



J.B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Internal Quality Assurance Cell

Course Outcomes

J.B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Department of Marathi

Course Outcomes

B.A. First Year

**अभ्यासक्रम – २०१३, डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ, औरंगाबाद.
बी.ए. प्रथम वर्ष (द्वितीय भाषा) Semester I & II**

गद्य पद्य आणि उपयोजित मराठी. अभ्यासपत्रिका १ ली व २ री	
Co1	विद्यार्थ्यांचे भाषिक आकलन व आविष्करण समृद्ध होते.
Co2	वाङ्मयीन व भाषिक कौशल्य अध्ययन, शब्दार्थ, वाक्यार्थ यांचे संदर्भ सापडतात.
Co3	मराठीतील कवी, लेखकांचा व त्यांच्या कलाकृतींचा परिचय होतो.
Co4	व्यवहारीक भाषिक कौशल्ये विकसित होतात.
Co5	भाषेचे कार्यालयीन उपयोजनही वर्दीगत होते.
Co6	विद्यार्थ्यांच्या संवाद, वाचन, लेखन व विचारांचा स्तर उंचावतो.

बी.ए. प्रथम वर्ष (ऐच्छिक) P-I, Semester I

काव्यात्म साहित्य पेपर- MAR००१	
Co1	आधुनिक कवींच्या कविताचा परिचय होतो
Co2	मराठी काव्य प्रवृत्ती व प्रवाह समजतो
Co3	साहित्याची आवड निर्माण होते, आस्वादाची क्षमता विकसित करता येते.
Co4	मूल्याधारित कवितेच्या माध्यमातून सामाजिक बांधिलकीची मूल्ये रुजविता येतात.
Co5	काव्यात्म साहित्याचे स्वरूप विद्यार्थ्यांच्या लक्षात येते.
Co6	काव्यात्म साहित्यातील मूल्यांची ओळख विद्यार्थ्यांना होते.

बी.ए. प्रथम वर्ष (ऐच्छिक) P-II, Semester I

नाट्यात्म साहित्यपेपर- MAR१०२	
Co1	आधुनिक नाट्यात्म साहित्याचा परिचय होतो.
Co2	मराठीची नाट्यात्म साहित्यप्रवृत्ती व प्रवाह समजतो.
Co3	विद्यार्थ्यांमध्ये साहित्यविषयक जाणिवा निर्माण होतात.
Co4	नाट्यात्म साहित्याच्या माध्यमातून सामाजिक बांधिलकीची मूल्ये रुजविता येतात.
Co5	साहित्याची आवड, गोडी निर्माण होऊन, आस्वादाची क्षमता विकसित करता येते.
Co6	नाट्यात्म साहित्य या वाङ्मय प्रकारची विद्यार्थ्यांना ओळख होते.

बी.ए. प्रथम वर्ष (ऐच्छिक) P-III, Semester II

कथात्म साहित्य पेपर MAR१०३	
Co1	विद्यार्थ्यांमध्ये साहित्यविषयक जाणिवा निर्माण होतात.
Co2	विद्यार्थ्यांना साहित्याच्या निरनिराळ्या साहित्यप्रकारांची माहिती होते.
Co3	कथा या वाङ्मय प्रकारची विद्यार्थ्यांना ओळख होते.
Co4	साहित्याची आवड, गोडी निर्माण होऊन, आस्वादाची क्षमता विकसित करता येते.
Co5	कथात्मसाहित्याचे स्वरूप विद्यार्थ्यांच्या लक्षात येते.
Co6	साहित्याच्या माध्यमातून सामाजिक बांधिलकीची मूल्ये रुजविता येतात.

बी.ए. प्रथम वर्ष (ऐच्छिक) P-IV, Semester II

मुहित माध्यमासाठी लेखन कौशल्ये पेपर - MAR१०४	
Co1	विद्यार्थ्यांमध्ये माध्यमांविषयीची जिज्ञासा निर्माण होते.
Co2	विद्यार्थी विविध माध्यमांविषयीची माहिती घेऊन समृद्ध होती.
Co3	मुद्रित माध्यमांच्या प्रकारांची विद्यार्थ्यांना माहिती होते.
Co4	वृत्तपत्रांचे महत्व आणि त्याचे स्वरूप विद्यार्थ्यांच्या लक्षात येते.
Co5	बातमी लेखन, अग्रलेख, जाहिरात, मुलाखत या लेखन प्रकाराची माहिती विद्यार्थ्यांना होते.
Co6	विद्यार्थ्यांमध्ये लेखन कौशल्य निर्माण होते.

बी.ए. द्वितीय वर्ष (द्वितीय भाषा) Semester III & IV

गद्य पद्य आणि उपयोजित मराठी. अभ्यासपत्रिका ३ व ४ थी	
Co1	मराठी उपयोजनाच्या एकूण प्रकारांविषयी विद्यार्थी अवगत होतात.
Co2	गद्य-पद्यातील अंतराची विद्यार्थ्यांना ओळख होते.
Co3	साहित्य विषयक अभिरूची विद्यार्थ्यांमध्ये निर्माण होते.
Co4	जीवन वसमाजाकडे डोळसपणे पाहण्याची दृष्टी प्राप्त करता येते.
Co5	साहित्यातील विविध प्रवाह लक्षात येऊन जिज्ञासूवृत्ती वाढते.
Co6	साहित्यकृतीच्या आशय-अभिव्यक्तीचा परिचय होतो.

बी.ए. द्वितीय वर्ष ऐच्छिक P-V, Semester III

आधुनिक मराठी वाङ्मयाचा इतिहास (इ.स. १८०० ते १९२०) पेपर -MAR१०५	
Co1	इ.स. १८०० नंतरच्या वाङ्मयाचा इतिहासाचा सर्वांगीन अभ्यास करता येतो.
Co2	इ.स.१८०० ते इ.स.१९२० या कालखंडाची सामाजिक व सांस्कृतिक पार्श्वभूमी लक्षात येते.
Co3	विचारप्रणाली, सामाजिकता यावरील प्रभावाचा अभ्यास करता येतो.
Co4	या कालखंडातील वाङ्मय निर्मिती, पार्श्वभूमी उलगडते.
Co5	प्रेरणा, प्रवृत्ती, प्रवाह, साहित्यकृती या अनुषंगाने विद्यार्थ्यांचा अभ्यास होतो..
Co6	भाषांतरित वाङ्मय, नियतकालिके, निबंधमाला वैचारिक वनिबंध, कथा, कादंबरी, नाटक, काव्य, चरित्र आणि आत्मचरित्र या वाङ्मय प्रकारांची ओळख होते.

बी.ए. द्वितीय वर्ष ऐच्छिक P-VI, Semester III

दृक श्राव्य माध्यमांसाठी लेखन कौशल्ये पेपर-MAR१०६	
Co1	विद्यार्थी दृक श्राव्य माध्यमांसाठी लागणाऱ्या लेखन कौशल्यांचा अभ्यास करतो.
Co2	दृकश्राव्य या दोन वेगवेगळ्या माध्यमांचे निराळेपण विद्यार्थी समजून घेतात.
Co3	इलेक्ट्रॉनिक मिडीयातील दूरचित्रवाहिन्या, नभोवाणी यांचा परिचय होतो.
Co4	संगणक क्षेत्रातील घटक विद्यार्थी ज्ञात करून घेता येतात.
Co5	दृकश्राव्य माध्यमांसाठी लागणाऱ्या लेखन कौशल्याची माहिती विद्यार्थ्यांना होते.
Co6	अभिव्यक्ती स्वातंत्र्य समजते.

बी.ए. द्वितीय वर्ष ऐच्छिक P-VII, Semester IV

आधुनिक मराठी वाङ्मयाचा इतिहास (इ.स. १८०० ते १९२०) पेपर- MAR१०७	
Co1	इ.स. १८०० नंतरच्या वाङ्मयाचा इतिहासाचा सर्वांगीन अभ्यास करता येतो.
Co2	इ.स.१८००तेइ.स.१९२०याकालखंडाचीसामाजिकवसांसकृतिक पार्श्वभूमी लक्षात येते.
Co3	विचारप्रणाली, सामाजिकता यावरील प्रभावाचा अभ्यास करता येतो.
Co4	या कालखंडातील वाङ्मय निर्मिती, पार्श्वभूमी उलगडते.
Co5	प्रेरणा, प्रवृत्ती, प्रवाह, साहित्यकृती या अनुषंगाने विद्यार्थ्यांचा अभ्यास होतो..
Co6	भाषांतरित वाङ्मय, नियतकालिके, निबंधमाला वैचारिक वनिबंध, कथा, कादंबरी, नाटक, काव्य, चरित्र आणि आत्मचरित्र या वाङ्मय प्रकारांची ओळख होते.

बी.ए. द्वितीय वर्ष ऐच्छिक P-VIII, Semester IV

साहित्य प्रकारांतर आणि साहित्याचे माध्यमांतर पेपर-MAR१०८	
Co1	साहित्याच्या विविध प्रकारांची माहिती विद्यार्थ्यांना होते.
Co2	विद्यार्थी माध्यमांचे महत्व लक्षात घेता.
Co3	साहित्याच्या प्रकारांची माहिती विद्यार्थ्यांना होते.
Co4	साहित्याचे माध्यमांतर करण्यासाठीचे लेखन कौशल्य विद्यार्थ्यांमध्ये निर्माण होते.
Co5	माध्यमांसाठीच्या विविध लेखन प्रकारांचा परिचय विद्यार्थ्यांना होतो.
Co6	संगणक क्षेत्रातील घटक विद्यार्थी ज्ञात करून घेता येतात.

बी.ए. तृतीय वर्ष P-IX, Semester V

भारतीय साहित्यविचार पेपर पेपर-MAR१०९	
Co1	विद्यार्थ्यांना साहित्याच्या स्वरूपविषयीचे आकलन होते.
Co2	विद्यार्थी साहित्य प्रयोजने माहिती करून घेता.
Co3	विद्यार्थ्यांना साहित्याच्या निर्मिती प्रक्रियेविषयी माहिती होते.
Co4	साहित्यातील शब्द शक्तीविषयी विद्यार्थी ज्ञात होतात.
Co5	साहित्य शास्त्राशी जवळून ओळख करता येते.
Co6	साहित्य समीक्षेचा नवा दृष्टीकोन अभ्यासक म्हणून प्राप्त होतो.

बी.ए. तृतीय वर्ष P-X, Semester V

भाषाशास्त्र पेपर - MAR११०	
Co1	विद्यार्थ्यांना भाषेचे विज्ञान असते हे कळायला लागते.
Co2	विद्यार्थी भाषेचे स्वरूप समजून घेऊन भाषेविषयीचे त्यांचे आकलन वाढते.
Co3	भाषेबाबतचे समज, गैरसमज विद्यार्थ्यांना कळू लागतात.
Co4	भाषेबाबतचे समज, गैरसमज विद्यार्थ्यांना कळू लागतात.
Co5	भाषाविज्ञानविषयाचे आकलन करूनलेखन करता येते.
Co6	भाषेचे स्वरूप, वैशिष्ट्ये व लक्षणे यांचा अभ्यास करता येतो.

बी.ए.तृतीय वर्ष P-XI, Semester V

मध्ययुगीन मराठीवाड.मयाचा इतिहास (प्रारंभ ते १६००)पेपर- MAR१११	
Co1	वाडमयाच्या इतिहासाचे कालखंड विद्यार्थ्यांना ज्ञात होतात.
Co2	तत्कालिन सामाजिक, सांस्कृतिक स्थितीगती विषयीची माहिती विद्यार्थ्यांना होते.
Co3	तत्कालीन ग्रंथनिर्मितीची प्रेरणा विद्यार्थ्यांना लक्षात येते.
Co4	महानुभाव, वारकारी संप्रदायांची ओळख विद्यार्थ्यांना होते.
Co5	यादव काळ व बहामणी काळातील साहित्याची विद्यार्थ्यांना माहिती होते.
Co6	त्यांच्या प्रेरणा समजावून घेता येतात.

बी.ए.तृतीय वर्ष P-XII, Semester V

प्रकल्प लेखन भाग - १ पेपर - MAR११२	
Co1	विद्यार्थ्यांच्या वाचन, लेखन कौशल्याचा विकास होतो.
Co2	विद्यार्थ्यांची समीक्षात्मक दृष्टी विकसित होते.
Co3	विद्यार्थ्यांच्या संशोधनात्मक वृत्तीला चालना मिळते.
Co4	विद्यार्थी चौफेर वाचन करण्यास प्रवृत्त होते.
Co5	विचारांची प्रगल्भपणे मांडणी करता येते.
Co6	मराठीची वैचारिक, साहित्यिक परंपरा अभ्यासता येते.

बी.ए.तृतीय वर्ष P-XIII

पाश्चात्य साहित्य विचार पेपर - MAR११३	
Co1	विद्यार्थ्यांना पाश्चात्य साहित्याच्या स्वरूपविषयीचे आकलन होते.
Co2	विद्यार्थी पाश्चात्य साहित्य प्रयोजने माहिती करून घेतो.
Co3	विद्यार्थ्यांना पाश्चात्य साहित्याच्या निर्मिती प्रक्रियेविषयी माहिती होते.
Co4	पाश्चात्य साहित्यातील शब्दशक्ती व प्रवाहविषयी विद्यार्थी ज्ञात होतात
Co5	साहित्य शास्त्राशी जवळून ओळख करता येते.
Co6	साहित्य समीक्षेचा नवा दृष्टीकोन अभ्यासक म्हणून प्राप्त होतो.

