

### Digras Vibhagiya Shikshan Prasarak Mandal's

# Bapuraoji Butle Arts, Narayanrao Bhat Commerce & Bapusaheb Patil Science College, DIGRAS DIST. YAVATMAL.

Affiliated to Sant Gadge Baba Amravati University, Amravati Maharashtra.

College Code : (Sr.) 405

[NAAC Re-accredited 'A' (CGPA. 3.16)]

College Code : (Jr.) Pay Unit – 146 Board – 08.04.002

Website: www.bbnbbpcollege.org

E-Mail: principal.bnbcollege@gmail.com

2.6.1 - Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

COs for all Programmes (exemplars from Glossary)

Principal
Principal
College, DIGRAS-445203

# B.B.Arts, N.B. Commerce & B.P. Science College, Digras.

# Department of Marathi

# Programme Outcomes (Marathi)

- 1.Creating an interest in literature.
- Availing the job opportunities in translation, transformation and media.
- 3. Increasing the critical attitude about literary studies.
- 4. Imbuing the literary research attitude.
- 5. Understanding the interrelation between literature and society.
- 6. Explaining the nature of language and literature.
- Obtaining the skills of literary criticism.
- Imbuing the essay writing skills.
- 9. Introduction of the medieval Marathi language and literature.
- 10. Acquaintance with oriental poetry.
- 11. Understanding the nature and features of poetry.
- 12. Creating the skill of critical appreciation of a poem.
- Developing the poetic devices and their usages.
- 14. Understanding origin, nature and function of language.
- Getting information about phonetics.
- 16. Enhancing the interest in Marathi language

# Course Outcome :- B.A.I,Sem.I,II (Marathi)

विषय: मराठी (आवश्यक)

नेमलेले पाठ्यपुस्तक : 'शब्दगंध' भाग-१ (सत्र १ व सत्र २) (संपादित)

प्रकाशकाचे नाव : राघव पब्लिशर्स ॲण्ड डिस्ट्रीब्युटर्स, नागपूर

# अभ्यासपत्रिकेची निष्पती (Course Outcome) :-

नेमलेल्या साहित्यातून जीवनदर्शन, समकालीन व्यवहार जाणिवा यांची माहिती होईल.

२. वैचारिक, ललित, कविता या विविध वाड्.मय प्रकाराचे ज्ञान होईल. या वाड्.मय प्रकाराचे वेगळेपण जाणून घेतील तथा यामधील साम्यभेदाचे आकलन होईल.

 वैचारिक गद्यातून भाषेच्या सर्जनशील रूपाचे विद्यार्थ्यांना आकलन होईल. तसेच चारित्र्यविषय असलेल्या थोर व्यक्तींच्या जीवनकार्यातून विद्यार्थ्यांना प्रेरणा मिळेल आणि संकटावर मात करून जीवनात यशस्वी होता येतेहा विचार त्यांच्या मनी रूजेल.

४. लित कलाकृतीच्या वाचनातून आनंद, बोघ, ज्ञान इत्यादींची प्राप्ती होऊन विद्यार्थ्यांच्या जीवनविषयक जाणिवा समृद्ध होतील.

५. वैचारिकता, तात्त्विकता, काव्यात्मकता, भावनात्मकता, सामान्य गोष्टीतील असामान्यत्वाचे दर्शन यातून विद्यार्थ्याचा दृष्टीकोण संपन्न होईल.

६. विविध प्रकारच्या साहित्याचे आकलन, वर्णन, आस्वादन, विश्लेषण आणि मूल्यमापन करण्याची क्षमता वादून विद्यार्थ्यांची अभिरूची विकसित होईल.

७. या वाड् मयप्रकारातून विविध प्रकारचे नीतिमूल्ये, जीवनमूल्ये, यांची शिकवण विद्यार्थ्यांना मिळेल, त्याचा उपयोग उत्तमरीतीने जीवन जगण्यासाठी होईल.

८. 'उपयोजित' घटकाच्या माध्यमातून विविध प्रकारची कौशल्ये त्यांच्यात निर्माण होतील व ते रोजगारक्षम होतील.

९. विचारवंत, लेखक, कवी होण्यासाठी हे अध्ययन प्रेरक ठरेल, सहाय्यभूत ठरेल. यातून विद्यार्थी भाषेचा सर्जनशील वापर कसा करावा हे समजून घेतील व विविध प्रकारातील साहित्य निर्मिती करतील. तसेच व्यवहारिक उपयोजन करून रोजगारक्षम होतील.

# Course Outcome :- B.A.I,Sem.I, (Marathi Literature)

विषय : मराठी वाड्.मय (ऐच्छिक)

# अभ्यासपत्रिकेची निष्पती (Course Outcome) :-

- कादंबरी या वाड्-मय प्रवाहातून सामाजिक प्रश्नांची जाणीव निर्माण होऊन व सामाजिक मूल्यांची जाणीव होईल.
- २) धूळपावलं या कादंबरीतून समाजातील विविध व्यक्तिरेखा, तथा ग्रामीण संस्कृतीचे दर्शन होईल.
- नेमलेल्या कांदबरीमधील पात्रांच्या नात्याची गुंतागुंत आणि भावनिक आंदोलनाचा शोध घेता येईल.
- ४) भाषिक व वाड्.मयीन मृल्यांचा अभ्यास होईल.
- ५) कादंबरी लेखनाचे तंत्र अवगत करता येईल.
- ६) कादंबरीचे स्वरुप व घटक समजून घेतल्यामुळे जीवन व्यवहाराच्या केंद्रस्थानी असणा
- या मनुष्य व इतर घटकांवर आधारित कादंबरी लेखनाचा प्रयत्न करता येईल.
- ७) 'काव्यसरिता' च्या माध्यमातून विविध प्रकारच्या रचनांचा अभ्यास करता येईल.
- ट) सामाजिक जाणिया, राष्ट्रीय एकात्मता, प्रेमविषयक भावना, भावनिकता या विचारांची बांधिलकी निर्माण होईल.
- ९) काव्यांच्या विविध प्रवाहांचा परिचय होईल व त्यातून काव्यनिर्मितीची प्रेरणा विकसित होईल.

# Course Outcome :- B.A.I,Sem.II (Marathi Literature)

विषय : मराठी वाड्.मय (ऐच्छिक)

# अभ्यासपत्रिकेची निष्पती (Course Outcome) :-

- भानवी जीवन समृद्ध करणा
- या 'नाटक' या वाड्.मयप्रकाराचा परिचय विद्यार्थ्यांना होईल.
- २) 'वाटा पळवाटा' या नाटकातील विविध मानवी प्रवृत्तीचे दर्शन घडेल.
- ३) 'वाटा पळवाटा' नाटकांच्या माध्यमातून सामाजिक संस्कृतीचे दर्शन होईल तथा विविध व्यक्तिमत्त्वांचा परिचय होईल.
- ४) 'वाटा पळवाटा' च्या अभ्यासाने नाटकाचे आकलन, आस्वाद आणि मूल्यमापन करण्याची क्षमता विकसीत होईल.
- प) नाटक निर्मितीच्या घटकांचा, तंत्राचा अभ्यास झाल्याने नाटक निर्मिती करण्याची प्रेरणा विद्यार्थ्यांना मिळेल.
- ६) नाटक / रंगभुमीवर कारकीर्द करू इच्छिणा
- या विद्यार्थ्यांना ही अभ्यासपत्रिका उपयुक्त ठरेल.
- ७) 'काव्यसरिता' च्या माध्यमातून विविध प्रकारच्या रचनांचा अभ्यास करता येईल.
- ८) सामाजिक जाणिवा, राष्ट्रीय एकात्मता, प्रेमविषयक भावना, भावनिकता या विचारांची बांधिलकी निर्माण होईल.
- ९) काव्यांच्या विविध प्रवाहांचा परिचय होईल व त्यातून काव्यनिर्मितीची प्रेरणा विकसीत होईल.



# Course Outcome :- B.A.II,Sem.III,IV (Marathi)

विषय : मराठी (आवश्यक)

# अभ्यासपत्रिकेची निष्पती (Course Outcome) :-

नेमलेल्या साहित्यातून जीवनदर्शन, समकालीन व्यवहार जाणिवा यांची माहिती होईल.

२. वैचारिक, लिलत, कविता या विविध वाड्.मय प्रकाराचे ज्ञान होईल. या वाड्.मय प्रकाराचे वेगळेपण

जाणून घेतील तथा यामधील साम्यभेदाचे आकलन होईल.

 वैचारिक गद्यातून भाषेच्या सर्जनशील रूपाचे विद्यार्थ्यांना आकलन होईल. तसेच चारित्र्यविषय असलेल्या थोर व्यक्तींच्या जीवनकार्यातून विद्यार्थ्यांना प्रेरणा मिळेल आणि संकटावर मात करून जीवनात यशस्यी होता येतेहा विचार त्यांच्या मनी रूजेल.

४. ललित कलाकृतीच्या वाचनातून आनंद, बोघ, ज्ञान इत्यादींची प्राप्ती होऊन विद्यार्थ्यांच्या

जीवनविषयकजाणिया समृद्ध होतील.

# Course Outcome :- B.A.II, Sem.III, IV (Marathi Literature)

विषय : मराठी वाड्.मय (ऐच्छिक)

अभ्यासपत्रिकेची निष्पती (Course Outcome) :-

 १) निवडक मराठी कथा या वाङ्.मय प्रवाहातून सामाजिक प्रश्नांची जाणीव निर्माण होऊन व सामाजिक मृत्यांची जाणीव होईल.

२) निवडक मराठी कथातून समाजातील विविध व्यक्तिरेखा, तथा ग्रामीण संस्कृतीचे दर्शन होईल.

 ३) नेमलेल्या निवडक मराठी कथामधील पात्रांच्या नात्याची गुंतागुंत आणि भावनिक आंदोलनाचा शोघ घेता येईल.

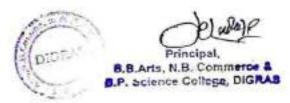
४) माषिक व वाङ्.मयीन मृत्यांचा अभ्यास होईल.

प्रे निवडक मराठी कथालेखनाचे तंत्र अवगत करता येईल.

६) निवडक मराठी कथाचे स्वरुप व घटक समजून घेतल्यामुळे जीवन व्यवहाराच्या केंद्रस्थानी असणा या मनुष्य व इतर घटकांवर आधारित कादंबरी लेखनाचा प्रयत्न करता येईल.

७) संत तुकारामाचे निवडक अभंगाच्या ' माध्यमातून विविध प्रकारच्या रचनांचा अभ्यास करता येईल.

- ८) सामाजिक जाणिवा, राष्ट्रीय एकात्मता, प्रेमविषयक भावना, भावनिकता या विचारांची बांधिलकी निर्माण होईल.
- ९) संत तुकारामाचे निवडक अभंगाच्या ' विविध प्रवाहांचा परिचय होईल व त्यातून काव्यनिर्मितीची प्रेरणा विकसित होईल.
- १०) आठवणीचे पक्षी या आत्मचरीत्रासंदर्भातील सर्व घटकांचा अभ्यास करता येईल.
- ११) 'लीळाचरित्रातील निवडक कथा' या पुस्तकातील कथांचे सर्वांगानी स्पस्टीकरण करता येईल.



# Course Outcome :- B.A.III,Sem.V,VI (Marathi)

अभ्यासपत्रिकेची निष्पती (Course Outcome) :-

 वैचारिकता, तात्त्विकता, काव्यात्मकता, भावनात्मकता, सामान्य गोष्टीतील असामान्यत्वाचे दर्शन यातून विद्यार्थ्याचा दृष्टीकोण संपन्न होईल.

२. विविध प्रकारच्या साहित्याचे आकलन, वर्णन, आस्वादन, विश्लेषण आणि मूल्यमापन करण्याची क्षमता

वादून विद्यार्थ्यांची अभिरूची विकसित होईल.

 या वाड्.मयप्रकारातून विविध प्रकारचे नीतिमृल्ये, जीवनमृल्ये, यांची शिकवण विद्यार्थ्यांना मिळेल, त्याचा उपयोग उत्तमरीतीने जीवन जगण्यासाठी होईल.

४. 'उपयोजित' घटकाच्या माध्यमातून विविध प्रकारची कौशल्ये त्यांच्यात निर्माण होतील व ते रोजगारक्षम

होतील.

५. विचारवंत, लेखक, कवी होण्यासाठी हे अध्ययन प्रेरक ठरेल, सहाय्यभूत ठरेल. यातून विद्यार्थी भाषेचा सर्जनशील वापर कसा करावा हे समजून घेतील व विविध प्रकारातील साहित्य निर्मिती करतील. तसेच व्यवहारिक उपयोजन करून रोजगारक्षम होतील.

# Course Outcome :- B.A.III, Sem. V, VI (Marathi Literature)

विषय : मराठी वाड्.मय (ऐच्छिक) अभ्यासपत्रिकेची निष्पती (Course Outcome) :-

- १) 'मिरासदारी' या कथासंग्रहातून समाजातील विविध व्यक्तिरेखा, तथा ग्रामीण संस्कृतीचे दर्शन होईल.
- २) भाषिक व वाड्.मयीन मूल्यांचा अभ्यास होईल.
- भिरासदारी' या कथासंग्रहातून कथा या वाङ्.मय प्रवाहातील सामाजिक प्रश्नांची जाणीव निर्माण होऊन व सामाजिक मृत्यांची जाणीव होईल.
- ४) 'मिरासदारी' या कथासंग्रहातून कथालेखनाचे तंत्र अवगत करता येईल.
- (भेरासदारी' या कथासंग्रहातून कथाचे स्वरुप व घटक समजून घेतल्यामुळे जीवन व्यवहाराच्या केंद्रस्थानी असणाया मनुष्य व इतर घटकांवर आधारित कादंबरी लेखनाचा प्रयत्न करता येईल.
- ६) 'साहित्यविचार' या पुस्तकातून साहित्याचे स्वरूप, साहित्याचे प्रयोजन आणि साहित्याची निर्मिती प्रक्रिया सखोलपणे समजून घेता येईल.
- ५) 'एक होता कार्न्हर' या जॉर्ज वाशिंग्टन कार्न्हरच्या चरित्रातून विद्यार्थ्यांना शिक्षणाविषयीच्या अभिरुचीचे ज्ञान आत्मसात करता येईल.
- ४) 'भाषाविज्ञान परिचय' या पुस्तकातून भाषेचे स्वरूप आणि उपयोग,स्वन विज्ञान तसेच स्वनीम विचार या भाषाशास्त्रीय घटकांचा अभ्यास करता येईल.



