differentiation and Riemann Integration.
PSO3: Mathematical literacy in vector spaces, vector differentiation and vector integration.
PSO4: Learned to gain the Knowledge to apply the previous Knowledge on Integration & Differentiation to understand –Beta & Gamma functions and analyze the basic concepts of Bessel’s equations, Hermite Polynomials, Laguerre Polynomials and Legendre’s equation.

Course Outcomes:
The Students acquired
- The knowledge Analytical skills and Reasoning.
- Students understand Data analysis, interpretation and comparative studies of special functions
- Eligibility to PG education in mathematics.

B.Sc. Physics Programme:
PSO1: Apply the basic laws of physics in the areas of classical mechanics, Newtonian gravitation, Special Relativity, electromagnetism, geometrical and physical optics, thermodynamics and statistical mechanics.
PSO2: Analyze the quantum methods in the solution of problems involving atomic spectra, blackbody radiation, the photoelectric effect, X-ray emission, the structure of the atom, and one-dimensional potentials.
PSO3: Understand classical experimental techniques and modern measurement technology including analog and digital electronics, laboratory test equipment, optics, lasers, and detectors.
PSO4: The student develop good experimental technique, including proper setup and care of equipment, conducting experiments and analyzing results and make meaningful comparisons between experiment and theory.

Course Outcomes:
The Students attained the knowledge of
- Application of Newton’s laws of motion to modern technology like rocket development and its motion.
- Relating to thermodynamic knowledge the student gain the knowledge of refrigeration-cooling technology.
- Under optics gain the skills relating to laser beam technology, fiber optics, holography.
- Knowledge relating to A.C And D.C current, working of generator, dynamo, GM.
- As scientific assistant in space research and Progression to PG education in Physics.

B.Sc. Chemistry Programme:
PSO1: Understand the structural difference among solids, liquids, gases and solutions
PSO2: Gained the Knowledge in electrical and thermal properties of d-block elements through Free Electron Theory, Valency Bond Theory and Band Theory
PSO3: Analyze the structures of glucose, fructose and sucrose and their chemical properties
PSO4: Use spectrophotometer to analyze known and unknown organic and natural compounds.

Course Outcomes:
The Students gained
- The knowledge relating to analysis of different drugs quantitatively
- Job opportunities as project assistant in research laboratories, forensic labs, Pollution control board and progression to PG education in Chemistry.

B.Sc. Botany Programme:
PSO1: The students gained the knowledge relating to the interrelations hips of different plant groups and their evolutionary tendencies
PSO2: The students acquired the knowledge enough to differentiate animals plants and Micro organisms with their distinguishing characteristics.
PSO3: Student of the gained the Knowledge and acquired capability of applying the Knowledge in the areas of like Agriculture, Plant Medicines, Horticulture and Tissue culture.

Course Outcomes:
The Students acquired the knowledge
1. Relating to medicinal botany, cell biology, genetics plant physiology, taxonomy, economic botany.
2. Progression to PG education in botany, Environmental science, biotechnology, bioinformatics, biochemistry, microbiology, genetics.
3. Self employment through mushroom cultivation, nursery activity.

B.Sc. Zoology Programme:
PSO1: Learned about Ecological adaptations and the knowledge of inter relationships of the animal with other groups like plants and microbes.
PSO2: The students gained practical knowledge about the specimen observation and its classification depending on the observed characteristics, Determination of PH, Alkalinity, concentration of oxygen in the given water sample and also analysis of human blood regarding types of blood groups( A,B,AB,O), Estimation of Haemoglobin, total count of RBC, WBC etc.
PSO3: The students understood the applications of Zoology in Aquaculture, Vermiculture, Sericulture, Poultry Science and Fundamentals of Clinical Science and Immunology.

Course Outcomes:
- Attained the knowledge relating to cell biology, genetics, clinical science, physiology.
- Progression to PG education in Zoology, aquaculture, Environmental science, Biotechnology, bioinformatics, biochemistry, microbiology, Human genetics, Marine biology.
- The Students get employment by industries/self employment in poultry, veterinary, Aquaculture.

B.Sc. Home science Programme:
PSO1: Understand the Role of Microbes and biochemical changes in human health
PSO2: Enhances Nutritional knowledge required to be healthy physically and psychologically.
PSO3: Equips knowledge from fiber to fabric which is one of the basic human need
PSO4: Augment the young minds with managerial skills to lead a better family life.

Course Outcomes:
- Can establish own enterprises like boutiques, small scale industries, preschool, day care centers etc.
- Students can do interior decoration and event management Programme.
- Gained the Knowledge to employ child development project officer in women development and child welfare departments, NGOs, and child guidance clinics.
- Job opportunities as dietician in corporate hospitals and progression to PG education.