बी.ए.तृतीय वर्ष P-XIV

व्याकरण व निबंध लेखन पेपर - MAR११४	
Co1	विद्यार्थी शब्दसंग्रह, भाषेचे स्वरूप समजून घेऊन भाषेविषयीचे त्यांचे आकलन वाढते.
Co2	व्याकरण व निबंध लेखन विकसित होते.
Co3	भाषा स्वरूप लक्षात येऊन वचन, संभाषण व लेखनातील सौंदर्य आत्मसात होते.
Co4	भाषेचे स्वरूप, वैशिष्ट्ये व लक्षणे यांचा अभ्यास करता येतो.
Co5	मराठीची वैचारिक, साहित्यिक व निबंध लेखनाची परंपरा अभ्यासता येते.
Co6	प्रमाण भाषा व बोली भाषा वर्णनात्मक आणि ऐतिहासिक भाषाविज्ञान यांचा धांडोळा घेता येतो.

बी.ए.तृतीय वर्ष P-XV

व्याकरण व निबंध लेखन पेपर - MAR११४	
Co1	पंडिती साहित्य, शाहिरी वाङ्मय, बखर वाङ्मय या प्रकारांबद्दल विद्यार्थ्यांमध्ये जिज्ञासा निर्माण होते.
Co2	मराठी वाङ्मयाच्या इतिहासाचे कालखंड विद्यार्थी समजून घेता येतात.
Co3	शिवकालीन सामाजिक, सांस्कृतिक धार्मिक स्थिती गती विद्यार्थ्यांच्या लक्षात येते.
Co4	आधुनिक मराठी वाङ्मयाची पार्श्वभूमी विद्यार्थ्यांना माहिती होते.
Co5	आधुनिक वाङ्मयातील विविध वाङ्मय प्रकारांबद्दल विद्यार्थ्यांमध्ये जिज्ञासा निर्माण होते.
Co6	साहित्यातील स्थित्यंतराबद्दल विद्यार्थी माहिती करून घेतात. वाङ्मयीन नियतकालिकांविषयीचे विद्यार्थ्यांचे ज्ञान अधिक प्रगल्भ होते.

बी.ए.तृतीय वर्ष P-XVI

प्रकल्प लेखन भाग - २ पेपर - MAR११६	
Co1	विद्यार्थ्यांच्या वाचन, लेखन कौशल्याचा विकास होतो.
Co2	विद्यार्थ्यांची समीक्षात्मक दृष्टी विकसित होते.
Co3	विद्यार्थ्यांच्या संशोधनात्मक वृत्तीला चालना मिळते.
Co4	विद्यार्थी चौफेर वाचन करण्यास प्रवृत्त होते.
Co5	विचारांची प्रगल्भपणे मांडणी करता येते.
Co6	मराठीची वैचारिक, साहित्यिक परंपरा अभ्यासता येते.

DEPARTMENT OF MARATHI

अभ्यासक्रम - जून, २०२२, डॉ. बाबासाहेब आंबेडकर मराठवाडा विद्यापीठ, औरंगाबाद.

बी.ए. प्रथम वर्ष (द्वितीय भाषा)

बी.ए.प्रथम वर्ष (भारतीय भाषा) भाग -१ AECC 1, भाग -२ AECC 2.	
Co1	मराठीतील वैविध्यपूर्ण सृजनाविष्काराचा आस्वादघेण्याची अभिरूची विद्यार्थ्यांमध्ये वाढीस लागते.
Co2	कलाकृतीतीलसौंदर्यस्थळांचा शोध घेण्याची वृत्ती वाढीस लागते.
Co3	विद्यार्थ्यांमध्ये नीतिमूल्यांचे व वैज्ञानिक आणिवांचे संस्करण करणे.
Co4	राष्ट्रीय एकात्मता व बंधुभाव वाढीस लागण्यास मदत होते.
Co5	निवडक गद्य व काव्याच्या अनुषंगाने मराठी साहित्यातील विविध प्रवाहांचा परिचय करून घेता येतो.
Co6	उपयोजित मराठीच्या माध्यमातून रोजगाराभिमुख शिक्षण देऊन व्यावसायिक वृत्ती वाढते व स्वावलंबी बनवण्यास मदत होते.

बी.ए. प्रथम वर्ष (ऐच्छिक) P-I

निवडक अभंग (अभंग आविष्कार)	
Co1	संत साहित्याचा आणि त्या प्रवाहाचा परिचय करून घेता येतो.
Co2	'अभंग' प्रकाराचे स्वरूप विशेष (फॉर्म) लक्षात येतात.
Co3	निवडक अभंगातील आशय व अभिव्यक्ती समजून घेतानाच अभंगातील मूल्य प्रेरित करतात.
Co4	संतांच्या अभंग रचनेतील पृथगात्मता व साम्य स्थळांचा उलगडा होतो..
Co5	आजच्या काळात अभंगाची उपयुक्तता सांगतानाच 'अभंगा'चे अक्षरत्व दृष्टीस येते.
Co6	नव सर्जनासाठी विद्यार्थी उद्युक्त होतात.

बी.ए. प्रथम वर्ष (ऐच्छिक) P-II

निवडक मराठी कथा (कथार्थ)	
Co1	कथावाङ्मय प्रकाराचे स्वरूप-विशेष व प्रेरणायांची माहितीहोते.
Co2	निवडक कथांच्या माध्यमातून विद्यार्थ्यांच्या आकलन होते.
Co3	आस्वादात्मक वाढीला चालना भेटते.
Co4	निवडक कथांच्या आधारे विद्यार्थ्यांना कलामूल्ये व जीवनमूल्ये यांचा परिचय करून देता येतो.
Co5	वाङ्मयीन अभिरूची वाढीस लावून विद्यार्थी कथात्म सृजनाविष्कारास उद्युक्त होतात.
Co6	कथेच्या अनुषंगाने समकालीन जाणिवा व तत्कालीन सामाजिक स्थिती समजून येण्यास मदत होते.

बी.ए. प्रथम वर्ष (ऐच्छिक) P-III

निवडक ललित गद्य (ललित गंध)	
Co1	ललितसाहित्यावर, स्वरूप-विशेष या वर प्रकाश टाकता येतो.
Co2	इतर बायकापेक्षा ललित मद्याचे वेगळेपण उलगडून दाखवणे
Co3	लेखकाच्या तरल, संवेदनशील, विचारशील प्रवृत्तीचा शोध घेता येतो.
Co4	त्या प्रवृत्तीचा लेखनास झालेला स्पर्श आणि त्यातून निर्माण झालेले सौंदर्य याचा शोध घेणे.
Co5	निवडक लेखकांच्या लिखाची भिन्न प्रकृती स्वातील साम्यता यांचा उलगडा करणे.
Co6	या अंगाने जाणाऱ्या विविध लेखाचा परिचय करून देऊन, विद्यार्थ्यांना ललित लेखनाच्या सर्जनशीलतेस उद्युक्त करता येते.

बी.ए. प्रथम वर्ष (ऐच्छिक) P-IV

निवडक मराठी कविता (आधुनिक)	
Co1	कविता वाङ्मय प्रकाराची माहिती करून देता येते.
Co2	कवितेच्या माध्यमातून कवितेच्या काळातील स्पंदने व कलावंताची संवेदनशीलता उलगडून दाखवता येते.
Co3	कविता या वाङ्मयप्रकाराच्या आकलन व आस्वादाची क्षमता वाढीला लागून, रसिक वाचक निर्माण होतात.
Co4	मूल्याधारित कवितेच्या माध्यमातून सामाजिक बांधिलकीची मूल्ये रुजतात.
Co5	काव्याचे प्रवाह, प्रवृत्ती, अभिव्यक्ती यांचा परिचय होतो.
Co6	निवडक कवींच्या कवितेतील आशय व अभिव्यक्ती याचे स्वरूप न्याहाळता येते.

J.B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Department of Hindi
Course Outcomes
B.A. & B.Sc. First Year
Semester I & II

Paper S.L.I	सामान्य हिंदी S.L.I (II) बी ए बी एस्सी
CO1	साहित्य आस्वादन अभिरुची का परिसंस्कार करना ।
CO2	मानवीय संवेदनाओं का विकास करना और इंसानियत की भावना को बढ़ावा देना।
CO3	भाषा कौशल का विकास करना।
CO4	हिंदी भाषा के महत्व के साथ व्याकरणिक सजगता विकास करना।
CO5	जीवन मूल्यों के प्रति आस्था निर्माण करना
CO6	साहित्य की अभिरुचि को विकसित करना

Paper Opt. I	प्रश्नपत्र I हिंदी साहित्य का इतिहास
CO1	साहित्य की अभिरुचि को विकसित करना ।
CO2	हिंदी साहित्य के सृजन की से परिचित करना।
CO3	जीवन मूल्यों का महत्व और उसके प्रति आस्था निर्माण करना ।
CO4	हिंदी साहित्येतिहास से परिचित कराना ।
CO5	बदलते जीवन मूल्यों को प्रस्तुत करना।
CO6	हिंदी साहित्य के प्रति रुझान को बढ़ाना।

Paper Opt. II	प्रश्नपत्र II आधुनिक कविता
CO1	आधुनिक हिंदी कविता से परिचित कराना।
CO2	हिंदी कविता की बारीकियों को पहचानने की क्षमता विकसित करना।
CO3	संवेदना के साथ कविता का आस्वादन करना।
CO4	आलोचना करने की दृष्टि का विकास करना।
CO5	साहित्य आस्वादन अभिरुची का परिसंस्कार करना।
CO6	हिंदी कविता के प्रति रुझान को बढ़ाना।

द्वितीय सत्र

Paper S.L.II	सामान्य हिंदी S.L. II बी ए बीएस्सी
CO1	साहित्य आस्वादन अभिरुची का परिसंस्कार करना ।
CO2	मानवीय संवेदनाओं का विकास करना और इंसानियत की भावना को बढ़ावा देना।
CO3	भाषा कौशल का विकास करना।
CO4	हिंदी भाषा के महत्व के साथ व्याकरणिक सजगता विकास करना।
CO5	जीवन मूल्यों के प्रति आस्था निर्माण करना
CO6	साहित्य की अभिरुचि को विकसित करना

Paper Opt. III	प्रश्नपत्र III कथा साहित्य
CO1	हिंदी कहानी साहित्य का अध्ययन करना ।
CO2	साहित्य आस्वादन और मूल्यांकन क्षमता का विकास करना।
CO3	जीवन मूल्यों तथा सुविधाओं का विकास और उसके प्रति आस्था निर्माण करना।
CO4	हिंदी साहित्य की कहानी का परिचय करवाना।
CO5	कहानी साहित्य के सृजन की से परिचित करना।
CO6	कहानी साहित्य की अभिरुचि को विकसित करना

Paper Opt. IV	प्रश्नपत्र IV मध्ययुगीन कविता
CO1	मध्ययुगीन साहित्य की परंपरा से परिचित करवाना।
CO2	मानवीय संवेदना को विकसित करके मूल्यों के प्रति आस्था निर्माण करना।
CO3	मध्ययुगीन कविता के उद्देश्य से परिचित करवाना।
CO4	संवेदना के साथ कविता का आस्वादन करना।
CO5	साहित्य आस्वादन अभिरुची का परिसंस्कार करना।
CO6	जीवन मूल्यों के प्रति आस्था निर्माण करना

बीए द्वितीय वर्ष
तृतीय सत्र

Paper S.L.III	प्रश्नपत्र सामान्य हिंदी S.L. III बी.ए, बीएस्सी
CO1	साहित्य आस्वादन अभिरुची का परिसंस्कार करना।
CO2	जीवन मूल्यों के प्रति आस्था निर्माण करना।
CO3	हिंदी के आधुनिक साहित्य की रचनाओं का परिचय करवाना।
CO4	अत्याधुनिक इलेक्ट्रॉनिक माध्यमों का परिचय करना।
CO5	व्यावहारिक प्रयोजनमूलक तथा संप्रेषणमूलक व्यावसायिक हिंदी से परिचित करना।
CO6	भाषा कौशल का विकास करना।

Paper Opt.V	प्रश्नपत्र -V कोत्तर गद्य साहित्य
CO1	हिंदी कोत्तर गद्य संवेद की परंपरा से परिचित करना।
CO2	जीवन मूल्यों के प्रति आस्था निर्माण करना।
CO3	साहित्य के विविध विद्याओं के आस्वादन लेने की आदत का विकास करना।
CO4	हिंदी कहानी साहित्य का अध्ययन करना।
CO5	साहित्य आस्वादन और मूल्यांकन क्षमता का विकास करना।
CO6	इंसानी जीवन मूल्यों तथा सुविधाओं का विकास करना।

Paper Opt .VI	प्रश्नपत्र -VI प्रयोजनमूलक हिंदी
CO1	हिंदी भाषा के प्रयोजनमूलक रूप का परिचय करना।
CO2	हिंदी भाषा की व्यावहारिकता का परिचय करना।
CO3	हिंदी भाषा के राष्ट्रीय और अंतरराष्ट्रीय स्वरूप का परिचय करना।
CO4	अत्याधुनिक इलेक्ट्रॉनिक माध्यमों का परिचय करना।
CO5	व्यावहारिक प्रयोजनमूलक तथा संप्रेषण हिंदी भाषा से परिचित करना।
CO6	भाषा कौशल का विकास करना।