# B.Com. I,II,III. Sem.I,II,III,IV,V,VI (Marathi)

### Course Outcomes:

नेमलेल्या साहित्यातून जीवनदर्जन, समकालीन व्यवहार जाणीवा यांची माहिती होईल.

२. वैचारिक, ललित, कविता या विविध वाड्मय प्रकाराचे झान होईल. या वाड्मय प्रकाराचे वेगळेपण जाणून

घेतील तथा या मधील साम्यभेदाचे आकलन होईल.

 वैचारिक गद्यातून भाषेच्या सर्जनशील रूपाचे विद्यार्थ्यांना आकलन होईल. तसेच चारित्र्य विषय असलेल्या थोर व्यक्तींच्या जीवन कार्यातून विद्यार्थ्यांना प्रेरणा मिळेल आणि संकटावर मात करून जीवनात यशस्वी होता येते हा विचार त्यांच्या मनी रूजेल.

४. सिलत कसाकृती च्या वाचनातून आनंद, बोच, ज्ञान इत्यादी ची प्राप्ती होऊन विद्यार्थ्यांच्या जीवनविषयक

जाणिवा समृद्ध होतील.

 पैचारिकता, तात्विकता, काव्यात्मकता, भावनात्मकता, सामान्य गोष्टीतील असामान्यत्वाचे दर्शन यातून पिद्यार्थ्याचा दष्टीकोण संपन्न होईल.

६. विविध प्रकारच्या साहित्याचे आकलन, वर्णन, आस्वादन, विश्लेषण आणि मूल्यमापन करण्याची क्षमता वाहून

विद्यार्थांची अभिरूची विकसित होईल.

 या वाड् मयप्रकारातून विविध प्रकारचे नीतिमूल्ये, जीवनमूल्ये, यांची शिकवण विद्यार्थ्यांना मिळेल, त्याचा उपयोग उत्तम रितीने जिवन जगण्या साठी होईल.

८. 'उपयोजित' घटकाच्या माध्यमातून विविध प्रकारची कौशस्य त्यांच्यात निर्माण होतील व ते रोजगारक्षम होतील.

९. विचारवंत, लेखक, कवी होण्यासाठी हे अध्ययन प्रेरक ठरेल, सहाय्यमूत ठरेल. यातून विद्यार्थी भाषेचा रार्जनशील वापर कसा करावा हे समजून घेतील व विविध प्रकारातील साहित्य निर्मिती करतील. तसेच व्यवहारिक उपयोजन करून रोजगारखम होतील.

# B.Sc.I.Sem.I,II (Marathi) विषय : मराठी (आवश्यक)

Course Outcome (प्रमुख साध्य)

भाषेच्या आकलनाबरोबरच विद्यार्थ्यांमध्ये समाजातील उच्चकोटीची मानवी मूल्ये वृद्धोंगत व्हावी, राष्ट्रीय एकात्मता, सामाजिक बांधिलकी, मानुषता, राष्ट्रप्रेम, राष्ट्रभक्ती, वैज्ञानिक दृष्टिकोन, पर्यावरण संरक्षण - संवर्धन, भूतदया इत्यादीची पेरणी व्हावी, विद्यार्थ्यांची मातृभाषा आणि वाङमयविषयक अभिरुची वाढीला लागावी, त्यांना दर्जेदार व व्यवसायभिमुख शिक्षण मिळावे याकरिता केंद्र सरकारच्या मानव संसाधन आयोगाने जी ध्येय धोरणे निश्चित केली आहेत त्या अनुषंगाने हा अभ्यासक्रम, नवीन शैक्षणिक धोरणाच्या परिप्रेक्ष्यात, निश्चित करण्याचे धोरण संत गाडणे वाबा अमरावती विद्यापीठाने अत्यंत विचारपूर्वक स्वीकारलेले आहे.मराठी भाषा हा केवळ शिकण्याचा आणि शिकविण्याचाच विषय नाही तर ते आत्मप्रकटीकरणाचे एक प्रभावी माध्यम आहे. तसा व्यक्तिमत्त्व घडविणारा तो संस्कारही आहे. बहुविध अंगाने तो व्हायला हवा. त्याबरोबरच भाषेच्या सर्वांगीण अभ्यासाची दिशा विद्यार्थांना सूचित व्हावी, साहित्यसरितेतील विविध वाङमय प्रकाराची आणि प्रवाहाची ओळख व्हावी हा उद्देश प्रामुख्याने ठेवला आहे.



# B.B. ARTS, N.B. COMMERCE & B.P. SCIENCE COLLEGE DIGRAS

### Department of English Programme Outcomes

## BA - PART I EXAMINATION

#### Semester - I

#### PSOs:

### After completion of this course students will be able to:

- 1. Comprehend various forms of literature like Prose, Poetry, Drama and Fiction
- 2. Develop the knowledge of grammatical system
- 3. Develop four language skills LSRW
- Scope of employability and Entrepreneurship, Teaching Civil Services and Creative Writing

#### Cos:-

- Understand the basic knowledge of English language and literature
- 2. Writing the News Report, Letter, Essay, Paragraph etc.
- 3. Avail the pleasure of literary forms such as Novel, Poem, Play etc.
- 4. Develop interview technique.
- Understanding and interpret the prose, poem, short stories.
- 6. Enhancing the interest in English Language.
- Have the relation between literature and real life.

#### Cos:

### After completion of this module students will be able to:

- 1. Read speedily and fluently.
- 2. Develop understanding of the passage
- 3. Enrich their vocabulary.
- I) Assignment: Comprehension (Unseen Passages)
- II) Class Test: Reading of Passage from prescribed text.

# BA - PART I EXAMINATION

### Semester - II

#### PSOs:

# After completion of this course students will be able to:

- 1. Comprehend various forms of literature like Prose, Poetry, Drama and Fiction
- 2. Develop the knowledge of grammatical system
- 3. Develop four language skills LSRW
- Widen scope of employability and Entrepreneurship like Teaching, Civil Services and Creative Writing

#### Cos:

# After completion of this course students will be able to:

- Understand the basic knowledge of English language and literature
- Write the News Report, Letter, Essay, Paragraph etc.
- 3. Avail the pleasure of literary forms such as Novel, Poem, Play etc.
- Develop interview technique.
- Understand and interpret the prose, poem, short stories.

Principal,
DIGRAS B.B.Arts, N.B. Commerce &

- 6. Enhance the interest in English Language.
- 7. Understand the relation between literature and real life.

#### Cos:

# After completion of this module students will be able to:

- 1. Understand various types of application.
- 2. Understand the structure of application.
- 3. Write various applications.
- I) Assignment: Application for Bonafide Certificate, Character Certificate and T.C.
- II) Class Test on Application Writing.



Principal,
B.B.Arts, N.B. Commerce &
B.P. Science College, DIGRAS

2

# BA - PART II EXAMINATION

# Semester - III

#### PSOs:

# After completion of this course students will be able to:

- Comprehend various forms of literature like Prose, Poetry, Drama and Fiction
- 2. Develop the knowledge of grammatical system
- Develop four language skills LSRW
- Scope of employability and Entrepreneurship, Teaching Civil Services and Creative

#### Cos:-

- Understand the basic knowledge of English language and literature
- Avail the pleasure of literary forms such as Novel, Poem, Play etc.
- 3. Develop interview technique.
- Understanding and interpret the prose, poem, short stories.
- 5. Enhancing the interest in English Language.
- Have the relation between literature and real life.

# BA - PART II EXAMINATION

#### Semester - IV

#### PSOs:

# After completion of this course students will be able to:

- 1. Comprehend various forms of literature like Prose, Poetry, Drama and Fiction
- Develop the knowledge of grammatical system
- 3. Develop four language skills LSRW
- 4. Widen scope of employability and Entrepreneurship like Teaching, Civil Services and Creative Writing

#### Cos:

# After completion of this course students will be able to:

- 1. Understand the basic knowledge of English language and literature
- 2. Avail the pleasure of literary forms such as Novel, Poem, Play etc.
- 3. Develop interview technique.
- 4. Understand and interpret the prose, poem, short stories.
- 5. Enhance the interest in English Language.
- 6. Understand the relation between literature and real life.

B.B.Arts, N.B. Commerce B.P. Science College, DIGRAS

### B.A. PART- III EXAMINATION

#### Semester- V

- 1. To strengthen English Language of the students.
- To enhance communication skills of students: speaking, reading, writing and listening.
- 3. To increase sound knowledge of English Grammar.
- 4. To make the students able to communicate clearly and effectively.
- 5. Enhancing the interest in English Language.
- After the completion of Degree, students will grow into a responsible and dutiful citizen.
- Attainment of programme outcomes, programme specific outcomes and course outcomes are evaluated by conducting following activities-
- a) Diagnostic Test
- b) Unit Tests
- c) Assignments
- d) Seminars
- e) Group Discussion
- f) Tutorials
- g) Guest Lecture
- h) Common Tests
- i) Viva-voce

### B.A. PART- III ENAMINATION

#### Semester- VI

- 1. To strengthen English Language of the students.
- 2. To enhance communication skills of students: speaking, reading, writing and listening.
- 3. To increase sound knowledge of English Grammar.
- 4. To make the students able to communicate clearly and effectively.
- 5. Enhancing the interest in English Language.
- 6. After the completion of Degree, students will grow into a responsible and dutiful citizen.
- Attairment of programme outcomes, programme specific outcomes and course outcomes are evaluated by conducting following activities-
- a) Diagnostic Test
- b) Unit Tests
- c) Assignments
- d) Seminars
- e) Group Discussion
- f) Tutorials
- g) Guest Lecture
- h) Common Tests
- i) Viva-voce

DIORAS

### B.Sc - PART I ENAMINATION

#### Semester - 1

#### Course Outcome:

- 1.To facilitate the learners in acquiring listening and speaking competence
- 2.To assist the learners in independent language comprehension and production
- 3.To make the students aware about the different communicative functions of English.
- 4.To improve skills and proficiency for being employed as teachers, state government employees, civilaviation, engineering and medico-related industry, defence, commerce and taxation sector.
- 5.To be able to speak, write, read and listen flawlessly in person and through the electronic mode in English.
- 6.To understand views of others, mediate contradictory views/ disagreements, reaching conclusion ingroups / group discussions.
- 7.To understand and use basic skills of the lenglish language for applying it in the job assigned /employment accepted / profession undertaken.

### Course Specific Outcome:

After completion of this course successfully, students would be able to

- Understand nature and nuances of English Language used in prose lessons and poetic passages.
- Apply the knowledge of English to communicate with others on personal, social, literary and interdisciplinary topics.
- 3. Compare the structure of English language to use LSRW.
- 4. Formulate the sentences as per situation requirement.
- 5. Differentiate between acceptable and un ceptable sentences in English.
- 6. Create appropriate, grammatically correct and acceptable sentences in English.
- 7. Develop general language proficiency arough listening, speaking, reading and writing

# Course Learning Outcome /CO

At the end of the Course, student would be able to:

- CO1 understand the paragraph, prose, poet and communicative skills.
- CO2. apply the four skills of language in his daily inter-personal communications.
- CO3. formulate/ compose his own sentence and able to speak English Language.
- CO4. converse with other students in English.
- CO5. communicate their ideas, thoughts and concepts properly in English.



Principal,
B.B.Arts, N.B. Commerce &

# B.Sc - PART 11 AMINATION

Semest -11

# General Course Outcome (COs):

1. To facilitate the learners in acquiring list sing and speaking competence

2. To assist the learners in independent land the comprehension and production

3. To make the students aware of the different communicative functions of English.

 To impact skills and proficiency for beautiful amployed as teachers, state government employees, civil aviation, engineering and medico-related industry, defence, commerde and taxation sector.

5. To be able to speak, write, read and I am tlawlessly in person and through the electronic mode in English.

To understand views of others, me. the contradictory views/ disagreements, reaching conclusion in groups / group disc.

### Course Specific Outcome:

After completion of this course successfully, students would be able to

Understand nature and nuances of Eng. Language used in prose lessons, poetic passages.

### Course Learning Outcome

At the end of the Course, student would be a too

1. Understand the paragraph, prose and poets.

2. Apply the four skills of language in his a lay inter-personal communications.

3. Formulate/ compose his own sentences to speak English Language.

4. Converse with other students in English

5. Communicate their ideas and concepts a sorty in English.



# Program Outcomes, Program Specific Outcomes and Course Outcomes

(Session: 2022-2023)

# Program Outcomes: B.A History

1. Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.

2. Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and

technology.

3. Social Interaction: Elicit views of others, mediate disagreements and help reach conclusions in group settings.

4. Effective Citizenship: Demonstrate empathetic social concern and equity centered national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.

5. Ethics: Recognize different value systems including your own, understand the

moral dimensions of your decisions, and accept responsibility for them.