B.A. History Programme:
PSO1: Understand the behaviour of Indian culture, Indian different kingdoms Religious movements ashoka dharma policies
PSO2: Analyse the Age of Rationalism and Humanism the World between 15th & 18th, Modern Andhra
PSO3: Understand Modern Andhra History & Travel & Tourism management

Course Outcomes:
- Learned about the Information relating to social and culture of Mouryan Empire, Gupta’s, Allauddin khlilji administrative reforms etc.
- obtained the knowledge of socio-religious reforms movement in 19th century, results of 1857 revolt.
- Knowledge of travel agencies and details of tourism accommodation, food catering etc.
- Received information about tourist places and its policies in India.
B.A. Economics Programme:
PSO1: Understand the behavior of Indian and World Economy inflation, unemployment and poverty.
PSO2: Analyze macro economic policies including fiscal and monetary policies in India.
PSO3: To understand consumer and producer behaviors, price determination, market systems, distributions.

Course Outcomes:
- Students are able to explain different concepts of unemployment, poverty, inequalities, analysis regarding A.P state economy, issues in finance sector, analysis on maximization theories, public revenue and debt and theories of taxation.
- Progression of the students to Masters degree and competitive examinations.

B.A. Politics Programme:
PSO1: Analyze the concepts of political science and relationship between political theories and political institutions, Indian constitution and dynamics of Indian political system.
PSO2: Understand the various political thoughts by Western thinkers as well as Indian thinkers.
PSO3: Students gained the knowledge regarding fundamental rights mentioned in Indian Constitution and trends in public administration.

Course Outcomes:
- Learn to analyze the functions of Indian President, state Chief Minister, powers of election commission.
- Analysis of different ideologies of Plato, Hobbes social contract theory, Rousseau’s
- Theory concept of Kautilya, B.R. Ambedkar political philosophy, Dr. Jaya Prakash Narayan’s political thought.
- Able to explain the differences between modern and post modern administration.
- Progression to the students to Masters Degree, employment, competitive examinations.

B.Com. Commerce Programme:
PSO1: Basic concepts in Financial Accounting, Taxation, Vouching.
PSO2: Duties, rights and liabilities of Auditor.
PSO3: Management Functions.
PSO4: Preparation of Cost sheets.

Course Outcomes:
- The student attained the knowledge relating to accounting concepts, double entry system, accounting formulas, closing accounts.
- Can prepare the cash book, preparation trade bills, cash and passbook difference.
• Ledger book maintenance and trail balance.
• Employed as accountant in business firms, organizations etc.
• Progression to PG education in commerce / Employment.

B.B.A Programme:
PSO1: Basic Concepts in Financial Accounting, Taxation and Vouching
PSO2: Duties, Rights and liabilities of Auditor
PSO3: Management Functions

Course Outcomes:
• Knowledge of vision and management principles, international business, finance, real estate, computer information system, Marketing or accounting.
• Students acquire practical management training, as sales executives, management trainees, research assistant, office executive etc.
• Progression to M.B.A PG Programme/Employment.

B.Sc. Computer Science Programme:
PSO1: Understanding of the principles and working of the hardware and software aspects of Computer systems.
PSO2: Understand, analyze and develop computer programs in the areas related to algorithms, multimedia and web design for efficient design of computer-based systems of varying complexity.
PSO4: Understanding the applications of computer Science in Office work, Software development, Photo Studios and Internet centers.

Course Outcomes:
• The ability to interpret the fundamental concepts and methodology of computer systems.
• Students can understand the functionality of hardware and software aspects of computer systems.
• Students able to complete successfully program small-to-mid-size programs on their own and attained the programming languages of C, C++, Java, DS, C#. Net, DBMS, Web Technologies.
• Methodologies of software systems. Possess competent skills and knowledge of software design process.
• Career in an information technology oriented business or study in computer science.
• Progression to P.G Programmes.
B.Sc. Statistics Programme:
PSO1: Understand the concept of mean, mode, central tendency, analysis of categorical data, probability, and random variables.
PSO2: Understand the Bivariate random variable, correlation and regression, Partial correlation, and Exact sampling distributions.
PSO 3: Sampling techniques, Analysis of variance, time series, Indian statistical system, Importance of SQC, Acceptance sampling, Linear programming problem and Reliability.
PSO4: Design of experiments, Index numbers, Vital statistics, Demand analysis, Transportation problem, Assignment problem, Sequencing problem and Game theory.

Course Outcomes:
- The students attainment relating to analysis of strategy in game theory in industry.
- Sampling technique in statistical quality control - assessment of quality of the product.

PG – M. Sc. Organic Chemistry Programme:
PO1: Students gained functional knowledge of the fundamental theoretical concepts and experimental methods of Chemistry.
PO2: Students acquired knowledge to analyze on unknown organic compound by using spectroscopy and synthesize the compound by synthetical approach.
PO3: They learned to handle the instruments like TLC, HPPL, UV Spectro photo meter etc.
PO4: They explored various job opportunities in the Govt. sectors such as IOCL, NPTC, ONGC, DRDO, ISRO, Forensic laboratories, AP GENCO etc. and the knowledge of research area within Chemistry.