बीए द्वितीय वर्ष
चतुर्थ सत्र

Paper S.L.IV	प्रश्नपत्र सामान्य हिंदी S.L. IV . बी.ए ,बीएस्सी
CO1	साहित्य आस्वादन अभिरुची का परिसंस्कार करना।
CO2	जीवन मूल्यों के प्रति आस्था निर्माण करना।
CO3	हिंदी के आधुनिक साहित्य की रचनाओं का परिचय करवाना।
CO4	अत्याधुनिक इलेक्ट्रॉनिक माध्यमों का परिचय करना।
CO5	व्यावहारिक प्रयोजनमूलक तथा संप्रेषणमूलक व्यावसायिक हिंदी से परिचित करना।
CO6	भाषा कौशल का विकास करना।

Paper Opt .VII	प्रश्नपत्र VII आधुनिक हिंदी कविता
CO1	हिंदी काव्य संवेदना की परंपरा से परिचय कराना।
CO2	जीवन मूल्यों के प्रति आस्था निर्माण करना।
CO3	हिंदी कविता के प्रति अभिरुची की वृद्धि करना।
CO4	साहित्य आस्वादन अभिरुची का परिचय करना।
CO5	हिंदी कविता के प्रति रुझान को बढ़ाना।
CO6	आलोचना करने की दृष्टि का विकास करना।

Paper Opt .VIII	प्रश्नपत्र VIII प्रयोजनमूलक हिंदी
CO1	हिंदी भाषा के प्रयोजनमूलक और व्यावहारिक रूप का परिचय करना।
CO2	हिंदी भाषा के राष्ट्रीय और अंतरराष्ट्रीय स्वरूप ,महत्व का परिचय कराना।
CO3	आधुनिक तंत्र विज्ञान में हिंदी की उपयोगिता का आकलन करना।
CO4	अत्याधुनिक इलेक्ट्रॉनिक माध्यमों का परिचय करना।
CO5	व्यावहारिक प्रयोजनमूलक तथा संप्रेषण हिंदी भाषा से परिचित करना ।
CO6	भाषा कौशल का विकास करना।

पंचमसत्र

Paper Opt .IX	प्रश्नपत्र IX - प्रादेशिक साहित्य
C01	साहित्य अस्वादन अभिरुचि का परिसंस्कार करना ।
C02	जीवन मूल्यों के प्रति आस्था निर्माण करना ।
C03	प्रादेशिक साहित्य का ज्ञान करवाना ।
C04	भारतीय साहित्य का अध्ययन करना ।
C05	इंसानी जीवन मूल्यों तथा सुविधाओं का विकास करना ।
C06	

Paper Opt .X	प्रश्नपत्र X - आदि तथा मध्यकालिन हिंदी साहित्य साहित्य का इतिहास
C01	हिंदी साहित्य का इतिहास तथा आरंभिक काल के साहित्य का परिचय कराना ।
C02	हिंदी साहित्य की परम्परा से परिचित करवाना ।
C03	हिंदी साहित्य के लेखन स्त्रोत एवं परंपराओं पर प्रकाश डालना ।
C04	जीवन मूल्यों के प्रति आस्था निर्माण करना ।
C05	साहित्य आस्वादन और अभिदाच का परिष्कार करना ।
C06	इंसानी जीवन मूल्यों तथा सुविधाओं का विकास करना ।

Paper Opt .XI	प्रश्नपत्र XI साहित्यसास्त्र
C01	साहित्य चिंतन परंपरा का अध्ययन करना ।
C02	साहित्य लोचन क्षमता का परिचय करना ।
C03	साहित्य सृजन के संस्कार करना ।
C04	साहित्य का मूल्यांकन करने का दृष्टिकोण विकसित करना ।
C05	छात्रों की कला क्षमता को विकसित करना ।
C06	साहित्य लोचन और सृजन क्षमता का विकास करना ।

Paper Opt .XII	प्रश्नपत्र XII/XVI प्रकल्पकार्य
CO1	पठन -पाठन और लेखन कौशलों का विकास करना ।
CO2	आलोचनात्मक क्षमता का विकास करना ।
CO3	अनुसंधानात्मक दृष्टि को विकसित करना ।
CO4	प्रकल्प प्रस्तुति की तकनीक से परिचित करना
CO5	आलोचना करने की दृष्टि का विकास करना।
CO6	अनुसंधानात्मक रुझान को बढ़ाना।

षष्ठमसत्र

Paper Opt .XIII	प्रश्न पत्र XIII मध्यकालीन काव्य
CO1	भारतीय भक्ति आंदोलन का अध्ययन करना।
CO2	रीतिकालीन संवेदनाओं का अध्ययन करना।
CO3	कविता के माध्यम से मध्यकालीन सांस्कृतिक संवेदना का अध्ययन करना।
CO4	इंसानी जीवन मूल्यों तथा सुविधाओं का विकास करना।
CO5	साहित्य आस्वादन और अभिरुचि का परिष्कार करना।
CO6	आलोचना करने की दृष्टि का विकास करना।

Paper Opt .XIV	प्रश्न पत्र XIV आधुनिक हिंदी साहित्य का इतिहास
CO1	हिंदी साहित्य के आधुनिक काल के साहित्य का अध्ययन करना।
CO2	साहित्य आस्वादन और अभिरुचि का परिष्कार करना।
CO3	हिंदी साहित्य की परंपरा से परिचित कराना
CO4	जीवन मूल्यों के प्रति आस्था निर्माण करना।
CO5	मानवीय संवेदनाओं और इंसानियत की भावना को बढ़ावा देना।
CO6	बदलते जीवन मूल्यों को प्रस्तुत करना।

Paper Opt .XV	प्रश्नपत्रXV साहित्यशास्त्र
CO1	साहित्य लोचन और सृजन क्षमता का विकास करना।
CO2	साहित्य सृजन के संस्कार करना।
CO3	साहित्य चिंतन परंपरा से परिचित करना।
CO4	साहित्य का मूल्यांकन करने का दृष्टिकोण विकसित करना।
CO5	छात्रों की कला क्षमता को विकसित करना ।
CO6	हिंदी साहित्य की परंपरा से परिचित कराना

J.B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Department of English
Course Outcomes

B.A. First Year
Semester I & II

Paper I & II–English Compulsory	
CO1	Differentiate various types of genres
CO2	Explain nature and structure of sonnet
CO3	Identify parts of speech appearing in sentences
CO4	Distinguish between open and close class items is clear to students
CO5	Have a good knowledge of tenses

Paper I & III– English Optional: The Structure of English	
CO1	Have thoroughly understood the Received Pronunciation
CO2	Reproduce all forty-four speech sounds
CO3	Good knowledge of syllable, phone, intonation, tone group, etc.
CO4	Be well versed in sentence types, elements of clause structure, various phrases, etc.
CO5	Comprehend the process of word formation

Paper II & IV – English Optional: Reading Literature	
CO1	Know poetical types especially lyric, sonnet and ode
CO2	Read and interpret novel
CO3	Have knowledge of drama, especially of tragedy and comedy
CO4	Read and interpret Shakespearean sonnets
CO5	Read and interpret Keats' odes

B.A. Second Year

Semester III & IV

Paper III & IV –English Compulsory

CO1	Distinguish between spoken language and the written
CO2	Understand and acquire English language skills through creative writing
CO3	Use English language appropriately, creatively and imaginatively
CO4	Identify the main ideas and themes depicted in a text
CO5	Have competence in various concepts in grammar and writing skills

Paper V & VII – Optional English: Literature in English 1550 – 1750

CO1	Have developed and applied the literary knowledge
CO2	Know the nature and structure of epic and mock epic
CO3	Differentiate between various types of literary genres
CO4	Distinguish between good and evil, moral & immoral depicted in literature
CO5	Study literature critically

Paper VI & VIII – Optional English: Literature in English 1750- 1900

CO1	Have obtained sufficient knowledge of poetical types like ballad and dramatic monologue
CO2	Understand the socio-economical condition and culture of English society in the 19th century
CO3	Acquainted with the dramatic techniques of Oscar Wilde by studying his play The Importance of Being Earnest
CO4	Understand Coleridge's ballad The Rime of the Ancient Mariner
CO5	Able to interpret Robert Browning's dramatic monologues

B.A. Third Year

Semester V & VI

Paper IX & XIII–Optional English: Twentieth Century Literature in English

CO1	Acquaint themselves with twentieth century literary and social background
CO2	Understand elements of drama
CO3	Know the features of prescribed poems by Eliot and Yeats
CO4	Comprehend the features of the novels through the study of Sons and Lovers and Lucky Jim
CO5	Have a sound knowledge of the contemporary world as depicted in the play Look Back in Anger

Paper X & XIV–Optional English: An Introduction to Literary Criticism & Terms

CO1	Understand various forms of literature and the literary terms
CO2	Know importance of literary criticism to understand literature
CO3	Understand classicism in literature
CO4	Come across perspectives of a critic while analyzing and interpreting a text
CO5	Apply critical theories while understanding a text

Paper XI & XV–Optional English: Indian Writing in English

CO1	Acquainted with the history of Indian English literature
CO2	Distinguish between various genres in Indian English literature
CO3	Gain knowledge of major authors and their literary contribution in Indian English Literature
CO4	Understand characterization in literary works
CO5	Comprehend colonial and post-colonial Indian English Literature

B.Sc. First Year Semester I &

II

Paper I & II–English Compulsory	
CO1	Differentiate various types of genres
CO2	Explain nature and structure of sonnet
CO3	Identify parts of speech appearing in sentences
CO4	Distinguish between open and close class items is clear to students
CO5	Have a good knowledge of tenses

B.Sc. Second Year Semester

III & IV

Paper III & IV –English Compulsory	
CO1	Distinguish between spoken language and the written
CO2	Understand and acquire English language skills through creative writing
CO3	Use English language appropriately, creatively and imaginatively
CO4	Identify the main ideas and themes depicted in a text
CO5	Have competence in various concepts in grammar and writing skills

J.B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Department of Sociology
Course Outcomes

B.A. First Year

Semester I & II

Paper I: Introduction to sociology	
CO1	Explain concepts of theoretical perspectives in sociology and how they are used in sociological explanations of social behavior
CO2	Describe how social interactions are influenced by local, regional, national, and global cultures
CO3	Describe origin and the development of sociology in general and development in India in particular
CO4	Elaborate various approaches and principles of sociology
CO5	Give importance and uses of sociology in present society

Paper II: Individual and Society	
CO1	Give Importance of Indian culture and Socialization
CO2	Describe concept of social Structure
CO3	Elaborate origin of caste system
CO4	Explain factor of social change and social control
CO5	Write concept of conformity and deviance

Paper III: Introduction to subfield of sociology	
CO1	Give Importance of Scope
CO2	Describe concept of social psychology
CO3	Elaborate origin of the political sociology
CO4	Explain factor of anthropology
CO5	Write concept of applied sociology

Paper IV: Indian Social Composition	
CO1	Explain features of Indian society
CO2	Describe population factor & Impact
CO3	Write importance of Secularism in Indian society
CO4	Elaborate structure of rural society in India
CO5	Give importance of Democracy in India

**B.A. Second Year
Semester III & IV**

Paper V: Problems of rural India	
CO1	Explain Problems of rural women
CO2	Describe Domestic violence law
CO3	Explain education Dropout in rural area
CO4	Give India rural area Economy
CO5	Elaborate major issue in Development

Paper VII: Contemporary Urban issues	
CO1	Explain concept of Urbanization
CO2	Elaborate cause and impact of Indian Migration
CO3	Explain various types of urban planning
CO4	Give importance of Globalization
CO5	Evaluate urban change

Paper VII : Population in India	
CO1	Explain basic concepts of Indian population
CO2	Describe density of population in India
CO3	Write on human population dynamics
CO4	Elaborate population growth and environment
CO5	Give importance of population policy in India

Paper VIII: Sociology of development	
CO1	Describe conceptual perspectives on development
CO2	Explain concept of sustainable development
CO3	Write on problems of Poverty & Unemployment,
CO4	Elaborate view of capitalist socialist and mixed approaches
CO5	Give importance Impact of Government schemes in India

B.A. Third Year
Semester V & VI

Paper IX : Sociological Tradition	
CO1	Give Scope industrial revolution
CO2	Describe French revolution
CO3	Explain theory low of three stages
CO4	Elaborate Durkheim theory of suicide
CO5	Describe theory of Karl Marx's Class struggle

Paper X : Introduction to research methodology	
CO1	Give Scope and Importance of Social Research
CO2	Describe Types of Research
CO3	Explain Scientific Research Process
CO4	Elaborate difference between Theory and Research
CO5	Describe problem of objectivity in Research

Paper XI : Urban Sociology	
CO1	Give Scope and Importance of Urban Sociology.
CO2	Understand the profile of urban community
CO3	Explain the Urban Development process
CO4	Elaborate Burges theory of Concentric zone
CO5	Describe theory of Robert louise wirth urbanism

Paper XIII: Sociological Theories

CO1	Explain theory of social action
CO2	Elaborate Robert matrons theory of role set
CO3	Describe Lewis Coser theory of violence
CO4	Explain symbolic interaction theory
CO5	Write on theory of power and authority

Paper XIV: Social Research Methods

CO1	Explain techniques of Sociological Investigation
CO2	Describe use of computer in social research
CO3	Describe introduction of SPSS
CO4	Elaborate utility of social research
CO5	Give use of internet in social research