6. Environment and Sustainability: Understand the issues of environmental contexts and sustainable development.

7. Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological changes Sample POs of PG Programmes.

# Program Specific Outcomes: B.A History

Analyze the Socio-Political and Cultural background of the Indian History.

Examine various perspectives of history and historiography.

3: Prepare fdr Competitive Examinations like UPSC, MPSC, and SET/NET etc.

4: Compare various concepts in Social Studies through the Indian History.

Describe the developments of mankind.



B.B.Arts, N.B. Commerce I P. Science College, DIGRAD

# Course Outcomes: B.A History

## B.A - Ist Year (CBCS)

(Semester - I)

# History of India from Early to 700 A.D

(Subject code: 1021)

Survey the sources of History of Ancient India.

- Describe the social, economic, religious and institutional bases of Ancient India.
- Analyze development of the concept of Nation- State background of political history.

4: Study ancient Indian Art & Architecture.

# On successful completion of the Course the students will be able to:

 Learn the socio-political and cultural background of the Ancient Indian History.

Learn various Ancient Indian History Tourist places and Guide Tourist.

- 3: Prepare for Competitive Examinations like UPSC, MPSC, and SET/NET etc.
- Understand various concepts in Social Studies through the Ancient Indian History.

Learn developments of mankind.

## (Semester - II)

# History of India from Early to 701 A.D to 1525 A.D.

(Subject code: 1021)

1: Survey the sources of History in Sultanate period of India.

Analyze the social, economic, religious and institutional bases of Sultanate period of India.

3: Known development of the concept of Nation- State background of political

4: Study Sultanate period of India Art & Architecture

# On successful completion of the Course the students will be able to:

 Learn the socio-political and cultural background of the Sultanate period of Indian History.

2: Learn various Sultanate period Indian History Tourist places and Guide Tourist.

3: Prepare for Competitive Examinations like UPSC, MPSC, and SET/NET etc.

4: Analyze various concepts in Social Studies through the Sultanate period of Indian History.

5: Learn developments of mankind Through Religious Movements.

DIGRAE

# B.A - IInd Year (CGS)

# (Semester - III)

# History of India From 1526 A.D. to 1756 A.D.

(Subject code: 1021)

# On successful completion of the Course the students will be able to:

- 1. Students got knowledge of Mughal Empire.
- 2. Students got knowledge of Maratha Empire.
- 3. Students got knowledge of administrative system in Mughal Empire.
- 4. Students got knowledge of administrative system in Maratha Empire.
- Students got knowledge of social, religious, economic, cultural condition during Mughal age.
- Students got knowledge of social, religious, economic, cultural condition during Maratha age.

### (Semester - IV)

# History of India From 1757 A.D. to 1947 A.D.

(Subject code: 1021)

# On successful completion of the Course the students will be able to:

- Students got knowledge about the consolidation of British rule in India and the tools of expansion, diplomacy of British.
- Students got knowledge about the economic changes, social and cultural changes and the status of women during British rule.
- Students got knowledge about the revolt of 1857 and the Indian Nationalist movement, constitutional developments during this era.
- Students got knowledge about Gandhian ideology and movements, revolutionary movement and left wing movement.
- Students got knowledge about Subhashchandra Bose and Indian National Army, Partition of Indian, Act of Indian Independence

DIGRAS

# B.A - IIIrd Year (CGS)

# (Semester - V)

# History of Modern World (From 1780 to 1920 AD)

(Subject code: 1021)

On successful completion of the Course the students will be able to:

١

 Students got knowledge about French revolution, Napoleon Bonaparte, congress of Vienna (1815 AD)

- Students got knowledge about Nation state of Italy and Germany, policy of Bismarck and Kaiser William II; Triple Entente, Russo-Japanese war and the First World War.
- Students introduced with the concept of Communism, Capitalism, Socialism
- Students got knowledge about the Russian revolution, Paris peace conference, Versailles treaty, the League of Nations, the economic crises of 1929.

### (Semester - VI)

# History of Modern World (From 1921 to 1965 AD)

(Subject code: 1021)

On successful completion of the Course the students will be able to:

- Students got knowledge about Mussolini and Hitler and The Second World War
- Students got knowledge about The United Nations, the concept of Cold War, 3. Students got knowledge about NATO, Warsaw, SEATO and CENTO
- Students got knowledge about Suez crisis, European Union, European Common Market, Commonwealth Nation, Berlin crisis.

Head Department of History

DIGRATI

### B.B.ARTS, N.B.COMMERCE AND B.P.SCIENCE COLLEGE, DIGRAS

### Sant Gadge Baba University Amaravati

### Syllabus Prescribed under Choice based Credit System 2022-23

Faculty: Humanity

Programme: UG (B.A. Home Economics)

#### Part A

PO

- After successfully completion of UG course in Home Economics student will be able to -
- Describe the home management process and apply it in practice for planning and executing inside and outside the home.
- Play model role as a home maker, home manager, home Scientist, counselor as well as play a different role in different kinds.
- Build Confidence to create her own business and adjust in it better way.
- Derive certain changes in behavior and attitudes that require for effective communication and as a Entrepreneur.

#### Part - B

### Syllabus prescribed for 2022-23 for UG program

#### Program - BA

Course/Subject : HOME ECONOMICS

#### Semester - I

Code of the Course/Subject	Title of the Course/Subject	Total number of Periods
1113	Family Resource Management and Interior Decoration	75 periods



Principal,
B.B.Arts, N.B. Commerce 1

#### Cos

### After successfully completion of course student should be able to-

- · Formulate a plan of activities/programs managing and saving resources.
- · Evaluate the planned activities and will be able to build better plan in coming program.
- · Classify the decisions to its hierarchy for achieving a goal in future.
- · Make family budget with list of items.
- Make greeting cards and sample design using colour schemes
- · Quote and Name to each flower arrangement

### Objectives: This course will enable the students-

- · To recognize the basic concepts home economics.
- To design a plan of home-work using management process.
- · To classify the resources and decisions and use it effectively.
- To enhance the chances of reaching the desired goals through wise decisions and effective use of resources
- To apply the course knowledge in day-to-day life.

### SEM (Module) Event Management

Total 15 periods

#### Objectives :-

- 1. To Acquire the basic concept of event management
- 2. To design a event plan for carrying out casily and skillfully.
- 3. To enable event delivery and evaluation
- 4. To develop skills Evem /planning is a source of employment and self-employment

#### COs

After successfully completion of module course students should be able to -

- · Design Draft of event plan and follow the timeline
- Do job work in event planning industry as well as play a role of Event manager after wellpracticed
- · Identify best practice in the development and delivery for successful event.
- Enhance the scope for bringing understandings into event planning practices



#### Part - B

# Syllabus prescribed for 2022-23 for UG program

### Program - BA

Course/Subject : HOME ECONOMICS

#### Semester - II

Code of the Course/Subject	Title of the Course/Subject	Total number of Periods
1113	Family Resource Management and Interior Decoration	75 periods

#### COs

After successfully completion of course student can-

- · Formulate a plan of arrangements to modify home decoration.
- Classify and arrange the items using principles of housing.
- Design plan of work/ activities by acquiring knowledge of Work Simplification
- · Make carrier in the field Interior Decoration and designing.
- Apply and guide ergonomics' technique for comfort physique.

### Objectives :-

- To realize the basic concepts of housing.
- To design a plan of different arrangements in home Decoration.
- To modify the home simply using this course knowledge.
- To demonstrate the principles of housing.
- To develop aesthetic sense of students.



### SEM (Module) Interior Decoration

15 periods

Objectives :- This Module will enable the students-

- · To describe the basic concept of Interior Decoration
- · To design art draft skillfully.
- To inspire the students to choose their carrier in this field
- To apply the knowledge in their carrier advancement

#### COs

After successfully completion of module course students should be able to -

- Design a Draft plan of interior decoration on gain knowledge.
- Match all the arrangements in order to relation in home space and area.
- Enhanced their Skills in this field for carrier advancement.
- Open his/her self-enterprise all industry, applying the respective course knowledge.

#### Semester - III :- Food Science and Nutrition

- · To understand the basic concept of Nutrition.
- To understand the knowledge of food, food functions and Nutritive value of foods.
- · To develop abilities to plan Diets for Various stages.
- To develop the Entrepreneurial skills.

#### Semester - IV :- Food Science and Nutrition

By completion of this course students will able-

- · To understand the basic concept of related Nutrition.
- · To development abilities to plan diets for various diseases.
- · To understand the methods of food preparation and food preservations.
- To encourage the students for self employments...
- · To aware the work of different agencies in the area of health.



# Semester - V :- Human development

By completion of this course students will able-

- To understand the concept of Human Development.
- To know the factors affecting of human Development.

### Semester - VI :- Human development

By completion of this course students will able-

- · To understand the role of heredity and environment in development.
- · To state the role of parent and teacher in child development.
- · To understand the problems of child.
- · To develop skill based activity.

DIGRAC

Principal, B.B.Arts, N.B. Commerce & B.P. Science College, DiGRAS

# B. B. ARTS, N. B. COMMERCE AND B. P. SCIENCE COLLEGE, DIGRAS

# Department of Political Science

# Program Outcomes: B. A. Political Science

#### POs:

- 1: Understanding of constitution, government institutions, electoral processes and policies.
- Knowledge of some of the philosophical underpinnings of modern politics and government.
- Develop the ability to make logical inferences about social and political issues on the basis of comparative and historical knowledge.
- 4: Knowledge of key theories and concepts, political thoughts, organization, and modern issues in international relations.
- Develop the analytical abilities, observational skills and decision making abilities of the students so that they will be able to face different challenges of life.
- 6: Equip students with the concepts, principles, theories and processes studied in Political Science, so as to facilitate their career choices and employment.
- 7: Aim at shaping the students' perception and outlook on social, economic and political environment of India and beyond.

# Program Specific Outcomes: B. A. in Political Science

#### PSOs:

Student of B. A. program studying Political Science as an optional subject is expected to:

- 1: To understand the basic structure of Indian political system
- 2: To Inculcate interest in political field
- 3: To create the leadership qualities in students
- 4: To understand Indian governing system

### **Employability Potential of the Program**

Political Science students have the advantage of learning and knowing about government policies, rules and regulations - knowledge that is increasingly important in today's business



world. Political science graduates have even chosen careers in different sector like political parties survey, media exit-pol survey, political analytical agency, personnel, marketing, advising, banking, finance, and public relations. With some work experience, you may also find yourself able to work in both the private and public sectors.

One thing you should keep in mind is that your future employer will likely be looking for people who can do the following:

- communicate clearly, present ideas persuasively (orally or in writing)
- argue and debate constructively and respectfully
- negotiate and mediate conflicts successfully
- · plan, make decisions and implement them effectively
- provide effective leadership.

The study of political science can equip you with all these skills.

Obtaining a Bachelor degree there are many career opportunities. Not only does it enable you to understand the nuances of local and National politics, but you also develop analytical and critical thinking skills.

Equipped with these skills, you can find employment opportunities in central, state, or local government agencies, enter into politics, law, social services, or academia, pursue political journalism, or aim to become a civil servant/political advisor.

Political Science is a versatile and fortuitous liberal arts stream. As mentioned earlier, B.A. degree with political science opens up new career possibilities before you. Below are three reasons why you should enroll in a graduate program with Political Science:

- You develop skills like negotiation & communication skills, writing skills, generic
  and analytical reasoning, and public response management.
- It equips you to choose from many promising careers such as law, education, journalism, politics, civil services, etc.
- It prepares you to enter the national/international political scene as you will be well-versed with historical and current affairs.

## B.A. in Political Science: Employment Opportunities

As a Political Science graduate, you will have access to some of the most respectable career options, such as:

### 1. Teaching:

A career in academia is perfect for people who are passionate about teaching and grooming students on matters related to Political Science, Politics, and Polity. You can either be a school teacher While teaching at the school level demands a B.Ed.

#### 2. Journalism:

Since a substantial portion of modern journalism covers politics and political matters, journalism is an excellent field for Political Science graduates. Having a thorough understanding of politics, political systems, and the national/international political



environment makes Political Science graduates ideal candidates for roles like Political Journalist/Editor or Political Correspondents.

#### 3. Law:

While pursuing B.A. course in Political Science, candidates develop and hone analytical, critical thinking, and decision-making skills. These skills are immensely valued in Law. However, to enter into Law, you need to complete a 3-year LLB course and clear the All India Bar examination administered by the Bar Council of India.

#### 4. Politics:

Political Science students. After getting B.A. degree in Political Science, you can start working under a Political leader or directly begin your political journey as a Politician/Political Analyst/Political Advisor. Usually, Political leaders receive monthly along with numerous other benefits.

#### 5. Civil Services:

The Indian Civil Services is undoubtedly the most prestigious and respectable career choice for young aspirants. As for Political Science graduates, IAS (Indian Administrative Service) and IFS (Indian Foreign Services) are the two most popular choices.

Since the general science paper of both the preliminary and main exams of Civil Services contain several Political Science questions, Political Science students certainly have the edge over candidates from other streams.

#### 1. Government Affairs Director:

As the name suggests, Government Affairs Directors supervise and direct public relations team and manage policies related to local, state, and central government matters. They build and maintain beneficial relationships with relevant government agencies, committees, and legislative bodies. They design corporate policies, strategies, and plans as per government laws and regulations. They examine how the new and updated government regulations affect businesses and offer befitting suggestions to help the company navigate through the changes.

#### 2. Political Consultant:

Political Consultants have extensive knowledge of the political process. Their primary responsibility is to devise effective political strategies and campaigns for electoral candidates to influence voters and gain support from the majority.