PSO1: Understand the Concept of Aromaticity to Organic Compounds and Natural Products
PSO2: Explain the properties of metal Complexes and Transition Elements.
PSO3: Analyze the indicators and Sampling techniques.
PSO4: Use spectrophotometer to analyze known and unknown organic and natural compounds. Through UV, IR NMR Mass data
PSO5: Applies the uses of drugs and Antibiotics in daily life.

Course Outcomes:
- Students are able to analyze the sample and to control or decrease the byproduct – Impurities in various drug samples.
- As a quality controller in food industry to improve the quality of food products.
- They get knowledge in handling in instrumentation, structural determination of unknown compound by using spectral data.
- Able to analyze the synthesis of unknown organic compound by disconnection approach
- Eligibility towards research / employment.

The level of attainments for MSc Chemistry Programme is: 59.2%
P.G M.Sc Mathematics programme:
PO1: Students gained knowledge of advanced models and methods of Mathematics.
PO2: Students learned the skills of comprehending, analysing, modelling and solving given problems at a high level of abstraction based on logical and structured reasoning.
PO3: Students got better employability in software companies.
PO4: Empowered to take up Academic research.

PSO1: Understand the concept of Group theory - Sylow's theorem - Ring Theory - Homomorphisms - Ideals and quotient Rings - Euclidean rings
PSO2: Apply the previous Knowledge on Continuity, continuous functions-continuity, connectedness. Discontinuities, Monotone functions, Mean value theorems, L’ Hospital’ s rule. Derivatives of higher Order, Taylor’ s theorem.
PSO3: Understand the concept of two phase Method for artificial variables ; phase-I; Phase-II; Numerical examples of the two phase method, unbounded solution in the primal computational procedure for standard form I.II,III.

Course Outcomes:
• Students are able to apply mathematical methods and models to study various problems that arise in industry and business with an emphasis on developing computable solutions that can be implemented.
• Eligibility towards research / employment.
• Students gained the knowledge in abstract algebra, Number theory, advanced mathematical methods.

The level of attainments for MSc Programme is: 88.6%

P.G. M.Com Programme:
PO1: Students are equipped with a broad base of Commerce knowledge and its applications in contemporary business contexts.
PO2: Students develop advanced theoretical knowledge and research capabilities.
PO3: Students received better career opportunities and academic research knowledge
PSO1: Acquire strong subject- matter, expertise in finance, financial instruments and markets
PSO2: Develop advanced theoretical knowledge and research capabilities in their
PSO3: preparation for academic and research focused careers.
PSO4: Pursuing professional courses such as CA, CS, CMA, CFA etc.
PSO5: Able to handle computer based software in areas of Accounting, Taxation, and Banking.
PSO6: Ability to work in teams with enhanced communication and inter-personal skills.

Course Outcomes:
• Students gain the knowledge relating to accounts, statistics management, taxation, banking, economics, I.T, financial instruments and markets.
- Student acquires not only the theoretical knowledge but also practical input in commerce and management, research capabilities in academic and other careers.
- Able to handle computer based jobs in the areas of accounting, taxation and banking.
- Pursue professional courses such as CA(chartered accountant), CS(company secretary), CMA(cost and management accountant), CFA(), ICWA(institute of cost and work accounting).

**The level of attainments for M.Com Programme is: 91.75%**

**P.G. M.A English Programme:**

**PO1:** Students learned to demonstrate an appropriate level of expertise in literary history, literary theory, and rhetoric.

**PO2:** Students enhanced their critical and analytical skills in the interpretation and evaluation of literary text.

**PO3:** Students improved their command of academic written and oral English, including the abilities to organize and present material in a cogent fashion, formulate and defend original arguments and employ effectively the language and vocabulary.

**PO4:** Enhanced their attitude towards literary research.

**PSO1:** An Awareness of the literary past
**PSO2:** Appreciate the importance of major literary genres, subgenres and periods
**PSO3:** Develop and carry out research projects to inculcate research aptitude
**PSO4:** Recognize and comprehend different varieties of English

**Course Outcomes:**
- The students gain teaching skills like rendering the lecture, giving away seminar, explaining the novels and characters in it and will be able to demonstrate it with small skits.
- The student will gain the analysis process even in terminology, vocabulary origin, usage comparisons of classics to modern poetry, awareness of culture and civilization.
- Students develop the language skills like listening, speaking, reading and writing.
- Eligibility towards research / employment.

**The level of attainments for M.A English Programme is: 100%**

The attainment level of the college during the last 5 Year Period is above 85%. The PG programme examinations are being conducted by the affiliated university, Acharya Nagarjuna University. PG Courses attained 100% result.