Paper XV: Urban Society in India

CO1	Explain the growth of urban population
CO2	Describe the concept of rural urban migration
CO3	Explain the problems of slums and housing
CO4	Elaborate causes & Effects pollution
CO5	Explain deference between rural and urban society in India

Paper XII & XVI : Project Work

CO1	Write Importance of research culture
CO2	How collects data in field work
CO3	Describe impact of problems on society
CO4	Elaborate importance of research methodology

J.B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Department of Economics

Course Outcomes

B.A. First Year

Semester I&II

Paper I: Micro Economics	
CO1	Students understand the personal economic behaviour and foundation of economics.
CO2	It able to understand about the behaviour of an economic agent specifically consumer, producer, seller, and factors of production.
CO3	It support to students for decision making in establishing business
CO4	The students will be able to apply the knowledge to the real market and understand the pricing decision of the firms.
CO5	The students will be able to analyse the behaviour of firms, production decisions, its implications on the overall economy and linkages with the macro economy.
CO6	Students will be able to understand the fundamentals of economic theory

Paper II: Indian Economy	
CO1	Students will be able to compare Indian Economy with the developed countries.
CO2	There will be basic understanding of the development indicators.
CO3	Students will be able to read and understand the data which will help in analysing the performance of the economy.
CO4	The paper spread awareness about the facts, strengths and weaknesses of the economy.
CO5	Students will understand the problems and solutions for the problems faced by the economy.
CO6	The students will be able to review the infrastructure development which formulates the base for economic development

Paper III: Theory of Price	
CO1	Students understand the personal economic behaviour and foundation of economics.
CO2	It able to understand about the behavior of an economic agent specifically consumer, producer, seller, and factors of production.
CO3	It support to students for decision making in establishing business.
CO4	The students will be able to apply the knowledge to the real market and understand the pricing decision of the firms.
CO5	The students will be able to analyse the behaviour of firms, production decisions, its implications on the overall economy and linkages with the macro economy.
CO6	Students will be able to understand the fundamentals of economic theory.

Paper IV: Money Banking and Finance

CO1	Students will learn the basic concepts related to banking and money
CO2	Students will understand the new technology in the banking system
CO3	To understand the place of co-operative banks in agriculture and rural development in India
CO4	To understand role of development banking in Indian economy
CO5	This paper is essential for students to understand the monetary and the banking system of a country
CO6	It provides knowledge which is beneficial to the entrepreneurs, citizen and servants in the monetary institutions.

**B. A. Second Year
Semester III & IV****Paper V: Macro Economic**

CO1	Students will be able to understand the importance of basic concepts of Macroeconomics
CO2	Students will be aware of the basic theoretical framework underlying the field of Macroeconomics.
CO3	Students will be able to understand the behaviour of Macroeconomic variables and relationship among Macroeconomic variables and functioning of economy.
CO4	Students will be able to understand the concept of Money, Inflation, Business cycle etc.
CO5	Students will be aware of macroeconomic issues and concerns like unemployment, inflation, deflation associated with the economies of the world.
CO6	Students will be able to understand and think about the Monetary Policy making, implementation etc. to solve the macroeconomic issues.

Paper VI: Economics of Development

CO1	Development is process and by studying this paper students know about economic development process and different concepts and theories of development.
CO2	Students will be able to understand the basic concepts of development and underdevelopment as well as underdeveloped countries and developed countries.
CO3	Students will be able to get ability to know the structural aspects of Indian Economy and constraints to development of Indian economy.
CO4	Students will be able to understand theoretical aspect of economic development.
CO5	Explain role of sector approach in Economic Development
CO6	Students will be able to understand the role of economic planning for development.

Paper VII : Public Finance

CO1	This paper provides knowledge of the fiscal policy, public revenues and expenditure, tax system etc.
CO2	To relate and recognize the nature, scope and important concepts in public finance.
CO3	To describe and analyse the policy of Public Revenue, Public Expenditure and Public Debt in India with its effects.
CO4	To use this knowledge for careers in the government sector, policy analysis etc.
CO5	To understand the components and instruments of Fiscal Policy, describe and analyse the concept of Deficit Financing and its effects.
CO6	To describe and explain the Centre and State Financial Relationship.

Paper VIII : Statistical Methods

CO1	To develop analytical skill among students required data handling and use of statistical tools
CO2	Knowledge of this paper supports students to get work opportunity in central and state governments various departments and in various research institutes.
CO3	It may also provide the information to the students for collection of data, enquiry, primary and secondary methods of collection of data, classification and tabulation of data.
CO4	It may provide the information about the concept of central tendency such as, mean, median, mode.
CO5	The course will help the students to learn about graphic representation, types of diagram etc.
CO6	It may also provide the information about the measures of dispersion such as mean deviation, standard deviation and index numbers.

**B.A. Third Year
Semester V & VI**

Paper IX: International Economics	
CO1	Studying this paper students know about international trade theories and finance.
CO2	This paper provides knowledge of liberalization, privatization and globalization and policies of international trade.
CO3	Students will get ability to apply the concepts and theories of International Trade.
CO4	Students will be able to analyse the concepts of Terms of Trade and Balance of Payments.
CO5	Students will get hand on the basic ideas of foreign exchange market.
CO6	Students will develop skill to analyse the latest trends in the international as well as domestic market with respect to trade and finance.

Paper X: Agriculture Economics	
CO1	Students get knowledge of various aspects of agriculture sector such as agriculture production, agriculture marketing, agriculture pricing, role of agriculture sector in Indian economy etc.
CO2	Train the students in production economics tools for agricultural decision making.
CO3	Able to acquire knowledge and analytical skills in addressing the issues of agricultural marketing.
CO4	Provide orientation to the students regarding the concepts and measures of economic development.
CO5	Understand the agricultural policies and its effect on sustainable agricultural development.
CO6	Understand the globalization and its impact on agricultural development.

Paper XI: History of Economic Thought

CO1	The course will help the student to learn about the history of economic thought.
CO2	It develops the skill in students to understand and to develop new economic theory.
CO3	This course is beneficial the society clarifies the role of contemporary science has evolved over many countries
CO4	It will provide the information of Classical period e.g. Theory of Karl marx, Adam Smith etc.
CO5	This course is necessary for a student who had interest in advanced training in economic scientific rigour and important part of evaluation of modern social thought.
CO6	Students inculcate their views about the economic theories of Curnot, Gossen, Marshall and others.

Paper XIII : Research Methodology

CO1	This paper prepares and develops research oriented mind set of the students.
CO2	By studying this paper students can research to solve social and economic problems of the society
CO3	Students will get the basic idea of research in social sciences and Economics.
CO4	Students will be able to identify appropriate sources of data and information
CO5	Students will get the basic idea of data analysis in social sciences and Economics.
CO6	Students will be able to learn the various dimensions of research report writing and use of data in it.

Paper XIV: Industrial Economics

CO1	It introduces industrial structure of the economy and progress of industrialization.
CO2	It aware about industrial policy of Indian economy and growth and development of industrial sector.
CO3	Student understands about the functioning of market led economy in the competitive industrialized era. The developing economies like India are in fact 'Factory' where there is abundance of semi-skilled and unskilled labour power. Our budding corporates need to get knowledge of such papers to deal with economic and industrialized setup of globalized world to bring home country on global map.

Paper XIV : Indian Economic Thinker

CO1	This paper introduces economic thoughts of Indian economic thinkers and their contribution in economics.
CO2	It promotes skill of understanding various economic thoughts and knows the steps of theory development.

Paper XII & XVI : Project Work

CO1	By completing project work students can get practical knowledge of research methodology.
CO2	Develop the skill of using various research methods to solve social and economic problems of the society.

J.B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Department of Public Administration

Course Outcomes

**B.A. First Year
Semester I & II**

Paper I - Principles and Concepts of Public Administration	
CO1	Explain meaning, nature and scope of Public Administration.
CO2	Differentiate between Public and Private Administration.
CO3	Explain meaning and forms of Organization.
CO4	Describe different Principles of Organization.
CO5	Identify concepts of Public Administration like Leadership, communication, supervision etc.

Paper II - Public Administration in India	
CO1	Explain historical evolution and current global scenario of Indian Administration.
CO2	Explain the constitutional framework, fundamental rights and duties.
CO3	Discuss structure and function of Rajya sabha and Loksabha.
CO4	Explain the structure and function of Indian judiciary/Supreme courts.

Paper III- Maharashtra Administration	
CO1	Discuss formation of Maharashtra State and its administrative features.
CO2	Describe structure and functions of the state Executive and legislative.
CO3	Analyze structure and functions of the state judiciary.
CO4	Identify relevance of Constitutional and Statutory bodies at the state level such as MPSC, Maharashtra Finance Commission, Election Commission etc.

Paper IV – District Administration

CO1	Explain evolution and importance of District Administration.
CO2	Explain the various functions of District Collector.
CO3	Discuss changing role of district collector.
CO4	Identify various aspects of the concept Law and Order and it's Principles.
CO5	Understand functioning of revenue administration.
CO6	Understand functioning and issues of district police administration.

B.A. Second Year**Semester III & IV****Paper V– Personnel Administration**

CO1	Explain the meaning and function personnel administration and public services in India.
CO2	Identify the role of personnel training institutions such as YASHDA, MPA and LBSNAA.
CO3	Discuss personnel grievance redressal mechanism in India CVC.
CO4	Comprehend with the problems of personnel administration in India.
CO5	Explain relevance of administrative tribunal mechanism in India CAT, MAT

Paper VI – Panchayati Raj and Rural Development

CO1	Discuss basic concept and history of Local Self Government in India.
CO2	Discuss on Panchayat Raj system structure and function in Maharashtra.
CO3	Explain composition and function of state Rural Development Ministry.
CO4	Acquaint concept and Program of Rural Development.
CO5	Describe Problems of Rural area.
CO6	Discuss the financial resources of local self-government.

Paper VII – Financial Administration

CO1	Explain basics of information financial administration as well as importance of the Finance ministry.
CO2	Comprehend process and importance of budget.
CO3	Describe major accounts and audit mechanism in India.
CO4	Explain methods and importance of parliamentary control over financial Administration in India.
CO5	Discuss concept of Liberalization, Privatization and Globalization.

Paper VIII – Urban Local Self Government and Urban Development

CO1	Discuss basic concept of urban local self-Government in India.
CO2	Understand the causes of urbanization.
CO3	Explain urban local self-Government system in Maharashtra.
CO4	Acquaint Urban Development Agencies in Maharashtra.
CO5	Describe the problems of urban area.
CO6	Identify major Urban Development Program.

B.A. Third Year

Semester V & VI

Paper IX – Human Resource Development

CO1	Explain nature, scope, structure and processes of human resource development
CO2	Discuss changing paradigms of human resources development.
CO3	Understanding means of human resource development.
CO4	Explain the human resource management and its objective.
CO5	Discuss on recruitment process.
CO6	Explain importance of human resource planning.

Paper X – Educational Administration in India

CO1	Discuss objectives and importance of Education.
CO2	Describe historical background of Education in the light of various Committee's Recommendations and government policies.
CO3	Identify role of Quality Control Institutions, such as NAAC and AICTE, in Higher Education.
CO4	Describe structure, relevance and the present Scenario of Higher Education.
CO5	Analyze impact of Globalization on Higher Education in India.

Paper XI– Administrative Thinkers

CO1	Discuss F. W. Taylors concept of Scientific Management.
CO2	Understand Feyols elements and Principles of Management.
CO3	Describe Max Weber's Ideal Model of Bureaucracy.
CO4	Explain Mary Follet's ideas of Authority, Conflict and Integration
CO5	Describe Elton Mayo's Hawthorn Experiment or Human Relation Theory.
CO6	Examine Herbert Saiman behavioral approach and Decision-Making approach.
CO7	Explain Ecological approach and concept of Prismatic Society by F. W. Riggs.

Paper XIII– Public Policy and Development

CO1	Explain concept of Public Policy.
CO2	Discuss role of internal determinants in the formulation of Public Policy.
CO3	Discuss role of Executive and Bureaucracy in the implementation of Public Policy.
CO4	Explain concept of Development and Sustainable development.
CO5	Understanding central government development policies – Food policy, Water policy, Land Reform.
CO6	Describe challenges before Development.

Paper XIV - Health Administration in India

CO1	Explain organizational elements, structure, performance, and terminology and delivery modalities for India healthcare systems.
CO2	Understanding structure and interdependence of healthcare system elements and issues using critical thinking to formulate innovative system designs that improve healthcare delivery.
CO3	Explain the role and facilities of NRHM.
CO4	Explain the challenges before Indian health care system.

Paper XV - Recent Trends in Public Administration and Important Laws

CO1	Discuss concept of New Public Administration and New Public Management.
CO2	Explain Public Choice Approach and the relevance and role of the Civil Society.
CO3	Explain meaning and importance of the Citizen Charter.
CO4	Discuss concept and its relevance of Good Governance, E-Governance and Disaster Management.
CO5	Discuss important Laws such as Civil Rights Protection, Consumer Protection, Environment Protection, and Right to Public Services.

Paper XII & XVI - Project Work

CO1	Develop problem solving abilities and communications skill.
CO2	Understanding of the social, political, economic, and cultural factors and its Influence on public administration.
CO3	Develop ability to effectively communicate, both in research writing as well as terminology, facts, concepts, and theories used in the field of public administration.
CO4	Create awareness social, administrative issues and policies.