Political Consultants also create favorable stories about political candidates to paint them in a positive light and influence their media image. Sometimes, they also conduct surveys to understand the inclinations and reactions of voters towards political candidates.

#### 3. Public Relations Specialist:

Public Relations Specialists handle the responsibility for maintaining and improving the reputation of a company or an organization. Their job is mainly media-centric. Thus, they work closely with media agencies and journalists to place favorable news and stories about their clients before the common mass.

Public Relations Specialists draft press releases, write blog posts, manage social media accounts, and organize press conferences and other events to attract media attention and promote their client. They are master negotiators and orators who are always up to date with the industry's current affairs, policies, and laws.

### 4. Political Anyalist:

Political Scientists focus on studying the origin, development, and operation of political systems around the world. They also learn and research political ideas and policies, political trends, and analyze governments. Their research usually pertains to the four core areas – political theory, national politics, comparative politics, and international relations.

While Political Scientists use qualitative methods to gather information from disparate sources, they use different quantitative methods to develop political theories. Political Scientists may sometimes don the role of a Policy Analyst for organizations with labor unions and political groups.

#### 5. Intelligence Analyst:

Intelligence Analysts are employed by high-level government intelligence agencies like the Central Bureau of Investigation (CBI), Department of Criminal Intelligence, Directorate of Military Intelligence, Defence Intelligence Agency, Indian Political Intelligence Office, and National Investigation Agency, to name a few.

They closely study the behavior and actions of particular groups that are considered security threats, analyze leadership patterns in such groups, and gather information from multiple sources. Intelligence Analysts present their findings in detailed reports and brief to agency executive and political leaders.

#### Policy Analyst:

Policy Analysts are primarily responsible for changing, adjusting, and implementing new public policies, laws, and regulations. They may either work under a government or for NGOs and for-profit companies. Policy Analysts policy design a sound thesis and compelling draft arguments for/against adopting a particular policy or law. They may specialize in specific areas (corporate policy, public policy, energy policy, etc.), or they may focus on a government or organization's general political functions.

- Academician:- There is a wild scope for pursuing an academic career on India. Those who choose to pursue future education can in turn become lectures and professors.
- Public Administrator:- As a Public Administrator the political science post graduate with his knowledge can play an important role in decision – making and implementation of policies.
- Political Content Writer:- Political Science post gradates can also become political content writer. His work is to write contemporary and historical issues.
- Archivist:- A Political archivist is responsible for assessing collecting, organizing, maintaining important records which process long term value.



B.B.Arts, N.B. Commerce A

 Legislative Assistant:- Most people are unaware of the fact that Members of Parliament and other elected representatives and officials often hire assistants who can help them with their legislative duties.

More on career opportunities ....

Most students think that a Political Science degree means you want to be a politician, but it can also lead to many other exciting careers. Here are just a few:

- Journalist
- Senior bureaucrat, including Deputy Minister
- Researcher in private companies
- Member of India's diplomatic and foreign services
- · Government worker, including customs officer and employment insurance officer
- · City planner · Non-government organizations (NGO's) · Police officer
- Social worker · Community activist · Constituency office worker
- · Project officer
- Communications officer with a government organization
- Election Campaigning Advisor.

### B. A. Part I

### Indian Political System

#### (Semester I)

#### COs

At the end of the course the students should be able to:

- 1: Understand and explain the significance of Indian constitution as the fundamental law of the land.
- 2: To know the making process of the constitution and salient features of Indian constitution.
- Exercise the fundamental rights in proper sense at the same time identifies his responsibilities in national building.
- 4: Analyze the Indian Political System, the powers and functions of the Union, State Government in detail.
- 5: Critically analyzing the important institutions of Indian Union: The Executive: President, Vice-President, Prime Minister, Council of Ministers, State Executive: Governor, Chief Minister, Council of Ministers, The Legislature:

RajyaSabha, LokSabha, State Legislature, The Judiciary: Supreme Court and High Court: Composition and jurisdictions.



6: To make conscious of the social, cultural, economic and political environment that affects politics in India, at the national as well as regional levels.

### B. A. Part I

### Indian Political System

### (Semester II)

COs

At the end of the course the students should be able to:

- 1: Understand and explain the significance of Election Commission of India
- 2: know the powers and role of Governor, Chief Minister & Council of Minister
- 3: Understand structure & powers of Legislative Assembly and Legislative Council
- 4: Explain the structure and jurisdiction of High Court and District Court
- 5: Know the Composition Function and Powers of Gram panchayat & Gram Sabha



#### B. A. Part II

# Selected Constitutions and International Relations

(U.K., U.S.A. & China)

### (Semester III)

- Students enable to understand the Salient Features of the Constitution of U. K.
- Students enable to know the Historical Background of Crown and also understand the Appointment, Powers, Functions and Role of Prime Minister and Cabinet in U. K.
- 3. Students enable to understand the Parliamentary System of U. K.
- Students enable to know the Composition, Powers and Functions of House of Lords and House of Commons, with Reference to Constitutional Reforms Act-2005.
- 5. Students enable to know the Role of Opposition and Shadow Cabinet of U.K.
- 6. Students enable to understand the Salient Features of the Constitution of U. S. A.
- Students enable to know the Election Process, Powers and Functions of the President and Vice President and also understand the Structure and Functions of the Cabinetof U.S.A
- Students enable to know the Legislature of U. S.A. (Congress): Composition, Powers and Functions of Senate and House of Representative.
- Students enable to understand the Composition, Powers and Functions of the Supreme Court of U. S. A.
- Students enable to know the South Asian Association for Regional Cooperation (SAARC), Its Objectives, Structure and Functions.

DIGRAS

## B. A. Part II

# Selected Constitutions and International Relations

(U.K., U.S.A. & China)

(Semester IV)

- Students enable to understand the Salient Features of the Constitution of China (1982)
- Students enable to know the Legislature of China: Composition, Powers and Functions of National People Congress and also know the Composition, Powers and Functions of Standing Committee.
- Students enable to know the Appointment, Powers and Functions of the President and Prime Minister of China.
- 4. Students enable to know the Role of the Communist Party in China.
- Students enable to understand the United Nation Organization (UNO): its Charter, Aims and Basic Principles.
- Students enable to understand the Composition and Functions of General Assembly and Security Council.
- Students enable to understand the Appointment, Powers and Functions of Secretary General of U. N. O.
- Students enable to understand the Composition and Powers of International Court of Justice.
- 9. Students enable to know the Indo China Relations.
- Students enable to understand the Tibet Dispute, Role of China about India in UNO and Impact of Chinese Goods and Market on Indian Economy.

DIGRAS

#### B. A. Part Final

#### Semester - V

## Modern Concepts and Policy in Politics

- Students enable to understand the Meaning, Factors and Role of Leadership.
- Students enable to know the Meaning and Nature of Indian Reservation Policy.
- Students enable to understand the Reservation in Indian Parliament and Reservation and Politics in India.
- Students enable to know the Meaning and Nature, Factors of Nationalism and also understand the Present Status of Indian Nationalism.
- Students enable to understand the Meaning of Communalism, Role of Communalism and Present Status of Communalism in India.
- Students enable to understand the Meaning and definition, Kinds of Terrorism.
- 7. Students enable to understand the Acts for Prevention of Terrorism in India.

### B. A. Part Final

### Semester - VI

# Concepts of Western and Indian Thinkers

- Students enable to understand the Concept of State: i) Aristotle Classification of State, ii)M. K. Gandhi –Concept of Ramrajya.
- Students enable to understand the Concept of Walter Bagehot's and Abraham Lincoln's concept of Democracy.
- Students enable to understand the Concept of Parliamentary Democracy of Dr. B. R. Ambedkar.
- Students enable to understand the Concept of Nationalism of Niccolo Machiavelli, Swami Vivekananda and V. D. Sawarkar.
- Students enable to understand the Concept of Socialism of Karl Marks, Ram ManoharLohiya and Pandit Jawaharlal Nehru.
- Students enable to understand the Concept of Behaviouralism of DevidEston and also Know the concept of Post-Behaviouralism of Gabriel Almond.
- 7. Students enable to understand the Concept of Sovereignty of John Austin.

DIGRAS

#### Programme: (B.A. Economics)

#### PSOs:

- Problem analysis:recognize formulate and study the problems of various sectors of the Indian economy, regional
  economy and the global economy with the help of the economic ways of thinking, theories, concepts and laws.
- Apply the knowledge of economic concepts, laws and theories, for a better economic environment for the society at large.
- Communicate effectively on the economic activities with the community and the society through the acquiring knowledge of the national and the global economy.
- To build on these concepts to develop deeper understanding of Economy in the future.
- Explain the basic concepts, laws and theories related to the economic behaviour of the human being.
- Graduates from our department are effectively taught and explained the cause with the help of visual aids like white board and PowerPoint Presentation.
- They will be able to visualize the real world situation and enhance them to initiate the programmers for pursuing studies and be alert with the importance of entrepreneurial skills for their self-employment, to improve the general attitudes and living conditions of the masses.

### Programme: (B.A. Economics) Semester I(Micro Economics)

#### Course Outcomes:

- 1. Apply knowledge and skill in the field of Economics and will be able to have the employability in these areas.
- Describe and apply the methods for analysing consumer behaviour through demand and supply, elasticity.
- 3. Perform analysis to analyse the impact of economic events on Markets,
- 4. To create a new approach towards the study of Economics.
- 5. The course will illustrate how microeconomic concepts can be applied to analyse real-life situations
- 6. Analyse the performance of firms under different market structures,
- 7. Evaluate the factors affecting firm behaviour, such as production and costs
- 8. To have better awareness regarding different Factors Pricing Rent, Wages, Interest, and Profit.

#### Semester II (Economy of Maharashtra)

#### Course Outcomes:

- Develop ideas of the basic characteristics of Maharashtra's economy and its potential for natural resources.
- Understand agriculture as the foundation of economic growth and development, analyse the progress and changing nature of the agricultural sector and its contribution to the economy as a whole.
- Understand the role of Agriculture in Economy of Maharashtra.
- Study the issue of farmer's suicide in Maharashtra.
- 5. Study the concept of FDI and its trends in Maharashtra.
- Consider the role of Industry and Service sector in Economy of Maharashtra.

#### Semester III (MACRO ECONOMICS)

#### Course Outcomes:

- 1. Understand macroeconomic analysis.
- 2. Understand of national Income.
- 3. Understand classical & Keynesian theories of output and employment.
- 4. Understand consumption & Investment function.
- Understand various macroeconomic problems.
- 6. Understand various macroeconomic policies.

#### Semester IV(BANKING)

#### Course Outcomes:

- 1. Understand meaning and function of commercial Bank.
- Create the awareness among the students of Modern Banking system.
- Understand commercial banking system in India.
- 4. Understand working and operation of RBL
- Understand cooperative and rural banking in India.
- Able to understand international aspects of the Indian financial system.

7.



#### Semester V(INDIAN ECONOMY)

#### Course Outcomes:

- 1. Understand nature, basic characteristics and major issues of the Indian economy.
- 2. Understand population and economic development.
- 3. Understand poverty and Unemployment Concepts and their trends in Indian economy.
- 4. Understand role of agriculture, industrial sector in Indian economy.
- 5. Understand economic planning in India.
- 6. Understand Regional Imbalance causes and preventive Measures.

#### Semester VI(DEMOGRAPHY)

#### Course Outcomes:

- Understand various theories of population.
- 2. Understand the concept of Population Explosion.
- 3. Understand the importance of population studies.
- 4. Understand Demography Features of India.
- 5. Understand the problems of Migration and Urbanization in India.
- 6. Understand the correlation between population and development.

DIORAS

# Bapuraoji Butle Arts, Naraynrao Bhat commerce and Bapusaheb Patil Science College , Digras

## Department of English (Faculty Commerce)

### Programme Outcomes, Course Outcomes

### Programme Outcomes :-

The students would able to -

- 1) Attain requisite skills and knowledge after the completion of the programme
- 2) Achieve the basic knowledge of Economics
- Assimiliate basic knowledge of Accountancy & Statistics.
- 4) Efficiency in reading and writing skill.
- Achieve requisite skills and knowledge of preparing cashbook, leadger books and balancesheet of company.
  - 6) Become knowledgeable about marketing.
  - 7) Create a self employment.
  - 8) Assimiliate ethics of life.
  - 9) Achieve Environmental awareness.
  - 10) Attain fundamental knowledge of Computer

Programme: Bachelor of Commerce -Semester I

Code of the Course/Subject-BC-11

Title of the Course/Subject-English

COs

- 1. Able to communicate skilfully in Business correspondence
- 2. Acquaint with the work culture in corporate world
- 3. The life of great personalities will motivate them to toil to be successful
- 4. Learn and gain fluency in the English language and conversation
- . 5. Become efficient in reading and writing skills.
- 6. The drafting skills of the learners will be honed through grammar and writing skills
- 7. Become proficient in the language and to eventually inculcate professional skills



# Programme: Bachelor of Commerce-Semester II

### Code of the Course/Subject-BC-21

### Title of the Course/Subject-English

#### COs:

- 1. Able to communicate skillfully in Business correspondence
- 2. Acquaint with the work culture in corporate world
- 3. The life of great personalities will motivate them to toil to be successful
- 4. Learn and gain fluency in the English language and conversation.
- Become efficient in reading and writing skills.
  - 6. The drafting skills of the learners will be honed through grammar and writing skills
  - 7. Become proficient in the language and to eventually inculcate professional skills

### Programme: Bachelor of Commerce- Semester III

### Title of the Course/Subject-English

#### COs:

- 1. to study the prose and poetry.
- 2. Acquaint with the culture during the travel
- 3. The skill life of given by great personalities
- 4. to study about the beauty of nature
- 5. Become efficient in reading and writing skills.
- 6. The drafting skills of notices, agenda and miniuts
- 7. To study communication skills.