J.B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Department of Political Science

Course Outcomes

B.A. First Year

Semester I & II

Paper: I Basic Concept of Political Science

CO 1	Describe Fundamental concepts of Political science
CO 2	Explain origin of state
CO 3	Write meaning and theory of Sovereignty.
CO 4	Explain concept of Citizenship

Paper: II Government and Politics of Maharashtra

CO 1	Describe origin of Maharashtra state
CO 2	Classify organs of the state government
CO 3	Explain cooperative movement and movements of Peasants
CO 4	Explain Dalit and Feminist movements in Maharashtra

Paper: III Basic Concept of Political Science

CO 1	Describe Fundamental concepts of Political science
CO 2	Explain origin of state
CO 3	Write meaning and theory of Sovereignty.
CO 4	Explain concept of Citizenship

Paper: IV Government and Politics of Maharashtra

CO 1	Describe origin of Maharashtra state
CO 2	Classify organs of the state government
CO 3	Explain cooperative movement and movements of Peasants
CO 4	Explain Dalit and Feminist movements in Maharashtra

B.A. Second Year

Semester III & IV

Paper V: Indian Government and Politics

CO 1	Write down sources and features of Indian Constitution
CO 2	Explain fundamental rights and directive principles of state policy given in Indian Constitution
CO 3	Classify structure of the Union government of India
CO 4	Write down budgetary process and functions of important parliamentary committees
CO 5	Explain structure and functions of Attorney General and CAG of India

Paper VI: International Relations

CO 1	Discuss meaning, nature, scope and significance of International relations
CO 2	Explain main approaches to the study of International relations
CO 3	Describe India's foreign policy in regards of its principles and objectives
CO 4	Explain concepts of National Interest, National Power and Deterrence
CO 5	Describe Balance of Power and NAM

Paper VII: Indian Government and Politics

CO 1	Write down structure and functions of Supreme court of India and recognise its importance
CO 2	Discuss about relations between Centre and States. Explain the division of powers between them
CO 3	Describe composition, power and function of Election commission of India and explain the electoral reforms in India
CO 4	Identify challenges before Indian democracy

Paper VIII : International Relations

CO 1	Identify relevance of Collective security and UNO in international environment
CO 2	Identify major issues like terrorism and environmentalism in internationalism
CO 3	Outline structure and functions of international organisations such as IMF, WB, WTO
CO 4	Explain organisation of SAARC and ASEAN

B.A. Third Year: Semester V & VI**Paper IX: Indian Political Thinkers**

CO 1	Write down views of Raja Ram Mohan Roy on Religion and Social and Political system of India.
CO 2	Describe religious, political and social thoughts of Dayanand Saraswati
CO 3	Explain liberal and political thoughts of Gopal Krishna Gokhale
CO 4	Recall views of Lokmanya Tilak on Nationalism and Social reform
CO 5	Write Mahatma Gandhi's views on religion and explain his concept of "Ram Rajya"

Paper IX: Western Political Thinkers

CO 1	Recall Aristotle's views on state, citizenship and revolution
CO 2	Describe Machiavelli's advice to Prince, views on religion, morality and human nature
CO 3	Classify theory of Social Contract of Hobbes, Locke
CO 4	Explain concept of Utilitarianism of J. S. Mill and write down his views on liberty and representative government

Paper X: Political Ideologies

CO 1	Classify major political ideologies
CO 2	Describe Nationalism
CO 3	Describe Feminism
CO 4	Discuss on Liberal ideology

Paper XI: Indian Political Thinkers

CO 1	Write views of Maulana Azad on religion and politics and Hindu-Muslim Unity. Explain his ideas of nationalism and synthesis nationalism
CO 2	Explain Views of J. Nehru on democracy and socialism, nationalism and internationalism
CO 3	Recall critique of Marxism by M. N. Roy and explain his radical thoughts
CO 4	Recall relevance of thoughts of Dr. Ambedkar and his views on religion, society, democracy and economy
CO 5	Explain idea of total revolution by Jaya Prakash Narayan

Paper XII: Western Political Thinkers

CO 1	Classify theory of Social Contract of Rousseau
CO 2	Describe views of Jeremy Bentham on State, Government and Rights and Utilitarianism
CO 3	Explain Marxism and its importance
CO 4	Write down Laski's views on Liberty

Paper XIII : Political Ideologies

CO 1	Describe socialism and communism
CO 2	Understand Anarchism
CO 3	Indicate the need of Environmentalism in politics
CO 4	Criticize ideology of fascism

J.B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Department of Home Science

Course Outcomes

B.A. First Year

Semester I & II

Paper No – I Family Resource Management

CO1	To enable student to understand the family resources.
CO2	To acquired knowledge about the Management process.
CO3	To develop the ability to improve the work within less time fatigue.
CO4	To understand ability how to make within less time and fatigue
CO5	To understand ability how to make a household budget to each income group
CO6	To develop the ability to saving and investment.

Paper No- II - Food and Nutrition

CO1	student will acquire knowledge in the following fields:
CO2	Role of food and function of nutrient.
CO3	Different sources and deficiencies of nutrients.
CO4	Student can improve the nutritional quality of food and nutrition
CO5	To create awareness about RDA among students
CO6	Improving the nutritional status of the family.

Paper No - III Human Development (Prenatal Development and Early Childhood)

CO1	To study the meaning and scope of Human Development.
CO2	To understand the importance of prenatal development.
CO3	To know the adjust mental problems of infancy.
CO4	Studying behaviour problems in early childhood
CO5	To know about the type of birth
CO6	To Study child rearing practices

Paper No -IV Textile and Clothing

CO1	To enable students for proper choice of fabrics.
CO2	To impart knowledge regarding textile and clothing.
CO3	To impart creative and technical skill in clothing construction.
CO4	To enable students to develop skills in embroidery.
CO5	To encourage entrepreneurship.
CO6	To impart knowledge about renovation of garments.

**B.A. Second Year
Semester III & IV**

Paper No-V -Extension Education

CO1	To understand the meaning, importance and need of Home Science Extension.
CO2	To impart knowledge of extension education
CO3	To understand the process of communication in development work.
CO4	To get acquainted with in extension approach and models.
CO5	To study the extension education methods.
CO6	To Study the role of NGO in community development.

Paper No- VI Textile and Clothing (Garment Design and printing)

CO1	To impart knowledge about the basic principle of design and printing.
CO2	To enable student to know about important aspect of clothing.
CO3	To impart knowledge bout wardrobe planning.
CO4	To impart knowledge regarding select of clothes for different age group texture and fabric.
CO5	To impart knowledge about renovation of garments.
CO6	To study household printing methods.

Paper No-VII Child Development (Late Childhood and Adolescent)

CO1	To appreciate the sequential stages of development during Late Childhood.
CO2	To understand behavioural problems during Late Childhood.
CO3	To aware the need and skills to be developed for self-improvement.
CO4	To know development and behaviour during adolescence.

Paper No- VIII Food and Nutrition.

CO1	To gain acquaintance with human gastro intestinal tract.
CO2	To understand the concept of an adequate diet and importance of meal planning.
CO3	To know the different method of food preservation.
CO4	To be aware of the effect of food poisoning and food adulteration.
CO5	To gain the knowledge about the nutrient needs for various age groups.
CO6	To study the methods of measuring value of food.

**B.A. Third Year
Semester V & VI**

Paper No- IX-Marriage and Family Dynamics	
CO1	To understand the merits and demerits of marriage and family system.
CO2	To be aware about the area of adjustments in marriage and family.
CO3	To share knowledge about the Laws related to woman, marriage and family.
CO4	To develop awareness about counselling.
CO5	To study the types of marriage
CO6	To study about family crisis

Paper No- X- Housing and Interior Decoration	
CO1	To recognize the role of housing in integrated development.
CO2	To know the essentials of Interior decorations.
CO3	To study the landscape design and its application
CO4	To gain knowledge about types of house plan.
CO5	To study about the institutions providing funds of housing.
CO6	To know the importance and types of lighting and ventilation.

Paper No-XI Nutritional Management in Health and Diseases	
CO1	To know the principles of diet therapy.
CO2	To understand the role of dietician.
CO3	To understand the modification of normal diet for therapeutic purpose.
CO4	To gain knowledge about dietary pattern of different region and communities.
CO5	To study nutritional requirements in common aliments.
CO6	To study about hygiene and sanitation in food sector.

Paper No-XIII Human Development (Adulthood and old age)	
CO1	To understand the nature of developmental pattern in adulthood and old age.
CO2	To know different aspect adulthood
CO3	To gain knowledge regarding adjustments during adulthood
CO4	The o study about changes in interests during adulthood.
CO5	To gain Knowledge about Menopusal syndrome.
CO6	To study about government and non-government agencies working for elderly

Paper No- XIV - Fundamental of Art and Design

CO1	To understand elements and principal of art and design.
CO2	To apply various Colours, harmonies in design.
CO3	To develop skills in creating design and making art objects.
CO4	To develop skill in creating floor decoration.
CO5	To understand art principals in flower arrangement.
CO6	To understand cultural importance of Rangoli.

Paper No- XV- Communication Process in Home Science

CO1	To understand the role of communication in development.
CO2	To know the process of communication and effect of media.
CO3	To develop the skills in the students about the use of communication methods and media.
CO4	To enable the qualities of leadership in the student.
CO5	To know the importance of programme planning implementation of programme and evaluation.
CO6	To understand the role of leadership in development of community.

J.B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Department of History
Course Outcomes

B.A. First Year
Semester I & II

Paper I: Shivaji and His Times (1630 to 1707 A.D.)	
CO1	Explain formation of welfare state during the Maratha rule
CO2	Discuss industrial agricultural aspects of Chhatrapati Shivaji 'regime
CO3	Explain administrative aspects of the Swarajya
CO4	Elaborate inspiration behind the establishment of Swarajya
CO5	Explain reasons behind Chhatrapati Shivaji's early conflicts with the regional lords and the outsiders
CO6	Discuss Maratha war of independence.(1689 to 1707A.D.)

Paper II: History of Modern Maharashtra (1818 to 1905 A.D.)	
CO1	Discuss history of modern Maharashtra
CO2	Evaluate renaissance and social reform movement in Maharashtra
CO3	Explain early political awakening of freedom struggle in Maharashtra
CO4	Discuss British administration in Bombay presidency
CO5	Identify social institutions of 19 th Century

Paper III: History of Marathas (1707 A.D. TO 1818 A.D.)	
CO1	Discuss importance of the Maratha history in 18 th century
CO2	Asses circumstances under which rise of the Peshwa took place
CO3	Explain political scenario of the Maratha power in the 18 th century
CO4	Evaluate policies adopted by early Peshwas
CO5	Explain circumstances of the Maratha power at battle of Panipat
CO6	Explain reasons of political disintegration of the Maratha
CO7	Discuss nature of Anglo-Maratha relations

Paper IV: 20th Century Maharashtra (1905 A.D. – 1960 A.D.)

CO1	Explain salient features of 20 the century Maharashtra
CO2	Evaluate consolidation of British power in Maharashtra
CO3	Analyze social religious, consciousness in Maharashtra
CO4	Discuss freedom struggle in Hyderabad state specially in Marathwada region
CO5	Differentiate the Dalit movement and non Brahmin movement
CO6	Explain salient features of 20 the century Maharashtra

B.A. Second Year**Semester III & IV****Paper V: History of early India (up to 300 B.C.)**

CO1	Describe Prehistory and Proto-history
CO2	Classify urbanization in the Genetic Basin
CO3	Classification of Buddhism and Jainism
CO4	Acquire knowledge about Sanskrit, Pali literature
CO5	Identify Early Indian Maps

Paper VI: History of Delhi Sultanat (1200A.D. to 1526 A.D.)

CO1	Students of history will learn about the foundation, expansion and consolidation of The Sultanate of Delhi and also to the downfall of the Delhi Sultanate.
CO2	will learn towards the emergence of provincial dynasties & Consolidation of Regional identities like, Bahamanis, Vijayanagar and Bengal.
CO3	They also acquire the knowledge about the Changing scenarios of the urban and Rural societies after consolidation of the rule of the Sultanate of Delhi.
CO4	They can learn about the activities of Delhi Sultanate i.e., revenue systems monetization, market regulations, growth of urban centers, trade and commerce, Indian Ocean trade etc.

Paper VII: History of early India (300 B.C.TO 650 B.C.)

CO1	Describe the rise of Maurya Empire and administration along with details of life of people in that period.
CO2	Categorize the impact Indo-Greek kingdoms in Ancient India.
CO3	Classify and compares between Guptas and other kingdoms of the period and analyses the debate of the Golden Age
CO4	Identify the growth of Indian feudalism during and after Harshawardhan period.
CO5	Appraise the nature of south Indian political power.

Paper VIII: History of Mugal India (1526A.D.TO 1757 A.D.)

CO1	Students of history will learn about the foundation, expansion and consolidation of the Sultanate of Delhi and also to the downfall of the Delhi Sultanate.
CO2	will learn towards the emergence of provincial dynasties & Consolidation of regional identities like, Bahamanis, Vijayanagar and Bengal.
CO3	They also acquire the knowledge about the Changing scenarios of the urban and rural societies after consolidation of the rule of the Sultanate of Delhi.
CO4	They can learn about the activities of Delhi Sultanate i.e., revenue systems monetization, market regulations, growth of urban centers, trade and commerce, Indian Ocean trade etc.

B.A. Third Year

Semester V & VI

Paper IX: Historiography	
CO1	Write articles on historical topics, Writings History and Techniques of historical Writing
CO2	Developed their ability to access critically historical analysis and argument past and present
CO3	Gained an understanding of the development of the academic study of history
CO4	Throughout the world since the later eighteenth century
CO5	Explain recent and contemporary debates in the theory and practices of historical writings

Paper X : History of National Movement (A.D. 1885-1947)	
CO1	Explain early political awakening in Indian freedom struggle
CO2	Discuss origin and development of Indian national congress
CO3	Explain various phases of the national movement
CO4	Identify difference between moderates, extremists and revolutionaries
CO5	Comprehend socio-religious scenario and the social reformation
CO6	Discuss freedom movement under the Mahatma Gandhi's leadership
CO7	Explain Revolutionary movement in India
CO8	Discuss evolutionary process of constitutional developments

Paper XI : Women Struggle in Modern India	
CO1	Discuss women contribution in Indian freedom struggle
CO2	Explain actual condition of women in Colonial period
CO3	Discuss past and present existing social, political, religious and economic condition of women in modern India
CO4	Explain various superstitions, wrong traditions related to women in modern Indian history
CO5	Discuss women contribution in Indian freedom struggle

Paper XII : Fields of History

CO1	Explain advance and assist Archaeological research
CO2	Discuss participation in archaeology throughout society, identifying and addressing barriers to inclusivity
CO3	Explain various career opportunities in the field of Museology, and tourism
CO4	Identify various types of career opportunities in the field of Tourism, Archaeology Museology etc.
CO5	Explain advance and assist Archaeological research

Paper XIII: Fields of History

CO1	Explain advance and assist Archaeological research
CO2	Discuss participation in archaeology throughout society, identifying and addressing barriers to inclusivity
CO3	Explain various career opportunities in the field of Museology, and tourism
CO4	Identify various types of career opportunities in the field of Tourism, Archaeology Museology etc.
CO5	Explain advance and assist Archaeological research

Paper XIV: Landmarks in the History of Modern World

CO1	Discuss rise of Modern World
CO2	Classify growth of capitalism
CO3	Identify world maps –Oceanic Explorations, Europe in 1815, important stages of World War, and important centers of International trade
CO4	Explain rise and development of Democracy in modern world
CO5	Discuss freedom struggle in America, French, Russia, China, India and other part of the world

Paper XV: Glimpses of the history of Marathwada

CO1	Discuss salient features of history of Marathwada
CO2	Analyze contribution of Marathwada in Hyderabad Freedom Struggle
CO3	Discuss Marathwada freedom struggle with Indian freedom Struggle
CO4	Explain women contribution of Marathwada in freedom struggle
CO5	Identify socio- religious movements in Marathwada

J.B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Department of Geography
Course Outcomes

B.A First Year I & II Semester

Paper I : Elements of Physical Geography

Co1	Describing human-environment, and nature-society
Co2	Interactions as well as global human and environmental issues.
Co3	Identifying and explaining the planet's human and physical characteristics and processes, from global to local scales.
Co4	Evaluating the impacts of human activities on natural environments.
Co5	Applying knowledge of global issues to local circumstances to evaluate the local effects of the issues.
Co6	Showing an awareness and responsibility for the environment

Paper II: Human Geography

Co1	You have in-depth knowledge of the history of human geographic thought.
Co2	You have advanced empirical and theoretical knowledge within one or more of the following areas:
Co3	Urban Studies and Planning, Climate Change Adaptation and Social Transformations,
Co4	You have in-depth knowledge of advanced methodological tools
Co5	Development and Politics, and Economic Of Human Geography.
Co6	And can assess their appropriate use for the analysis of specific issues.

Paper III : Geography Landform

Co1	Understand earth's tectonic and structural evolution. Gain knowledge about earth's interior. Develop an idea about concept of plate tectonics, and resultant
Co2	Understand the theories and fundamental concepts of Geotectonic and Geomorphology.
Co3	Acquire knowledge about types of folds and faults and earthquakes, volcanoes and associated landforms.
Co4	Understanding crustal mobility and tectonics; with special emphasis on their role in landform development.
Co5	Development models. ability to record temperature, pressure, humidity and rainfall
Co6	Overview and critical appraisal of landform Develop the skills of identification of features and correlation between them.

Paper IV : Regional geography of Maharashtra

Co1	To acquaint the students with geography of our state.
Co2	To make the student aware of the magnitude of problems
Co3	Prospects at State level.
Co4	III. To help the students to understand the inter relationship between the subject and the society.
Co5	To help the students to understand the recent trends in regional studies.
Co6	Comparison of our state & other state

Paper V : Practical Geography

Co1	Understand the Nature and Development of Cartography
Co2	Able to prepare maps with their basic elements.
Co3	Identification of different scale types.
Co4	Identification varies graphs. Enlargement & reduction of map.
Co5	Representation of slops & land forms.
Co6	Identification toposheet & Symbol.

B.A Second Year III & IV Semester**Paper VI : Climatology**

Co1	Understand the elements of weather and climate, different atmospheric phenomena and climate change.. Learn.
Co2	Learn to associate climate with other environmental and human issues. Approaches to climate classification.
Co3	To analyze the dynamics of the Earth's atmosphere and global climate. Assessing the role of man in global climate change
Co4	Prepare various climatic maps and charts and interpret them. Learn to use of various meteorological instruments.
Co5	the interaction between the atmosphere and the earth's surface. Understand the importance of the atmospheric pressure and winds
Co6	Understand how atmospheric moisture works.

Paper VII : Population Geography

Co1	To understand the clear concepts of population geography, through spatial and temporal frameworks; population dynamics;
Co2	Demographic studies of population geography •
Co3	World population and development with special reference to India.
Co4	To understanding of nature, scope and evolution of population geography
Co5	Acquiring, handling and analyzing population data both at the grassroots level and secondary sources
Co6	To understand of settlement, concepts associated with Population theories and different growth and morphology

Paper VIII: Oceanography

Co1	Analyse the concepts of Hydrology and Oceanography
Co2	Emphasizing the significance of groundwater quality and its circulation
Co3	Evaluate the role of the global hydrological cycle.
Co4	Realize the importance of water conservation. Identify marine resources and characteristics of ocean waters.
Co5	Interpret hydrological and rainfall dispersion graphs and diagrams.
Co6	Studying the behaviour and characteristics of the global oceans.

Paper IX: Settlement Geography

Co1	Acquire knowledge about Rural settlements- Definition, nature and characteristics Differentiate between city-region and conurbation topographical sheet
Co2	Analyse the morphology of rural settlements Learn the rural house types, census categories of rural settlements and idea of social segregation
Co3	Learn the census definition and categories of urban settlements Analyse the urban morphology models of Burgess, Hoyt, Harris and Ullman
Co4	Analyse the functional classification of cities Develop the skill of mapping language distribution of India
Co5	Learn to plot proportional squares to illustrate housing distribution Acquire the skill of identifying rural settlement types from
Co6	Understand Social Area Analysis of a city based on Shaky and Bell

Paper X : Practical Geography

Co1	Understand the basic principles of Weather Interpretation
Co2	Acquire knowledge about the uses of Meteorological instruments
Co3	Interpretation of Weather maps
Co4	Interpretation of whether interment
Co5	Understand conventional signs & symbol
Co6	Understand the map projection

B.A Third Year V & VI Semester

Paper XI : Physical Geography Of India

Co1	Identifying and explaining the Indian Geographical Environment, from global to local scales.
Co2	Applying geographical knowledge to everyday living.
Co3	Applying knowledge of global issues to a unique scientific problem.
Co4	Showing an awareness and responsibility for the environment and India.
Co5	Evaluating the impacts of human activities
Co6	Natural environments special reference to India.

Paper XII : Geography Of Environment

Co1 The students acquired the information about environment.

Co2 Acquired information about climate

Co3 Earth's and anthropogenic movement and environment changes.

Co4 The students improved their role in environment.

Co5 The students increased the knowledge in research.

Co6 To create awareness about environment in the society.

Paper XIII : Industrial Geography Of Maharashtra

Co1 Study the different elements of Industrial geography of Maharashtra

Co2 Identify key about historical, Political background of Maharashtra

Co3 Describe the administrative divisions in details as well drainage system, climatic regions, drought prone regions, flood areas etc.

Co4 Details in Maharashtra's agricultural land, different crops processing Industries

Co5 Industrial area and their importance,

Co6 Role of population, settlements, Tourism and urbanization in Industry.

Paper XIV : Agriculture Geography of India

Co1 Understand about the introduction to agriculture, nature, scope, significance and Development of agriculture geography, study approaches applied in agriculture.

Co2 Understand the influence of physical, Economic and Technological factors on agriculture patterns.

Co3 To understand the agricultural system its meaning and concept, whittlesey's classification

Co4 Agricultural system, types of agricultural, study the types of agricultural in respect of area, salient Features and their problems.

Co5 Understand the agricultural regionalization and modes in agricultural geography and their classification of agricultural models and some theories.

Co6 Understand definition and characteristics of arid and semi-arid regions and study about droughts and famines, role of irrigation and dry farming.

Paper XV : Geography Of Natural Calamity

Co1 Understand the nature of hazards and disasters.

Co2 Assess risk, perception and vulnerability with respect to hazards.

Co3 Prepare hazard zone maps

Co4 Assessing the nature, impact

Co5 management of major natural and man-made hazards

Co6 Affecting the Indian subcontinent.

Paper XVI : Practical Geography

Co1	Understand the collection Geographical data
Co2	Classification and processing of geographical data.
Co3	Comprehend the graphical representation and interpretation of the results
Co4	Apply basic statistical analysis to geographical data day-to-day uses
Co5	Conduct Plane table survey and Prismatic survey and produce the survey maps
Co6	Educational survey and agriculture survey data analyses

Paper XVII: Bio-Geography

Co1	Understand the impact of man as an active agent of soil transformation, erosion and degradation Studies
Co2	Recognize land capability and classify it.
Co3	Processes of soil formation, types of soil, and principles of soil and land classification; and management.
Co4	Understand the varied ecosystems and classify them.
Co5	Recognize the significance of biogeochemical cycles and biodiversity.
Co6	Comprehend the devastating impact of deforestation. • Identify soil types and derive

Paper XVIII : Practical Geography

Co1	To undertake survey exercises in a geographical area. •
Co2	Apply different cartographic techniques to map
Co3	Appreciate how projections are applied to prepare maps from the globe
Co4	Learning map projections is an integral part of map making and this paper
Co5	Enable the students to gain insight about various map projection techniques.
Co6	Apply the map projection to read map

Paper XIX Project Work

Co1	Students will be able to state an original research question appropriate for geographic analysis.
Co2	Students will be able to state how a research project contributes to an existing body of geographic literature
Co3	Students will be able to design legitimate geographic methodology.
Co4	Students will be able to implement legitimate geographic methodology.
Co5	Students will be able to explain and assess the results of original geographic research.
Co6	Students will be able to communicate clearly and effectively in a written format.

B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Department of Physical Education

Course Outcomes

**B.A. First Year
Semester I & II**

Paper I – Philosophical, Sociological foundation and History of Physical Education

CO1	Introduction to the theoretical concept of philosophical and sociological foundation of physical education
CO2	To impart knowledge to students regarding the fundamentals of sociological foundation & history of physical education.

Paper II – Principal & Recent development of Physical Education

CO1	To Develop Student's physical competence, knowledge of safe movement, their ability to use these perform in a wide range of activities associated with the development of an active.
CO2	To Provide the positive values, attitudes and a good foundation for student's lifelong and life wide learning in physical education.

Paper III- Practical in physical Education

CO1	To prepare the students in competition of games.
CO2	Develop game skill & abilities.

B.A. Second Year

Semester III & IV

Paper V– Health Education & Recreation in physical Education and sports.	
CO1	To aware about own health.
CO2	To acquire knowledge about the health education.
CO3	To develop the personality of students and their socialization through recreation in physical education.

Paper VI – Officiating, Coaching & Training Methods in Physical Education and sports	
CO1	To Acquire knowledge through the officiating, coaching & training methods.
CO2	To know the different training methods of fitness.

Paper VII – Practical In Physical Education	
CO1	To Prepare the students in companions of games.
CO2	Develop game Skill & Abilities.

B.A. Third Year

Semester V & VI

Paper IX – Ancient & Modern History of Physical Education and sports

CO1	To Create the interest in Ancient & Modern History in Physical Education and sports.
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Paper X – Sports Psychology & Management in physical Education and sports

CO1	To Provide foundation for the basic principles of psychology in physical education
CO2	To train players how psychological principles can help them to face sports challenges.
CO3	To enable students to relate what they are learning in class to issue that they encounter in their stress, Health, personal relationships communication and self - esteem.

Paper XI– Organization, Administration & Supervision in Physical Education and sports Youth welfare and youth services.

CO1	To acquire deep knowledge or organization and administration in physical education.
CO2	To use this knowledge in sports competition.

Paper XIII– Anatomy, Physiology and kinesiology of physical Education	
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CO1	To study anatomy, physiology and kinesiology in physical education.
CO2	To understand the anatomy, Physiology and kinesiology effects ion physical education.

Paper XIV – Practical in Physical Education (Subsidiary)	
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Paper XV – Practical in Physical Education (Main)	
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CO1	To prepare the students in competition of games.
CO2	Develop game skill & abilities
CO3	To Accumulate fitness development and co-ordination of body.