### Programme: Bachelor of Commerce- Semester IV

### Title of the Course/Subject-English

#### COs:

- 1. To study the prose and poetry
- To study the various aspects of day to day life.
- 3. Contribution of great personality to the society.



Principal,
B.B.Arts, N.B. Commerce &

- 4. To study the autobiography of the great poets.
- 5. To study the materialistic approach of human beings.
- 6. To study nonverbal communication skills
- 7. Acquaint with interview and meeting skills

Programme: Bachelor of Commerce-Semester V

Title of the Course/Subject-English

COs:

- 1.To study the prose and poetry
- The life of great personilities will motivate them to be successful in life.
  - 3.To able to communicate skillfully in business communication.
  - 4. Aquanint with various e-resources
  - 5 To able to communicate in public speaking
  - 6 To able to study computer technology and recent concepts in business.

Programme: Bacheloriof Commerce- Semester VI

Title of the Course/Subject-English

COs:

- 1.To study the prose and poetry
- To study the great work of various personalities.
- 3.To study the right to information act 2005.
- 4. To study the various aspect in poetry.
- To study the employability skills
- 6.To study the advertising skills

DIGENS B.B.Arts,

# B. B. ARTS, N. B. COMMERCE & B. P. SCIENCE COLLEGE DIGRAS Faculty: Commerce & Management

Programme: Bachelor of Commerce

Programme Objectives: - • To impart the basic knowledge of Economics. • To impart basic knowledge of Accountancy & Statistics. • To impart knowledge of creating a cash book and ledger books. • To impart the basic knowledge of management, planning, organizing, directing and controlling • To impart the basic knowledge of application of computers and its development. • To impart the knowledge of business sectors, firms, e-commerce, cashless transaction • To impart the knowledge of local and global enterprises and trade. • To develop presentation skills and ability of goal setting. • To bring about the holistic development of the students. • To develop ethics of life. • To inculcate Environmental awareness. • To impart the fundamental knowledge of Computer.

### Programme Outcomes

The students would able to -

Attain requisite skills and knowledge after the completion of the programme.
 Achieve the basic knowledge of Economics.
 Assimilate basic knowledge of Accountancy & Statistics.
 Efficiency in reading and writing skill.
 Achieve requisite skills and knowledge of preparing cashbook, ledger books and balance sheet of company.
 Become knowledgeable about marketing.
 Create a self employment.
 Assimilate ethics of life.
 Achieve Environmental awareness.
 Attain fundamental knowledge of Computer.

Employability Potential of the Programme Commerce faculty is really very popular as it can earn up lucrative packages and opportunities are more than Arts or Science faculty. As commerce education includes computer, Talley, GST, income tax and English Language and communication Skill so chances of getting jobs in shops and malls are more than before.

Chartered Accountant is a dream career for commerce graduates. With several students failing to clear all stages of the course, CA is one of the hardest courses in the world. Therefore, to do very well in this course, students require specific talents and skills. Even if they cannot become CA they can find suitable jobs in market. Company Secretary is second popular Course. After B Com, M Com and PhD, to become professor is also a good option.

\*Jobs for Commerce graduate Students \* Chartered Accountant (CA), Marketing Manager,
Investment Banker, Human Resource Manager, Chartered Financial Analyst (CFA), Certified Public
Accountant (CPA), Cost Accountant, Business Accountant and Taxation, Retail Manager, Company
Secretary, Personal Financial Advisor, Research Analyst, Entrepreneur, Chief Executive Officer
(CEO), Cost Management Accountant (CMA), Product Manager, Hotel Manager, Event Manager,
Teachers / Instructors /professors Auditors / Clerks

Commerce graduates can prepare for competitive Examination like MPSC or UPSC to become government officers in state and central government. Commerce graduates can start business or Startups. They have the potential to create jobs by starting industry.

The present curriculum of B Com designed by the BOS of the Commerce and Management of SantGadge Baba University Amravati has all the potential to create an employable opportunities for the students. The curriculum will develop an innovative and global approach in the field of Commerce and Management. It will acquaint the students with the rapidly changing contemporary scenario in trade and commerce and in the corporate world. It will develop them into more creative and visionary entrepreneurs and boost them to undertake start-up enterprises in near future. The detailed knowledge in trade and commerce, statistical analysis of the global economy, the use of ultra modern technology in e-commerce, the applied nature of the course content and the need based skill oriented curriculum's rapport with the requirement in the region will develop the multi-dimensional view of the students and the feeling of affinity and sense of duty for the development of living standard of the people in the region of Western Vidarbha and thereby fulfil the community services. In this way, the potential and the research

Aptitude in the present program will encourage the progression of the students from UG to PG and PhD. The managerial skills in it will boost the commerce students to progress towards ambitious Management courses like MBA in various fields. Moreover, the course will open the vistas for the job opportunities.

The course content in Compulsory English and Supplementary English in particular will develop the all-round personality of the students and the sophisticated communication skills among them in this globalised era of international trade and commerce. The part of grammar and syntax will improve their sense of correct English in written and spoken form while the unit of Word- Formation will enrich their vocabulary. The inter-personal communication and situational communication in the unit of communication skills will boost confidence among students to hold impressive conversation in corporate world. The writing skills as resume, report and letter writing will develop a flair of writing in business correspondence while the content of soft skills like interview skills, body language and managerial skills will broaden the perception and make the students more sensible and mature in the practical world of Commerce and Management. Of course, the highly touching stories by the world famous writers and the biographical sketches of the successful Entrepreneurs and big business tycoons in India will develop the profound sense and fervour to be ambitious and successful. The few selected poems in the content will give an aesthetic and romantic relief and inculcate human and ethical values. In this way, the course like compulsory English and Supplementary English will bring about an all-round and holistic development of the students and ultimately make them sensible and mature global citizens.

The future prospects of a person depend upon the career path he/she chooses. B.Com graduates have many options open upon the completion of graduation. The various avenues open to the B. Com graduates are discussed below, which will be helpful to the candidate at the time of taking the toughest decision related to career.

Acquire various skills- During the graduation the students have the opportunity to acquire communication skills, interpersonal skills, accounting skills and knowledge, management skills, interpersonal skills, computer skills, team work, coordination, leadership skills and many more. These skills will be beneficial for being self employed or getting employment. The knowledge acquired during the graduation related to law, income-tax, accounting, planning, organisation etc., give an additional weight age at the time of being employable and are definitely useful in self employment.

Higher education On the completion of the B.Com degree program, the candidates can pursue M. Com., MBA or other similar masters degree program. Candidates can also pursue LL.B.; D. Tax.,

PGDBM, post graduate diploma in marketing management, HR or finance or such other similar courses.

Banking The candidates can go into the banking sector. These jobs will add on to their experience and skills. Both the public as well as the private sector banks offer many job opportunities to the B.Com graduates, such as - • bank officer's • financial administrator's • financial advisors • junior manager's • bank assistants

Export import manager at the completion of graduation the candidates can opt for a job as an Export-Import Manager.

Stock broker after acquiring the required skills a B.Com graduate can become a stock-broker.

Tax Consultant this is a special privilege to a B.Com graduate that he/she can become a tax consultant.

Financial Planning- The BBA graduates are expected to acquire the skill of financial planning. Those who choose to be financial planners help individual clients with their funds, and savings along with various investment issues for achieving their personal goals. Students who are planning to make career in the financial planning sector, can try for the following programs like: • CA- Chartered Accountant • CFA - Chartered Financial Analyst • CFP - Certified Financial Planner • CS - Company Secretary .These are renowned certification courses in finance which help the BBA students to be helpful in the financial matters of their individual clients.

#### Part B

### Syllabus prescribed for 1st Year Under Graduate Programme Programme :

#### Bachelor of Commerce Semester I

### **BC-13 Principle of Accountancy**

Course Outcome: 1) Student important basic accounting knowledge at applicable to business i.e. meaning of accountancy.

- 2) Able to handling account transaction
- 3) Maintaining sub subsidiary books and all types of cash books
- 4) Calculation of depreciation method of assets
- Preparation of all types of final account.

### BC-14 Principle of Business Economics

Course Outcomes: 1. Application of Micro & Macroeconomic Concepts

- 2. Application of Utility & Indifference Curve Analysis
- 3. Application of Demand Pattern
- 4. Application of Supply and Production Pattern

5. Application of Cost & Revenue Pattern

### **BC-15 Principle of Business Management**

#### COURSE OUTCOME

The students will be able to:

- 1) With this course, students will be able to have clear understanding of managerial functions.
- 2) Students will have the knowledge of planning process in the organization.
- Students will be able to demonstrate the ability to directing, leadership and communicate effectively.
- 4) Students able to analyze isolate issues and formulate best control tools and techniques.

### BC-16 Computer Fundamental and Operating System-I

Course Outcomes

The students will be able to - 1. Get information about evolution and application of computer & its development.

- 2. Know about different elements of computer system.
- Aware about different types of memory.
- 4. Get to know about different input devices and output devices.
- 5. Learn to prepare a text document with complete formatting and page setting.

### Semester II

# BC-23 Financial Accounting

#### Course outcome

- 1 Rectification of Journal entry
- 2 Student acquire the knowledge of non profit organization
- 3 Prepare the all types of cooperative society account
- 4 Students should be acquired partnership farm accountancy
- 5 The bill of exchange contest and unconditional order to pay a create amount on as agree day.

#### **BC-24 Business Economics**

#### Course Outcomes

Examine the difference between business and managerial economics.



- 2. Application of Discriminative nature of monopolist.
- 3. Application of monopolistic competition, oligopoly, and perfect competition
- Application of demand and supply pattern of rent and wage.
- 5. Application of the theories of interest and profit.

### **BC-25 Principle of Business Organization**

### COURSE OUTCOMES

The students will be able to: 1) To Familiar with business organization.

- 2) Understand the concepts related to Business policies.
- 3) Demonstrate the roles, skills and functions of management.
- 4) To diagnose and solve organizational problems and develop optimal managerial decisions.

### BC-26 Computer Fundamental & Operating System II

Course Outcome

The students will be able to- 1. Get basic introduction of Computer and mobile operating systems

- 2. Know concept of windows versions.
- 3. Create and delete file in File Explorer.
- 4. Know concept of modern communication and network topologies.
- 5. Create e-mail account and compose e-mail massage.
- Create table, utilizing existing Template provided by Microsoft and add customization on Template according to user needs.
- 7. Identify steps in the process and complete an activity to create a mail merge.
- Develop the skill of power point programs.
- 9. Insert various graphical object on slide.
- 10. Add different Transition, Animation, Sound and Timing effect to Slide.
- 11. Run a presentation on computer screen.

# BC-26 Computer Fundamental and Operating System-II (Practical)

· Course Outcome:

Students will be able to do at the end of practicals:

- 1) Know how to organize files/folder in File Explorer
- 2) Understand different customization setting in windows 10.
- 3) Create windows login Account which is necessary for Windows 10
- Create table, utilizing existing Template provided by Microsoft and add customization Template according to user needs.
- 5) Add header and footer to long list of pages which is crucial.
- 6) Complete Mail Merge process.
- 7) Change layout of pages
- 8) Create Presentation, designing slides and add different Transition and Animation effect to objects and Slide

# B.Com IInd Year (Semester IIIrd & IVth)

### Course Outcomes

### Company Accounting

To enable the students to learn principles and concepts of Accountancy.

Students are enabled with the Knowledge in the practical applications of accounting.

To enable the students to learn the basic concepts of Partnership Accounting, and allied aspects of accounting.

The student will get thorough knowledge on the accounting practice prevailing in partnership firms and other allied aspects.

To find out the technical expertise in maintaining the books of accounts.

To encourage the students about maintaining the books of accounts for further reference.

### MOS & IFS

(Financial Markets and Institutions in India)

Enable the students with Financial Markets and its various segments.

To give the students and understanding of the operations and developments in financial markets in India.

To acquaint them to gain an insight into the functioning and role of financial institutions in the Indian Economy.

Principal,
B.B.Arts, N.B. Commerce &

### **Business Mathematics and Statistics**

To use and understand useful functions in business as well as the concept of EMI.

To understand the different concept of population and sample and to make students familiar with Calculation of various types of averages and variation.

To learn the applications of matrices in business.

To understand the students to solve LPP to maximize the profit and to minimize the cost.

To use regression analysis to estimate the relationship between two variables and to use frequency distribution to make decision.

To understand the techniques and concept of different types of index numbers.

### Corporate Accounting

This course aims to enlighten the students on the accounting procedures followed by the Companies.

Student's skills about accounting standards will be developed.

To make aware the students about the valuation of shares.

To impart knowledge about holding company accounts, amalgamation, absorption and reconstruction of company.

To make the students aware of Indian banking system.

To enables students to understand the reforms and other developments in the Indian Banking.

□ To impart knowledge about functions and role of Reserve Bank of India.

# **Auditing and Taxation**

Students will be versed in the fundamental concepts of Auditing and different aspects of tax.

Students can understand Income Tax system properly, and can get the knowledge of different tax provisions.

To give knowledge about preparation of Audit report, Submission of Income Tax Return, Advance Tax, and Tax deducted at Source, Tax Collection Authorities under the Income Tax Act, 1961.

# T.Y. B. Com. (V & VI Semester)

# Business Regulatory Framework (Mercantile Law)

The student will well verse in basic provisions regarding legal frame work governing the business world.

To know the students with the basic concepts, terms & provisions of Mercantile and Business Laws.

To develop the awareness among the students regarding these laws affecting trade business, and commerce. Advanced Accounting

To provide the knowledge of various accounting concepts

To impart the knowledge about accounting methods, procedures and techniques.