J.B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Department of Chemistry
Course Outcomes

B.Sc. First Year
Semester I & II

Paper No. I (Inorganic Chemistry)	
CO1	Predict atomic structure and explain various quantum numbers
CO2	Explain standardized names and symbols to represent atoms, molecules, ions and chemical reactions
CO3	Explain trends of periodic properties of elements in periodic table
CO4	Predict biological role of Alkali and Alkaline earth metals

Paper No. II (Organic Chemistry)	
CO1	Explain various effects, and properties of organic compounds, nature of bond
CO2	Discuss nature of bond breaking and mechanical phenomenon
CO3	Explain concept of isomerism and types of stereo chemical configuration
CO4	Discuss mechanistic pathways of simple organic reaction

Paper No. III (Lab Course-I)	
CO1	Prepare and standardize various solutions
CO2	Determine basicity of given organic acid
CO3	Determine viscosity of given liquid
CO4	Identify acidic and basic radicals in given mixture
CO5	Identify types of organic compounds by chemical analysis method

Paper No. IV (Physical Chemistry)

CO1	Calculates Logarithmic relations, curve sketching, linear graphs and calculation of slopes, differentiation of functions like kx , e^x , x^n , $\sin x$, $\log x$; maxima and minima, partial differentiation
CO2	Explains about Gas Laws, Boyles Law, Charles Law, Grahams Law of diffusion, Avogadro's hypothesis, deviation from ideal behavior, van der Waals equation of state
CO3	Understand the term Catalysis: Definition, types, and characteristics of catalysis, homogeneous, heterogeneous catalysis - Enzyme catalysis and its application
CO4	Derived and solve the numerical problems based on zero order, first order, second order, Pseudo order, half-life
CO5	Illustrate the concept of Liquid State, Solid State, Types of solids, Amorphous, crystalline and difference between them, Miller Indices
CO6	Explains difference between solids, liquids and gases. Explains and derived Laws of crystallography
CO7	Understand the basic concept of colloids, classification of colloids, preparation and properties of sols, emulsions and gels and their general applications

Paper No. V (Inorganic Chemistry)

CO1	Demonstrate preparation, physical and chemical properties, structural properties, Applications of various elements
CO2	Differentiate chemical bonding, hybridization and molecular geometry on the basis of VBT
CO3	Differentiate types of indicators and correlate with appropriate titration method
CO4	Explain various aspects of radioactivity

Paper No. VI (Lab Course-II)

CO1	Identify nature /functional group /Derivative /physical constant of different compound
CO2	Prepare phenol by bromination
CO3	Estimate basicity molecular weight for acid example Oxalic acid acetic acid
CO4	Identify types of organic compounds by chemical analysis method

B.Sc. Second Year

Semester III & IV

Paper No. VII (Organic Chemistry)	
CO1	Explain different types of alcohol and its identification in simple organic compounds
CO2	Differentiate alcohol and phenols in simple and complex organic molecules
CO3	Explain the structure of carbonyl compounds and type of various name reaction involving carbonyl group
CO4	Analyze effect of substituent on acidity of carboxylic acid
CO5	Analyze effect of basicity in various simple hetero cycles

Paper No. VIII (Physical Chemistry)	
CO1	Distinguish isothermal, adiabatic, isochoric and other thermodynamic processes
CO2	Correlate law of mass action, equilibrium constant with free energy
CO3	Solve numerical problems related to efficiency, work done, heat change

Paper No. IX (Lab Course -III)	
CO1	Determine concentration values of sample solutions using instrumentation
CO2	Analyze quantitatively, specific elements by complex metrically and gravimetric methods
CO3	Determine critical solution temperatures of heterogeneous phases
CO4	Evaluate and interpret heat of neutralization reactions

Paper No. X (Inorganic Chemistry)	
CO1	Present in depth knowledge of abundance, position, preparation, properties and chemical behavior of various d and f block elements from the periodic table
CO2	Identify co-ordination compounds and its applications
CO3	Differentiate aqueous and non-aqueous solvents

Paper No. XI (Physical Chemistry)

CO1	Explain different types of Conductometric titrations
CO2	Solve mathematical problems on electro-chemistry
CO3	Explain phase diagrams of one component systems
CO4	Explain phase diagrams of two component systems
CO5	Classify electrochemical and electrolytic cells

Paper No. XII (Lab Course-IV)

CO1	Determine the molar refractive index of given sample by refractometer
CO2	Prepare organic derivatives and determine physical constants
CO3	Estimate ester, amide and other organic molecule entities
CO4	Preparation of derivative of different compound
CO5	Organic estimation of nitro group by reduction
CO6	Estimate amide by hydrolysis

B.Sc. Third Year

Semester V & VI

Paper No. XIII (Physical Chemistry)	
CO1	Understands about Black body radiation, Planck's radiation law, photoelectric effect, physical interpretation of the wave function, postulates of quantum mechanics
CO2	Develops the idea of Spectroscopy. Basic features of different spectrometers
CO3	Know Photochemistry and explain Laws of photochemistry, Grothus-Drapper law, Stark-Einstein law. Qualitative description of fluorescence, phosphorescence, non-radioactive processes and Jablonski diagram
CO4	Explains Physical properties and molecular structure by Guoy balance method, Applications of optical activity, dipole moment and magnetic property for determination of structure of molecule
CO5	Explain the Nano-materials and Methods of Synthesis of High energy ball milling, PVD, CVD and Micro emulsion. Synthesis using micro-organisms and plant extract

Paper No. XIV (Organic Chemistry)	
CO1	Find out types of sets of protons in organic compound, their chemical shift value, Splitting Pattern and Coupling Constant
CO2	Solve simple NMR problems with given data
CO3	Classify various organometallic compounds, Synthesis of various organometallic compounds and their application in organic transformation
CO4	Identify and classify various active Methylene compounds and their application in Organic Synthesis

Paper No. XV (Lab Course -V)	
CO1	Separate and identify organic components
CO2	Perform Semi-micro-Qualitative analysis of inorganic mixture
CO3	Study the gravimetric and volumetric analysis of ores and alloy
CO4	Analyze binary mixture with removal of barium and Nickel
Paper No. XVI (Inorganic Chemistry)	

CO1	Explain nature of metal-ligand bonding and illustrate splitting of d Orbitals
CO2	Demonstrate mechanism of sodium potassium cycle
CO3	Describe essential and trace elements and their role in biological system
CO4	Categorize chromatographic techniques with reference to adsorbents and other Components.

Paper No. XVII (Organic Chemistry)

CO1	Explain effect of Aromaticity on strength of basicity of heterocyclic compound
CO2	Classify carbohydrates and its utility in day-to-day life
CO3	Explain synthesis of paracetamol
CO4	Explain properties of good Drugs

Paper No. XVIII (Lab Course-VI)

CO1	Identify organic mixture0s by chemical analysis method
CO2	Analyze inorganic radicals by chemical analysis method
CO3	Identify and separate given mixtures by gravimetric and volumetric method
CO4	Analyze percent composition of acid mixture by Conductometric method
CO5	Identify empirical formula by Potentiometric method

J.B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Department of Physics

Course Outcomes

B.Sc. First Year

Semester I

Paper I : Mechanics, Properties of Matter

CO1	Identify fundamental principles in mechanics.
CO2	Illustrate Newton's laws of gravitation and Kepler's laws of planetary motion. Explain viscosity of Fluid, law of energy conservation and applications of Bernoulli's theorems with examples.
CO3	Apply the physical principles of moment of inertia in terms of the mass Distribution from the rotational axis to various symmetrical bodies.
CO4	Analyze the properties and applications of elasticity with experiments.
CO5	Justify the quantitative problem-solving skills in all the topics covered.
CO6	Develop an intuition towards problems solving and design realistic applications in the physical world.

Paper II: Heat & Thermodynamics

CO1	Recall the concepts of Thermodynamics.
CO2	Discuss the behavior of real gases.
CO3	Compute the thermodynamic quantities associated with different types of Processes.
CO4	Explain the working of heat engine, different types of thermometers. Compare types of heat engines and their working; temperature scales.
CO5	Determine work done, efficiency of heat engines and coefficient of performance of refrigerators, temperatures using different scales and principles of thermometers.

Semester II

Paper IV: Geometrical and Physical Optics

CO1	Describe and determine concept of cardinal point and different eye pieces
CO2	Explain interference phenomenon of light and its relevant experiments
CO3	Explain concept of diffraction of light and grating d its related Experiments
CO4	Describe polarization of light and its related Experiments

Paper V: Electricity and Magnetism

CO1	Recall the concepts associated with stationary charges.
CO2	Discuss the atomic view of polarization of matter. Explain the correlation in Electricity and magnetism.
CO3	Compute the boundary conditions and calculate quantities like current, voltage, Power, phase, impedance, etc in DC and AC circuits.
CO4	Classify the phase relations in AC circuits.
CO5	Compare the growth and decay of current in DC circuits.
CO6	Write the phase relations between different parameters (like current, voltage, power and impedance) in simple electronic circuits comprising of resistors, inductors and capacitors.

B.Sc. Second Year

Semester III

Paper VII: Mathematical Methods in Physics	
CO1	Recall the knowledge of calculus, vectors, vector calculus.
CO2	Illustrate methods of solving partial differential equations with the examples of Important partial differential equations in Physics.
CO3	Apply the various methods for solving differential equations in various physical problems such as in quantum mechanics, which they will learn in future courses in detail.
CO4	Explain the Fourier analysis of periodic functions and reconstruct physical problems such as vibrating strings etc.
CO5	Determine transformation equations and construct various coordinate systems. Compare Cartesian, spherical and cylindrical coordinate systems.
CO6	Formulate the special functions, such as the Hermit polynomials, the Legendre polynomials and Bessel functions and their differential equations.

Paper VIII: Modern and Nuclear Physics	
CO1	Explain Photoelectric Effect and its applications in various processes
CO2	Describe X- Ray radiation and its spectra
CO3	Explain theoretical aspect of Atomic mass, nuclear fission and Energy released in nucleus
CO4	Describe Particle accelerator, Cyclotron and Deuterons
CO5	Define and describe basic properties of the nucleus.
CO6	Explain the concept of radioactivity. Classify different radiation detectors and Nuclear models.
CO7	Solve problems related to nuclear and particle physics.
CO8	Explain nuclear reaction dynamics, nuclear reactors and accelerators.
CO9	Compare nuclear energy with other energy sources.
CO10	Specify applications of accelerators and detectors. Compile knowledge of elementary particles to understand nuclear phenomena.

Semester IV

Paper XI: General Electronics

CO1	Describe semiconductors, Zener diode, Transistor and give its application
CO2	Explain Amplifier, RC coupling and Transistor biasing and discuss its applications
CO3	Describe theoretical and practical aspects of Oscillator and Multi-vibrator
CO4	Elaborate modulation, FM Modulation and AM wave

Paper XII: Solid State Physics

CO1	List seven crystal systems.
CO2	Explain free electron theory and band theory.
CO3	Calculate lattice parameter from given XRD pattern.
CO4	Identify the structure of materials.
CO5	Evaluate the density of the state equation in 3D.
CO6	Specify the importance of magnetic materials.

B.Sc. Third Year

Semester V

Paper XV: Classical and Quantum Mechanics XV	
CO1	Describe methods of solving equations of motions.
CO2	Explain the necessity of considering constraints.
CO3	Apply different techniques to find solutions to problems in Mechanics.
CO4	Compare and contrast Newtonian, Lagrangian and Hamiltonian approaches.
CO5	Determine the constraint equations and decide the generalized coordinates to be used.
CO6	Hypothesize rotating frames of references.
CO7	Recall and explain the phenomena like black body radiation, photoelectric effect, Compton effect, diffraction of photons/electrons from one/two slits, pair production etc.
CO8	Explain the quantum statistics and differentiate between classical and quantum Statistics.

Paper XVI : Classical Electrodynamics	
CO1	Define electric fields, electric potential, displacement vector, electric Polarization.
CO2	Articulate concepts of evaluating electric fields due to line charge, surface charge and volume charge using Coulomb's law and Gauss's law. Explain mechanism of polarization in dielectrics.
CO3	Demonstrate special techniques to calculate potential due to some charge distribution.
CO4	Explain motion of charged particles in the electromagnetic field. Deduce Biot Savart's law from Ampere's law.
CO5	Compare magnetic properties of material on the basis of total spin of electrons in atoms.
CO6	Compile Maxwell's set of equations and develop electromagnetic plane wave equations.

Semester VI

Paper XIX: Atomic and Molecular Physics

C01	Recall and recognize the gradual development of the Atomic theory and Distinguish between various atomic models.
C02	Explain the effect of magnetic field on atomic spectra.
C03	Solve the problems in Atomic theory.
C04	Relate atomic theory to analyze spectra.
C05	Evaluate spectroscopic data to identify elements using atomic spectra.
C06	Develop mathematical treatment for the Bohr atom, Zeeman effect and Raman Spectra.

Paper XX: Non-conventional energy sources and Optical fiber

C01	Explain the concept of technologies of non-conventional sources of energy
C02	Describe various renewable energy technology
C03	Discuss non-conventional energy sources: Biomass, wind energy, tidal energy Ocean. geothermal energy and solar energy
C04	Elaborate the concept of solar energy and its applications in various fields
C05	Describe structures of optical fibers
C06	Describe fiber fabrication techniques and testing of optical fiber cables

J.B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Department of Botany
Course Outcomes

B.Sc. First Year

Diversity of Cryptogams-I

CO1: Introduction about basic plant group like Algae and Fungi.