To acquaint students with practical approach to accounts writing by using software package and by learning various accounts.

# Economic of Development

To enable students to understand students to a new approach to the study of the Indian Economy.

To help the students in analyzing the present status of the Indian Economy.

To rendering the process of integration of the Indian Economy with other economics of the world.

To notify students with the emerging issues in policies of India's foreign trade.

### **Business Environment**

To make the students aware about the Business and Business Environment.

To develop entrepreneurial awareness among students.

To motivate students to make their mind set for thinking entrepreneurship as career.

A course in environmental studies

To furnish awareness about environmental problems among people.

Impart basic knowledge about the environment and its allied problems.

Developing an attitude of concern for the environment,

Acquiring skills to help the concerned individuals in identifying and solving environmental problems.

# Company law

To impart students with the knowledge of fundamentals of Company Law and provisions of the Companies Act of 2013.

To apprise the students of new concepts involving in company law regime.

Principal, B.B.Aris, N.B. Commerce & B.P. Science College, DIGRAS

E.

To acquaint the students with the duties and responsibilities of Key Managerial Personnel.

### Cost Accounting

To understand Basic Cost concepts, Elements of cost and cost sheet.

Providing knowledge about difference between financial accounting and cost accounting.

Ascertainment of Material and Labor Cost.

To keep the students conversant with the ever - enlarging frontiers of Cost Accounting knowledge.

Students can get knowledge of different methods and techniques of cost accounting.

To impart Knowledge about the concepts and principles application of Overheads.

### IWWW-I & II

Student's Capability to apply theoretical knowledge in practical situation will be increased. Computer Programming and Applications.

To learn the skill how to use VBScript, transform Web pages from static text and images into functional, interactive, and dynamic e-commerce tools.

To embed VBScript code in an HTML document.

To use VBScript operators; write code that makes decisions based on existing conditions, using control structures and loops.

To enable students with a communication of Web page visitor using Message and Input boxes.

To use the DOM to control the layout of HTML pages, add effects, and get information from users.

### Bapuraoji Butle Arts, Naraynrao Bhat commerce and Bapusaheb Patil Science College , Digras

### Department of Botany

#### Programme Outcomes, Course Outcomes

Programme: B. Sc. Botany

POs: The students graduating with the degree B.Sc. with Botany will be able to

PO1. Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.

PO2.Effective Communication: Speak, read, write and listen clearly in person and through electronic media in inglish and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.

PO3. Social Interaction: Elicit views of others, mediate disagreements and help reach conclusions in group settings.

PO4. Effective Citizenship: Demonstrate empathetic social concern and equity centred national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.

PO5. Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.

PO6. Environment and Sustainability: Understand the issues of environmental contexts and sustainable development. PO7. Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological changes

PSOs:

Upon completion of the programme successfully, students would be able to

- Identify major groups of plants and compare the characteristics of lower (microbes, algae, fungi, bryophytes and pteridophytes) and higher (Gymnosperms and angiosperms).
- use evidence based comparative botany approach to explain the evolution of organism and understand the genetic diversity.
- explain various plant processes and functions, metabolism, concepts of gene, genome and how organism's function is influenced at the cell, tissue and organ level.
- 4. understand adaptation, development and behavior of different forms of life.
- 5. demonstrate the experimental techniques and methods of their area of specialization in Botany

DIGRAN

B.B.Arts, H.B. Commerce & B.P. Science College, DIGRAS

#### Semester I

Code of the Course/Subject - BOT(1S)/Botany

Title of the Course/Subject BOT(1S)/Botany DIVERSITY Of MICROBES, PHYCOLOGY, MYCOLOGYAND PHYTOPATHOLOGY

Cos

After completion of this course successfully, the students would be able to

- 1. understand microbial diversity, reproduction and economic importance.
- differentiate the microbes, algae and fungi on the basis of morphology, cellular organization, nutrition and metabolic activities.
- 3. classify and identify the various algal genera.
  - classify and identify the various fungal genera.
  - 5. Systematize the plant diseases and their pathogens
  - Apply understanding of microbial diversity, phycology and mycology for teaching primary to high school BOT(1S)/BOTANY Practical

COs

After completion of this course successfully, the students would be able to

- 1. Identify and classify the algae on the basis of morphology and other characters.
- 2. Create monograph of Algae and Fungi.
- S. Demonstrate the structural details of viruses and bacteria included in practical work.
- 4. Evaluate the plant diseases of local plants and diagnosed the diseases on the basis of symptology

Semester II

Code of the Course/Subject-BOT( 2 S)/Botany

Title of the Course/Subject -Bryophytes, Pteridophytes, Gymnosperms and Morphology of Angiosperms

COs

After completion of this course successfully, the students would be able to

- 1. demonstrate on understanding of Archegoniate, Bryophytes, Pteridophytes and Gymnosperms.
- 2. identify and classify plants from Bryophytes, Pteridophytes and Gymnosperms.



- develop critical thinking on morphology, anatomy and reproduction of Bryophytes, Pteridophytes and Gymnosperms.
- acquire skill of collection and preservation of Bryophytes, Pteridophytes and Gymnosperms.

#### Semester II

Code of the Course/Subject

Title of the Course/Subject (Laboratory/Practical/practicum/handson/Activity)

BOT(2S)/Botany Bryophytes, Pteridophytes, Gymnosperms and Morphology of Angiosperms, Utilization of Plants

Cos

By the end of the Lab/Practical Course, generally students would be able to:

- 1) Understand forms of Bryophytes, Pteridophytes and Gymnosperms.
- 2) Acquire the skill of preparation of slides of plant body and reproductive organs.
- 3) Classify and identify different plant parts on the basis of external morphology.
- 4) Describe the plants in technical language.
- develop critical understanding on morphology, botanical names and cultivation practices of economically important plants...

Semester-III

3S-Angiosperms Systematics, Antomy & Embryology

Course Outcomes

After completion of all semesters students should be able to

3S-Angiosperms Systematics, Antomy & Embryology

- Understand Origin & Evolution, Botanical Nomenclature, preparation of herbaria, Botanical Gardens, Concept of Biodiversity.
- 2.study systems of classification, Systematic study of dicotyledons(Polypetalae).
- 3. Systematic study of dicotyledons(Gamopetalae) Monocotyledons family. .
- 4. Understand types of tissues Anatomy of root..
- -5. Study anatomy of stem, anomalous structure in stem, antomy of leaf.
- 6. Understand Microsporogenesis, Megasporogenesis, Types of ovules.

Semester-IV



### 4S-Cell Biology, Genetics and Biochemistry

- 1.Study cell concept, cell wall structure, structure and functions of nucleus, Plasma membrane, Chloroplasts.
- Understand Structure and functions of ER, Golgi complex, Vacuole, Ribosome, Mitochondrion, Mitosis and Meiosis.
- 3. Structure of Chromosomes, Chromosomal aberrations, Numerical aberrations.
- 4. Study Mendels laws, Intraction of Genes, Problems based on Mendelism.
- Study Concept and types of Linkage, Crossing over, Gene mutation.
- Understand Nomenclature and characteristics of enzymes, theories for mechanism of action of enzymes.

#### Semester-V

# 5S-Plant Physiology and Ecology

After completion of all semesters students should be able to

#### Course Outcomes

- Study Plant water relations-Diffusion, Osmosis, Imbibition, Plasmolysis, Absorption of water, Ascent of Sap, Transpiration.
- 2. Understand plant metabolism like Photosynthesis, Respiration.
- 3. Study Nitrogen metabolism, Growth Senescence and Abcission.
- 4. Study plant responses like Photoperiodism, Vernalization, Plant movements, Stress physiology .
- Study Concept of environment, Scope of ecology, Ecological factors, Atmosphere and composition, Edaphic factor, Ecological adaptations.
- Understand Population ecology, Ecological Succession, Ecosystems.

### Semester-IV

## 6S-Molecular Biology and Biotechnology

#### Course Outcomes

- 1.Study Chemical composition, Double helical model of DNA, DNA Replication, DNA packaging .
- 2. Understand Fine structure of gene, Gene expression, Transcription in eukaryotes .
- 3. Study Regulation of gene in Prokaryotes and Eukaryotes, Protein folding mechanism, Protein sorting.
- Study tools and techniques of r-DNA technology, Restriction enzymes, Cloning vectors, Gene transfer technique, Gene amplification..
- 5. Study basic aspects of plant tissue culture, Laboratory requirements for tissue culture laboratory, Tissue culture techniques .

6. Understand Applications of Biotechnology in agriculture, industry, health care and conservation .

Programme- M. Sc. (Botany)

### POs By the end of the programme, students would be able to

PO1 Deep subject Knowledge and intellectual breadth Apply the subject knowledge to the solution of realworld problems.

PO2 Professional Ethics Apply ethical principles and commit to professional ethics and responsibilities and norms of the standard practices.

PO3 Creative & Critical Thinking Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.

PO4 Innovation, Research and Problem Solving Identify, formulate, review research literature, and analyze complex problems reaching substantiated and innovative conclusions. Design solutions for complex problems with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations. Use research-based knowledge and research methods to provide valid conclusions. Demonstrate the knowledge of, and need for sustainable development.

PO5 Team work and Communication Skills Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. Present/communicate research at national/international level, write effective articles, reports and design documentation, make effective presentations, and give and receive clear instructions. Communicate disciplinary knowledge to the community and broader public.

PO6 Professionalism and Leadership Readiness Demonstrate personal accountability and effective work habits, e.g., punctuality, working productively with others, and time as well as workload management. Demonstrate integrity and ethical behavior, act responsibly with the interests of the larger community in mind, and to learn from his/her mistakes. Use the strengths of others to achieve common goals, and use interpersonal skills to cach and develop others. Assess and manage his/her emotions and those of others; use empathetic skills to guide and motivate; and organize, prioritize, and delegate work.

PO7 Lifelong learning Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

PO8 Competence for Digital World Prepare well for living, learning and working in a Digital Society; Create, select, and apply appropriate techniques, resources, and modern ICT tools to complex activities with an understanding of the limitations. Use existing digital technologies ethically and efficiently to solve problems, complete tasks, and accomplish goals. Demonstrate effective adaptability to new and emerging technologies.

PO9 Global Citizenship Act with an informed awareness of global issues. Engage in initiatives that encourage equity and growth for all.

PSOs: After completing the programme successfully, students would be able to

1, explore the cutting edge technologies and skills currently used in plant sciences.



- 2. Be aware of social, environmental issues and plant significance in natural interest.
- 3, create interest in nature conservation and save the natural resources.
- 4. study the concepts of genetics, plant breeding and their applicability.
- 5, understand and correlate the various biochemical and physiological processes in plants.
- 6. study the evolutionary process in Bryophytes and Pteriodophytes.
- 7. study the bioactive principles in plants and their defence mechanis

Programme M.Sc. Botany

Semester I

Code of the Course Subject- DSC I

Title of the Couse/ Subject- Cell and Molecular Biology

Cos:

Upon completion of this course successfully, students would be able to

- understand structural organization and functional role of cell, organelles and biomolecules.
- 2. correlate the various life processes and their functioning.
- 3. understand the process of chromosomal organization and its role in cellular metabolism.
- evaluate the various life processes and their regulations with special reference to regulation of gene expression

Code of the Course- AEC I

Subject Title of the Couse AEC I Molecular Techniques

Course Outcomes: Upon completion of this course successfully, students would be able to

- 1. Become expert in laboratory preparation as well as chemical preparations of different concentrations.
- 2. apply various formulas in preparations of reagents and are aware of their properties.
- 3. Apply various techniques at appropriate places as per required.
- standardize the process and techniques on basis of knowledge.
- Analyze and interpret the results with accuracy.

Code of the Course Subject - DSC II

Title of the Couse/ Subject -Evolution and Diversity of Algae and Fungi

Cos:



Upon completion of this course successfully, students would be able to

- 1. Understand the phycology with special reference to Indian work.
- Identify Algae in diversified habitats (Terrestrial, fresh water, marine) Criteria used in classification of algae,
   Role of algae in human welfare
- 3. Know General account of thallus organization, reproduction and life history of algae.
- Study important groups of algae Cyanophyta, Chlorophyta, Charophyta, Xanthophyta, Bacillariopyta,
   Phaeophyta & Rhodophyta.
- 5. Study General Characters of Fungi Classification., Economic importance of fungi in medicine,
- Use Algae and fungi in Agriculture (Biopesticide and biofertilizer) & Fungi as plant pathogen.

Code of the Course\ Subject- DSC III

Title of the Couse- Economic Botany and Resource Utilization

Cos:

Upon completion of this course successfully, students would be able to

- 1. Study the origin, divarication, utility and conservation strategies & natural resources
- 2. Study importance of food, fiber, medicines & oil yielding plant
- 3. Study the plants and their value in the service & mankind.
- 4. Study the conservation of biodiversity

Code of the Course /Subject- DSC IV

Title of the Couse/ Subject -Plant Development

Cos:

Upon completion of this course successfully, students would be able to

- Deal with regulation of growth and development of plants in relation to bio-molecular interaction.
- 2. know the various structural and anatomical components of plant tissue and reproductive parts.
- Understand Structure and development of Flower, Male gametophyte, Female gametophyte, Seed development, dormancy

Semester II

Code of the Course /Subject - DSC V

Title of the Couse/ Subject Plant Physiology

Cos:



Upon completion of this course successfully, students would be able to

Grasp concepts of proteins, enzymes, basic plant signaling mechanisms, sensory photobiology. deal with physiology of nutrient uptake, photosynthesis and nitrogen metabolism

# Code of the Course/ Subject - AEC II

### Title of the Couse/ Subject Modern Techniques

#### Cos:

Upon completion of this course successfully, students would be able to

- learn about the latest techniques used in plant sciences
- 2. get training on the tools and techniques.
- know the principle and applications of these techniques

# Code of the Course Subject - DSC VI

# Title of the Couse/ Subject - Evolution and Diversity of Bryophytes and Pteridophytes

Cos: Upon completion of this course successfully, students would be able to

- understand evolutionary diversification of early land plants and morphology and reproduction in bryophytes, pteridophytes.
- know the Ecological and Economic Importance of bryophytes, pteridophytes.
- 3. classify Bryophytes into various groups, study their importance
- 4. classify Pteridophytes into various groups, study their importance and multiplication of important ferns
- 5. know the applied aspects of Bryophytes and Pteridophytes

# Code of the Course/ Subject - DSC VII

# Title of the Couse/ Subject -Genetics and Plant Breeding

Cos:

Upon completion of this course successfully, students would be able to

- understand the concept of classical and modern genetics clearly.
- study the inheritance pattern.
- know the role of chromosomes in evolution and the factors leading to changes in them.
- study mutations and breeding and their significance in crop improvement.
- 5. study the variation in populations

Code of the Course /Subject- DSC VIII



### Title of the Couse/ Subject -Plant Biochemistry and Pharmacognosy

Cos:

Upon completion of this course successfully, students would be able to

- 1. study the plant biochemistry and its various aspects.
- 2. study the metabolism and regulation of bio molecules.
- understand the medicinal properties of plants and its constituents.
- 4. study the evaluation and standardization methods of drugs Plant Biochemistry and Pharmacognosy

#### Semester III

# Paper IX-Biology and Diversity of Pteridophytes and Gymnosperms

Cos: Upon completion of this course successfully, students would be able to

- understand evolutionary diversification of early land plants and morphology and reproduction in pteridophyte and Gymnosperms.
- 2. know the Ecological and Economic Importance of, pteridophytes and Gymnosperms.
- 3. classify Pteridophytes into various groups, study their importance and multiplication of important ferns
- classify Gymnosperms, into various groups, study their importance and multiplication of important Gymnosperms.
- 5. know the applied aspects of Pteridophytes and Gymnosperms.

# Paper X-Taxonomy of Angiosperms

Cos: Upon completion of this course successfully, students would be able to

- . understand evolutionary diversification of plants and morphology and reproduction in Angiosperms
  - 2. Morphological characters of different families of Angiosperms..
  - 3. classify Angiosperms into various groups, study their importance and multiplication of important Angiosperms
  - 4.. know the Ecological and Economic Importance of Angiosperms
  - 5. know the applied aspects of Angiosperms

# Paper XI-Angiosperm Taxonomy, Phytochemistry and Pharmacognasy-I (Elective)

Cos: Upon completion of this course successfully, students would be able to

- Understand basic principles and phytochemical techniques.
- 2.To study the basic aims and concepts of taxonomy.



- 3. Classify Angiosperms into various groups, study their importance and multiplication of important Angiosperms
- 4. Understand the medicinal properties of plants and its constituents.
- 5. Study the evaluation and standardization methods of drugs Plant phytochemistry and Pharmacognosy

# Paper XII-Angiosperm Taxonomy, Phytochemistry and Pharmacognasy-II (Elective)

Cos: Upon completion of this course successfully, students would be able to

- 1. understand evolutionary diversification of plants and morphology and reproduction in Angiosperms
- 2. Morphological characters of different families of Angiosperms...
- 3. classify Angiosperms into various groups, study their importance and multiplication of important Angiosperms
- . understand the medicinal properties of plants and its construents.
- 5. study the evaluation and standardization methods of drugs Plant phytochemistry and Pharmacognosy

#### Semester IV

### Paper -XIII-Plant Ecology

Cos: Upon completion of this course successfully, students would be able to

- 1.To understand the basic concepts and scope of ecology
- Study Concept of environment, Scope of ecology, Ecological factors, Atmosphere and composition, Edaphic factor, Ecological adaptations.
- 3. Understand Population ecology, Ecological Succession, Ecosystems.
- 4.Understand the Ecosystem organization.
- Understand the Ecosystem functional aspects.

## Paper XIV-Environment Ecology

Cos: Upon completion of this course successfully, students would be able to

1.to understand the basic concepts and scope of environmental ecology.

2 to study the various aspects of Environmental pollution

3 to study the various aspects ofwater pollution.

3 to study the various aspects conservation strategies.

5 to study the various aspects sustainable management.

### Paper XV-Plant Biotechnology



Cos: Upon completion of this course successfully, students would be able to

1.to understand the basic concepts principles and scope of blotechnology.

2 to study the various aspects of somatic hybridization

3 to study the various aspects plant transformation technology

3 to study the various aspects Environmental biotechnology.

5 to study the applications of biotechnology.

### Paper XVI-Genetic Engineering

Cos: Upon completion of this course successfully, students would be able to

1.to understand the basic concepts principles and scope of Genetic Engineering.

to study the various aspects and methods of gene cloning.

3 to study the various aspects sustainable development.

3 to study the various aspects enzymes and recombinant DN. archnology

5 to study the applications of Genetic Engineering





# B.B. ARTS, N.B. COMMERCE AND B.P. SCIENCE COLLEGE, DIGRAS DEPARTMENT OF ZOOLOGY

### 2022-23

# Programme Outcomes, Programs Specific Outcome and Course Outcome.

Department of Zoology	After successful completion of B.Sc three year degree program in Zoology a student is able to,
Programme Outcomes	PO-1. Understand history of Phylum of Non-Chordata & Chordata  PO-2. Demonstration & understand the major concepts in Zoology.  PO-3. To study & understand the classification of whole phyla of Non-Chordates & Chordates with the help of specimens/models/pictures.  PO-4. Create awareness in students about biodiversity of Non-Chordates & Chordates  PO-5. To create awareness of the impact of Zoology on the environment, society and development outside the scientific community  PO-6. To inculcate the scientific temperament in the students and outside the scientific community.
Programme Specific Outcomes	PSO-1. Gain the knowledge of Zoology through theory & practical. PSO-2.Use modern zoological tools, models, charts, specimens & equipments.  PSO-3. Understand the good laboratory practices and safety.  PSO-4.Make aware & handle the sophisticated instruments/equipments.  PSO-5.To develops research oriented skills.



# Course Outcomes B. Sc. Zoology

## Semester - I

Course Outcomes	After completion of all semesters students should be able to
1S-Life and Diversity of Non-	CO-1. Understand the history of phylum.
Chordata	CO-2 Understand about the non-chordate animals.
	CO-3. To study the external as well as internal character of non- Chordate.
	CO-4.to study the distinguishing character of non-chordate.
	CO-5.understand economic importance of some non-chordate animals.
	CO-6. Understand various internal systems.
	CO-7. Understand various diseases caused by protozoan parasite.

## Semester-II

Course Outcomes	Life and diversity of chordata and concept of evolution
2S- Life and diversity of chordata and concept of evolution	CO-1.understand history of phylum chordata.  CO-2.To study the external as well as internal characters of chordates.  CO-3.To study the distinguishing characters of chordates.  CO-4. Understand the evolution.  CO-5. Understand diversity of chordate animals among various graph.  CO-6. To study the adaptive radiation.



# Semester-III

Course Outcome	Life and diversity of chordata and concept of evolution.
3S- Life and	CO-1.understand history of phylum chordata.
diversity of chordata and concept of	CO-2. To study the external as well as internal characters of chordates.
evolution	CO-3. To study the distinguishing characters of chordates.
	CO-4. Understand the evolution.
	CO-5. Understand diversity of chordate animals among various graph.
	CO-6. To study the adaptive radiation.

## Semester-IV

Course Outcomes	After completion of all semesters students should be able to
4S-Advance genetics and animal ecology	CO-1.To study Mendel's law's of hereditary and interaction o gene.  CO-2. Understand the terms linkage, crossing over, multiple alleles and sex determination disorders.
	CO-3. Aware the students with genetic disorders. CO-4. To study different concepts in ecology.
	CO-5. To study different types of ecosystem.

DIGRAS

## Semester-V

Course Outcomes	After completion of all semesters students should be able to
5S –Animal physiology and economic zoology	CO-1. Understand the term of physiology.  CO-2.To study the muscle physiology, nerve physiology and reproductive physiology.  CO-3.To study the histology of various organs and endocrine glands.  CO-4. Understand the economic importance of insects.  CO-5.Understand the details of aquaculture.  CO-6.Understand the significance of beneficial and harmful insects.

## Semester-VI

Course Outcomes	After completion of all semesters students should be able to
6S-Molecular Biology and Biotechnology	CO-1.Understand the tools and techniques used in molecular biology and biotechnology. CO-2. To study types of mutation. CO-3. To study genetic material, protein synthesis, and concepts of gene CO-4. Understand the terms DNA fingerprinting, ELISA technique and RIYA technique CO-5To study concepts in immunology.



# B. B. Arts, N. B. Commerce & B. P. Science College, Digras Dist. Yavatmal Department of Physics

### Programme Outcomes:

At the time of graduation, students will be able to

- Critical thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions(intellectual, organizational and personal) from different perspectives.
- Effective Communication: Speak, read, write and listen clearly in person through electronic media in English and in one Indian language and make meaning of the world by connecting people, ideas, books, media and technology.
- Social Interaction: Elicit views of others, mediate disagreements and help reach conclusions in group settings.
- Effective Citizenship: Demonstrate empathetic social concern and equity centred national development and the ability to act with an informed awareness of issues and participate in civic life through volunteering.
- Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions and accept responsibility for them.
- Environment and sustainability: Understand the issues of environmental contexts and sustainable
- Self-directed and Life-long Learning: Acquire the ability to engage in independent and life
   -long learning in the broadest context socio-technological changes.

### Programme Special Outcomes:

Upon completion of the programme successfully, students will be able to

- Acquire comprehensive knowledge and sound understanding of fundamentals of Physics
- Develop laboratory skills, enabling them to take measurement in a physics laboratory and analyze the measurements to draw valid conclusions.
- Be prepared to acquire a range of general skills, to solve problems, to evaluate information, to use computers productively, to communicate with society effectively and learn independently.
- 4. Develop good oral and written scientific communication skill.



#### Course Outcomes:

On successful completion of this course, the students would be able to

- Discuss the basic concepts of rotational dynamics.
- Examine the phenomenon of simple harmonic motion and distinction between undamped, damped and forced oscillations and the concept of resonance.
- Explain the superposition of simple harmonic motion and acquire the knowledge of ultrasonic waves, their production, detection and applications in different field.
- 4. Determine the constant of elasticity and relate it with appropriate things
- Interpret the postulates of special theory of relativity.
- Know the concepts of Global Positioning Systems (GPS).
- 7. Discuss the concept of scalars & vectors and their properties.
- Develop an understanding of Gauss law and its applications to obtain electric field in different cases.
- Formulate the relationship between electric displacement vector, electric polarization and dielectric constant.
- Distinguish between the magnetic effect of electric current, electromagnetic induction and the related laws in appropriate circumstances.
- Simplify electrical circuits by applying various network theorems.
- Apply the principles of measurement and error analysis.
- Develop the skills to handle various instruments with precision.
- 14. Make the use of multimeter for the measurement of electrical parameters and get the knowledge of electronic components and their applications.



 Estimate the power consumption of domestic appliances and carry out energy audit.

On successful completion of practical course, the students would be able to

- List out, identify and handle various equipments like different types of pendulums.
- 2. Learn the procedures of operation of various oscillating objects.
- 3. Acquire skills in observing and measuring different types of errors.
- Perform procedures and techniques related to experiments based on mechanics.
- Conduct experiments collaboratively and ethically.
- Simplify various electrical circuits by using network theorems.
- Learn the procedures of operation of electrical components like capacitor, resistor and inductor.
- Acquire skills in measuring dielectric constants of different materials.
- Perform procedures and techniques related to experiments based on electrical and electronic circuits.
- Conduct experiments collaboratively and ethically.





# DEPARTMENT OF CHEMISTRY

# Course

# Following outcomes are considered for the students of B. Sc.1 Semester I.

By the end of this course, the students would be able to:

CHE(IS)T (Chemistry IS)

#### COs:

- Solve the conceptual questions using the knowledge gained by studying periodicity in atomic radii, ionic radii, ionization energy and electron affinity of elements.
- 2. Apply concepts of acids and bases as well as non-aqueous solvents and their industrial usage.
- Compare different reaction intermediates, functional group chemistry through the study of methods of preparation, properties and chemical reactions with underlying mechanism.
- 4. Choose correct synthetic approach to prepare derivatives of industrially important molecules
- Solve different numerical problem of varying difficulty associated with gaseous and liquid state.
- Apply the concepts from advanced mathematics to solve the derivation of different chemical formulae.

### CHE(IS)PR

#### COs

At the end of Lab/Practical course, students would be able to

- Synthesise different types of organic compounds.
- 2. Perform the process of filtration, crystallization, melting point, waste management.
- Understand the effect of orientation effect of a group.
- 4. Skilfully determine the surface tension, viscosity of liquid.
- 5. Predict the endothermic or exothermic process from heat of solution of a salt.

DIGRAS

Principal,
B.B.Arts, N.S. Commerce &

# Following outcomes are considered for the students of B. Sc.1 Semester II

By the end of this course, the students would be able to:

# CHE (2S)T

COs

- Apply the knowledge gained by studying types of bonding, solvation, hybridization and molecular geometries.
- 2. Draw the correct molecular structures, bond order and bond length.
- 3. Synthesize commercially important compounds of varying carbon backbone.
- Choose correct synthetic approach to prepare derivatives of industrially important molecules.
- 5. Solve numerical problems related to crystalline state
- Acquire skills to use chemical kinetics to develop mechanism of chemical reactions.