CO2: To equip the students with all life science fundamental practical skills.

CO3: Make aware about the economic and medicinal value of cryptogrammic plant.

Morphology of Angiosperms

CO1: Introduction about basic structure of plants.

CO2: To develop practical knowledge of Angiosperm plants

Diversity of Cryptogams-II

CO1: To understand the various category of plants with morphological features of Bryophytes and Peridophytes.

CO2: Analyze the peculiar characteristics features of plant groups in relation with its Internal characteristics.

CO3: Make aware of economic and medicinal value of cryptogrammic plant.

Histology, Anatomy and Embryology

CO1: To get detail knowledge of internal structure of plantparts

CO2: To use this knowledge in Wood Industry, Forensicscience.

CO3: To understand development of seed and seedcertification.

B.Sc. Second Year

Taxonomy of Angiosperm

CO1: Familiarize with basic terminology, plant systematic and its different classification.

CO2: To identify Angiosperm plants and their use.

Plant Ecology

CO1: Knowledge of anatomical characterization of plant for the understanding ecological adaptation.

CO2: Study its eco-friendly conservation and sustainable utilization.

CO3: Students cope up with the ecosystem mechanism, analyzing plants ecosystem.

Gymnosperms and Utilization of plants

CO1: To make aware about the economic and medicinal value of Gymnosperms and Angiosperms.

CO2: To understand some important terminology in industrial economically important higher plant groups species.

Plant Physiology

CO1: To understand plant physiology, different life process, streams like Plant genetics and Plant biotechnology.

CO2: To use the knowledge for advance study in plant sciences.

B.Sc. Third Year

Cell and Molecular Biology

CO1: To create the innovative approaches to aware the students in basic terminology of plant cell

CO2: To get the detailed knowledge of cell at molecular level.

CO3: To apply this information for development of humankind

Diversity of Angiosperms-I

CO1: Create awareness about the plant resources

CO2: To classify plants on the basis of various morphological aspects

CO3: Participate in laboratory experiments for understanding the basic principles of life sciences and helpful for gaining primary information.

Genetics and Biotechnology

CO1: To Study basic terms in Mendelian and Non Mendelian genetics

CO2: To focus on Biotechnological importance for improvement and satisfaction of all need of human kinds

CO3: To give basic information regarding the plant biotechnology and its application in agriculture, Horticulture, medicinal and industrial crops.

Diversity of Angiosperms-II

CO1: To study its eco-friendly conservation and sustainable utilization of plants

CO2: Knowledge about flora in the area.

J.B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Department of Zoology
Course Outcomes

First Year

Semester I

Paper I : Protozoa to Annelida	
CO1	Identify animals by observation
CO2	Describe unique characters of Protozoa, Porifera, Coelenterate, Helminthes and Annelids
CO3	Explain life functions of Protozoa, Porifera, Coelenterate, Helminthes and Annelids
CO4	Describe ecological role of phylum Protozoa, Porifera, Coelenterate, Helminthes and Annelida
CO5	Identify diversity from Protozoa, Porifera, Coelenterate, Helminthes and Annelids

Paper II: Cell Biology	
CO1	Describe in detail the structure of cell
CO2	Describe function and the composition of the plasma membrane
CO3	Explain principles of the cell theory
CO4	Differentiate between prokaryotes and eukaryotes
CO5	Understand importance of the nucleus and its components

Semester II

Paper IV: Arthropoda to Echinodermata and Hemichordata	
CO1	Identify animals by observation
CO2	Describe unique characters of Arthropods, Mollusks, Echinoderms & Hemichordates
CO3	Explain life functions of Arthropods, Mollusks, Echinoderms and Hemichordates
CO4	Explain ecological role of phylum from Arthropod to Hemichordata

Paper V: Genetics I	
CO1	Describe chemical basis of heredity
CO2	Explain role of genetics in evolution
CO3	Evaluate conclusions that are based on genetic data
CO4	Find the results of genetic experimentation in animals

B.Sc II Year

Semester III

Paper VII: Vertebrate Zoology

CO1	Describe unique characters of urochordates, cephalochordates and fishes
CO2	Recognize life functions of urochordates to fishes
CO3	Explain ecological role of different groups of chordates
CO4	Explain the diversity of chordates and describe unique characters of amphibians, r reptiles, aves and mammals
CO5	Describe life functions of amphibians, reptiles, Aves and Mammals

Paper VIII: Genetics II

CO1	Explain in detail gene expression and its behavior in transformation
CO2	Describe the role of genetics in evolution
CO3	Evaluate conclusions that are based on genetic data in population genetics
CO4	Describe genetic diseases and disorders
CO5	Explain the techniques that are used in genetic engineering

SEMESTER IV

Paper XI: Animal Physiology

CO1	Describe in detail the physiology at cellular and system levels
CO2	Explain the role of different bio-molecules
CO3	Explain how mammalian body get nutrition from different bio-molecules
CO4	Describe the functions of different systems
CO5	Describe the physiology of respiratory, renal, endocrine and reproductive systems to define normal and abnormal functions

Paper XII: Biochemistry and Endocrinology

CO1	Describe in detail the metabolism of carbohydrates, proteins, fats
CO2	Explain the fundamental biochemical principles
CO3	Describe basic laboratory techniques in biochemistry
CO4	Describe the structure and function of endocrine glands
CO5	Explain the role of hormones

B.Sc. III Year

Semester V

Paper XV: Ecology	
CO1	Describe abiotic and biotic factors that affect, the distribution, dispersal, and behavior of organisms
CO2	Identify factors that affect biological diversity and the functioning of ecological systems
CO3	Use an ecological vocabulary in arguments and explanations of ecological phenomena
CO4	Apply concepts and theories from biology to ecological examples
CO5	Analyze and interpret ecological information, research and data

Paper XVI (D): Parasitic protozoa & Helminthes I	
CO1	Study of life cycles of Protozoan parasitic disease, its control, treatment and prophylaxis
CO2	Explain the methods used for diagnosis and treatment of Helminthes diseases.
CO3	Distinguish the methods used for protection of parasitic infectious diseases.

Semester VI

Paper XIX: Evolution	
CO1	Describe evolutionary history of man
CO2	Describe origin of species on earth
CO3	Have an enhanced knowledge and appreciation of evolutionary biology and behavior
CO4	Perform, analyze and report on experiments and observations in whole-organism biology
CO5	Gain information regarding animal classification and systematic, animal structure and function relationships, evolution between and within major animal groups, human evolution and animal reproduction and development

Paper XX (D): Parasitic Protozoa & Helminthes II	
CO1	Study of life cycles of Helminthes parasitic disease, its control, treatment and prophylaxis
CO2	Explain the methods used for diagnosis and treatment of Helminth diseases.
CO3	Distinguish the methods used for protection of parasitic infectious diseases.

J.B.S.P. Mandal's

Arts & Science College, Shivajinagar, Gadhi

Department of Mathematics

Course Outcomes

B.Sc. First Year

Semester I & II

Paper MAT 101 Differential Calculus

CO1	Solve problems on limits continuity and successive differentiation of Functions
CO2	Determine partial derivative of function more than one variable
CO3	Describe Rolle's Theorem, Lagrange's and Cauchy's mean value theorem
CO4	Describe partial differentiation and able to calculate partial derivatives of higher order.
CO5	Determine gradient, divergence and curl and directional derivatives

Paper MAT 102 Differential Equations

CO1	Determine solution of first order linear differential equation
CO2	Determine solution of exact differential equation
CO3	Find the solution of ordinary differential equation with more than two variables.
CO4	Determine solution of linear homogeneous differential equation
CO5	Describe partial differential equation and derivative of partial differential eq ⁿ

Paper MAT 201 Integral Calculus

CO1	Solve Basic Integral Calculus problems
CO2	Find integration of algebraic rational functions
CO3	Apply fundamental theorem of integral calculus
CO4	Calculate the length of arc of a curve.
CO5	Apply the theorems of Gauss, Green's and Stoke's theorem

Paper MAT 202 Geometry

CO1	Identify and use different type of equations of plane
CO2	Determine equations of the system of planes and the length of perpendicular to a plane
CO3	Determine equation of right line and the angle between the plane and line
CO4	Determine equation of sphere and its intersection with the plane
CO5	Describe the tangent lines and tangent planes to central conicoid.

B.Sc. Second Year**Semester III & IV****Paper MAT 301 Number Theory**

CO1	Describe division algorithm and solve the problem on it
CO2	Determine GCD and LCM by using Euclidean algorithm
CO3	Describe method of solving linear Diophantine equation
CO4	Determine solution of linear congruence
CO5	Describe the Euler's generalization of Fermat's theorem and Euler's phi function

Paper MAT 302 Integral Transforms

CO1	Define beta and gamma functions and derive their properties and apply them in evaluating integrals
CO2	Determine Laplace transform for various functions, properties of Laplace transforms
CO3	Determine inverse Laplace transform, properties of inverse Laplace Transform
CO4	Determine Fourier transform, properties of Fourier transform, Fourier sine and cosine transforms
CO5	Apply Laplace transform to find solutions of ordinary and partial differential equations

Paper MAT 303 Mechanics - I

CO1	Describe different types of forces, triangle law of forces, Parallelogram of forces, resultant of forces, sine rule and cosine rule
CO2	Explain resultant of several coplanar forces, equation of the line of action of the resultant, equilibrium of a rigid body under 3 coplanar forces

CO3	Explain Lammi's theorem and polygon of forces
CO4	Explain vector moment of a force and vector moment of couple
CO5	Describe basic concepts of centre of gravity and its applications

Paper MAT 401 Numerical Analysis

CO1	Explain Bisection Method, Method of False Position, Newton-Raphson Method
CO2	Describe Finite Differences, Newton's Formula for Interpolation, Lagrange's Interpolation Formula, Divided Differences
CO3	Describe Least Square Curve Fitting Procedures, Fitting a straight line, Chebyshev polynomial, Power series
CO4	Calculate Solution of Linear system of equations, Eigen values and Eigen Vectors
CO5	Find the solution of ordinary differential equation of by Euler, Taylor and Runge-Kutta method

Paper MAT 402 Partial Differential Equations

CO1	Define partial differential equations and Geometrical interpretation of the Lagrange's linear partial differential equation
CO2	Find different types of solutions like complete integral, Singular integral and general integral
CO3	Determine the solution of partial differential equations using Charpit's Method
CO4	Classify partial differential equations to special types
CO5	Describe Monge's Method, Method of transformation

Paper MAT 403 Mechanics - II

CO1	Find velocity and acceleration in terms of vector derivatives, curvature, Angular speed and angular velocity
CO2	Describe Radial and Transverse components of velocity and acceleration, areal speed and velocity
CO3	Explain Newton's Law of motion, angular momentum, work, energy, vector point function, Field of force
CO4	Describe motion under gravity, projectile, Motion of projectile, Parabola of safety
CO5	Describe areal velocity of central orbit, Pedal's equation

B.Sc. Third Year

Semester V & VI

Paper MAT 501 Real Analysis - I	
CO1	Describe sets, functions, real valued functions, countable sets, Least upper Bound axiom and greatest lower bound axiom.
CO2	Define different types of sequence and series with examples
CO3	Describe limit superior, limit inferior and Cauchy sequence
CO4	Describe absolute and conditional convergence of the series
CO5	Explain Jacobian of implicit function and necessary and sufficient condition for a Jacobian to vanish

Paper MAT 502 Abstract Algebra - I	
CO1	Explain elementary concepts of sets, functions and integrals
CO2	Describe group, subgroup, counting principle, Normal subgroup, Quotient groups, Homomorphism
CO3	Define homomorphism, automorphism, kernel of a homomorphism, isomorphism.
CO4	Define rings , zero divisors of a ring , integral domain , field with examples
CO5	Describe ideals, quotient rings and polynomial rings

Paper MAT 504 Ordinary Differential Equation - I	
CO1	Define Basic concepts of ordinary differential equation
CO2	Describe linear equation of first order and the general linear equation of first order
CO3	Solve problems associated with differential equation
CO4	Find the second order homogeneous equation and initial value problems for second order equations
CO5	Define linear dependence and independence with examples and solve the examples using formula for Wronskian

Paper MAT 601 Real Analysis – II	
CO1	Define Basic concepts of metric spaces and limits in metric spaces
CO2	Explain open sets and closed sets with examples. Prove the related theorems
CO3	Describe connectedness, completeness and compactness with the examples
CO4	Verify the function to be Riemann integral. Prove the properties of Riemann Integral.
CO5	Define Fourier series with examples

Paper MAT 602 Abstract Algebra – II	
CO1	Define Basic concepts of vector space and subspaces
CO2	Describe linear independences with examples
CO3	Give examples of bases for vector spaces.
CO4	Solve examples on inner product spaces, Schwarz inequality and orthonormal set
CO5	Define modules and sub modules and homomorphism of modules

Paper MAT 604 Ordinary Differential Equation – II	
CO1	Solve initial value problems for homogeneous differential equations
CO2	Explain reduction of the order of a homogeneous equation, nonhomogeneous Equations.
CO3	Find homogeneous equation with analytic coefficients, the Legendre equation
CO4	Define the Euler equation, second order equations with singular points
CO5	Explain the general case of second order equations with regular singular points