### CHE (2S)PR

#### COs

At the end of Lab/Practical course, students would be able to -

- Analyse the given organic compound qualitatively by different tests.
- 2. Prepare the derivative of the provided substance
- Illustrate the practical skills in volumetric analysis.
- 4. Differentiate types of titrations e.g. acid-base, redox, etc.
- Comprehend the kinetics of reactions and interpret the experimental data.
- 6. Calculate, communicate and analyses the result.

DIGRAS

# Following outcomes are considered for the students of B. Sc.2 Semester III

Students of the class became aware and got the knowledge of following important points.

- The basic quantum-mechanical approach to derive molecular orbitals from atomic orbitals.
- Describe traits of bonding and anti-bonding molecular orbitals.
- 3. Students can calculate bond orders based on molecular electron configurations.
- 4. Students can write molecular electron configurations for first- and second-row diatomic molecules.
- 5. Related these electron configurations to the molecules' stabilities and magnetic properties.
- 6. Given a Lewis structure, distinguish between bonded pairs and non-bonded pairs of electrons
- Use the Valence Shell Electron Pair Repulsion (VSEPR) model to predict the geometries of molecules and
- 8. Students got adequate knowledge of new thermodynamic properties as free energy, entropy.
- Requirements for spontaneity of process.
- Various conductance and their relationships.
- 11. How to measure the conductance
- Application of conductance to study progress of different titrations.
- 13. How to purify and extract the compound by solvent extraction.
- 14.Students Gate knowledge about stereochemistry different types of isomerism like optical geometrical and conformational unit 6 liquid state students get brief knowledge about liquid state and its related concepts like surface tension effect of temperature on surface tension viscosity relative viscosity etc
- 15. Recognise and assign names to aldehyde and ketone.
- 16. How to write the mechanism for nucleophilic addition and nucleophilic elimination reaction of aldehyde and ketone and be able to predict the products of such reaction.
- 17. Predict the product of addition reaction to alpha beta unsaturated carbonyl compound.
- 18. Distinguish the applications of quantitative analysis.
- Perform a systematic and skillful volumetric and Gravimetric analysis.

DIGRAS

# Following outcomes are considered for the students of B. Sc.2 Semester IV

Students of the class became aware and got the knowledge of following important points.

- New type of organic compounds such as heterocyclic, organometallic involved in our day to day life.
- How the compounds can be synthesized.
- 3. Information of crystals, how to determine crystal structure etc.
- 4. How to determine the molecular formula of newly synthesized compounds from colligative property.
- Students get knowledge about aromatic nitro compounds amino compounds diazonium salt and amino acid and proteins
- Distinguish between monosaccharides, disaccharides and polysaccharides.
- 7. Identify several major functions of carbohydrates.
- Lanthanaids and actinaids: Electronic configurations, oxidation states, colour, magnetic properties, lanthanide contraction, separation of lanthanides (ion exchange method)
- 9. Classify the various metallurgical operations.

DIGRAS

# Following outcomes are considered for the students of B. Sc.3 Semester V

Students of the class became aware and got the knowledge of following important points.

- The properties of the inner transition elements depending on the periodic properties in the Periodic table in addition to a comparative studies of the elements in their groups.
- The spectroscopic and magnetic properties of the transition elements.
- List several methods for concentration of ores and the methods and techniques for mineral processing is studied-
- Describe the processes of oxidation and reduction and understand that oxidation of metals is a naturally occurring process.
- Discuss the relationships between ligand binding in a metal complex and the degeneracy of the d orbitals and between the geometry of a metal complex and the splitting of the d orbitals.
- . To understand the key features of coordination compounds, including:
- the variety of structures
- oxidation numbers and electronic configurations
- coordination numbers
- ligands, chelates
- bonding, stability of complexes
- To be able to use Crystal Field Theory to understand the magnetic properties (and in simple terms the colour) of coordination compounds.
- 7. Describe the various deactivation processes of molecular excited states
- 8. Characterize the kinetics of deactivation processes and their role in the photochemical reactivity
- 9. Students get the idea of new type of compounds involved in our daily life.
- 10. Students get the Knowledge about the synthesis process.
- 11. Idea about spectra and its concerted concepts like selection rule ground term symbol orgel diagram spectrochemical series, other related concepts like EMI its characterization where parameter types of spectra degree of freedom energy level related to Electronic vibrational and

DIGRAS

rotational transitions selection rule rigid rotor moment of inertia zero point energy for Raman effect.

- 12. Discuss the properties of coordination compound.
- 13. Categorise coordination compound.
- 14. Consider effective atomic number theory and Werner's complexes.
- 15. Explain the spectroscopic properties of coordination compound.
- 16. To become familiar with some applications of coordination compound.
- 17. To be able to describe the shapes and structure of coordination complexes with coordination numbers ranging from 4 to 6.
- 18. Know the various pharmaceutical drugs, their application and synthesis.
- 19. To understand the function of dyes, paints and pigments.
- Have the knowledge of various Pesticides, insecticide, fungicide & herbicides.

DIGRAC

Principal,
B.B.Arts, N.B. Commerce &

# Following outcomes are considered for the students of B. Sc. III Semester VI

- 1. The students will be able to:
  - · Explain the basic principles of NMR.
  - Show and explain function of the main units of an NMR instrument.
  - Prepare a sample for an NMR experiment.
  - Elucidate structure of an unknown compound from a set of NMR spectra.
  - Identify, describe and explain the function of the several components of a mass spectrometer (sample introduction, ionization source, mass analyzer and detector)
  - 3. Students became aware of-
    - Potential and pH
    - Various electrodes
    - Calculation of pH and potential to study the progress of Acid-base, precipitation titration.
  - Students get concept about electronic Spectroscopy its theory instrumentation types of electronic transition presentation of spectra and its related seats and its application in structure determination of organic compound
  - 5.Organometallic compounds are very important in biological bodies like hemoglobin, chlorophyll vitamin B-12 and also they can be used as chemical reagents this topic discuss about the synthesis and properties of these organometallics.
  - Explain and rationalize the synthesis structure bonding properties and reactivity of metal carbonyls like Ni(CO)<sub>4</sub>,Fc(CO)<sub>5</sub> and Cr(CO)<sub>6</sub>.
  - 7. Distinguish the spectrophotometry & colorimetry with complete instrumentation and determine the conc. of Cu (II) ions.
  - 8. Explain the principles of paper chromatography techniques and to apply them.

DIGRAS

# Department of Chemistry

Programme: B.Sc. (Chemistry)

POs: At the time of graduation, Students would be able to ..

- PO1. Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.
- PO2. Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.
- PO3. Social Interaction: Elicit views of others, mediate disagreements and help reach conclusions in group settings.
- PO4. Effective Citizenship: Demonstrate empathetic social concern and equity centred nationa development, and the ability to act with an informed awareness of issues and participate in civ life through volunteering.
- PO5. Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.
- PO6. Environment and Sustainability: Understand the issues of environmental contexts and sustainable development.
- PO7. Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological changes.

PSOs: Upon completion of the programme successfully, the learners would be able to-

- Understand the scope, methodology and application of modem chemistry.
- Apply theoretical and practical concepts of instruments that are commonly used-in most chemistry field.
  - 3. Plan and conduct scientific experiments and record the results of such experiments.
- Get acquainted with safety of chemicals, transfer, and measurements of chemicals, preparation of solutions, and using physical properties to identity compounds and chemical reactions.
- Describe how chemistry is useful to solve social, economic and environmental problem issues facing our society in energy, medicine, and health.

# Department of Computer Science B.Sc Computer Science

### POs:

After completion of graduation, students will be competent to:

PO1: Critical Thinking: Take informed actions after identifying the assumptions that frame our thinking and actions, checking out the degree to which these assumptions are accurate and valid, and looking at our ideas and decisions (intellectual, organizational, and personal) from different perspectives.

PO2: Effective Communication: Speak, read, write and listen clearly in person and through electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.

PO3: Social Interaction: Elicit views of others, mediate disagreements and help reach conclusions in group settings.

PO4: Effective Citizenship: Demonstrate empathetic social concern and equity centred national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.

PO5: Ethics: Recognize different value systems including your own, understand the moral dimensions of your decisions, and accept responsibility for them.

PO6: Environment and Sustainability: Understand the issues of environmental contexts and sustainable development.

PO7: Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context sociotechnological changes

DIGRAS

# Department of Computer Science

# B.Sc Sem I

COs

Upon completion of this course successfully, Students would be able to -

Understand the computer, I/O and peripheral devices.

2. Understand concept of Operating systems.

3. Apply the Programming concepts.

4. Learn C language.

5. Write Simple C Programs.

### COs:

1. To draw flowchart, learn Algorithms and write simple programs.

 To assess the curricular skills acquired by students at college level through Assignments, Unit test, Internal Test, Group Discussion/Seminar/Mini Project, Study Tour

### Activities

1. Assignment

2. Group discussion

3. Study tour/ Industrial visit (4 periods)

### COs

Upon completion of this course successfully, Students would be able to demonstrate/perform/accomplish the following

1. Write word processing task.

2. Create worksheet and perform operations on it.

3. Design, compile and debug programs in C language.

 Classify conditional expressions and looping statement to solve problems associated with conditions and repetitions.

Demonstrate the programs using arithmetic and relational operators.

Implement the concept of various string handling functions.

 Classify programming components that efficiently solve computing problems in real-world.

DIGRAS

# Department of Computer Science B.Sc Sem II

### COs

Upon completion of this course successfully, Students would be able to -

- 1. Implement basic data structures such as arrays, stacks.
- 2. use linked list, trees and queues.
- 3. Apply Algorithm for solving problems like sorting, searching, insertion and deletion of data.
- 4. Describe the procedural and object-oriented paradigm with concepts of streams, classes, functions, data and objects. 5. Perform programming on functions, inline functions, constructor and destructor.
- Perform programming on the concept of function overloading, operator overloading, virtual functions and polymorphism.

### COs:

- 1. Acquire skill to work with core components of data structure
- 2. Acquire object oriented programming skill.

### Activities

- Assignment
- 2. Group discussion
- 3. Study tour/ Industrial visit

### COs

Upon completion of this course successfully, Students would be able to demonstrate/perform/accomplish the following

- 1. Perform various operations Data structure using CPP.
- 2. Develop the concept of dynamic memory allocation through linked list.
- Design stack and queue with contiguous and non-contiguous data storage mechanism.
- Perform the various operations on binary tree.
- 5. Implement sorting on 1-D array using different techniques.



## B. B. ARTS, N.B. COMMERCE & B. P. SCIENCE COLLEGE DIGRAS

Department of Mathematics

Course Outcome (2022-23)

# Semester I: Maths I- Algebra and Trigonometry

After completing this course students would able to-

- 1. Find inverse and normal form of matrices
- 2. Evaluate the characteristics equations, eigen value and eigen vector of a given matrix.
- 3. Evaluate the relation between the roots and coefficients of equations
- 4. Study application of Demoivres Theorem
- 5. Compute summation of trigonometric series

## Semester 1: Maths II - Calculus (Differential and Integral Calculus)

After completing this course students would able to-

- 1. Define limit and study the basic property
- 2. Classify the continuity and discontinuity of fuctions
- Find derivative and evaluate limit by L'hospitals rule.
- Describe geometrical applications of MVT
- 5. Evaluate the reduction formulae.

DIGRAS

# Semester II: Maths III -Ordinary Differential equation

After completing this course students will able to-

- 1. Solve first order differential equation using different technique
- 2. Solve higher order differential equation and orthogonal trajectory
- 3. Calculate complementary function and particular integral
- 4. Solve second order differential equation by different methods
- 5. Illustrate application of differential equation

# Semester II: Maths IV - Vector analysis and geometry

After completing this course students would be able to-

1Interprete vectors there products

2 determine curvature and torsion

3 use the concept of divergence curl and gradient

4 describe the different forms of sphere and properties

5 Discuss the equation of cone and cylinder

## Semester III: Maths V - Advance calculus

Students will able to-

1. Decide convergence and divergence of sequence. 2. Decide convergence and divergence of series by using comparison test, Cuschy integral test, ratio test, root test, Lebnitz rule and Abels test. 3. Expand the function of two variables by Tailor's theorem. 4. Find maxima and minima of function of two variables by second derivative test and Lagranges multiplier method.5. Draw the region of double integral and evaluate it.

# Semester III: Maths VI - Number theory

Students will able to

- 1. Find greatest common divisor by division algorithm and Euclidean algorithm method.
- Find least common multiple and greatest common divisor by prime factorization.Define prime numbers, composite numbers and Fermat numbers.Define congruence relation and solve linear congruence.
- 5. Find the Euler's function, Tow and Sigma functions and define arithmetic and Mobius function.

DIORAC

Principal, B.B.Arts, N.B. Commerce & B.P. Science Cokege, DIGRAS

1

# Semester IV: Maths VII - Modern Algebra

Students will able to-

- Define group, subgroup, cyclic groups, permutation group and order of an element, 2.
   Define cosets, normal subgroup and quotient group, cyclic subgroups, and understand the structure and characteristics of these subgroups, 3. Define homomorphism, isomorphism, kernel and range of homomorphism.
- Define ring, types of ring, integral domain and field.
   Define ideal, quotient ideal and describe identity element of quotient ideal.

### Semester IV: Maths VIII - Classical mechanics

Students will able to-

- 1. Define constrains and use D'Alemberts principle 2. Find extremals of function.
- 3. State Hamilton Principle.
- 4. Find Eulerian angle.

### Semester V: Maths IX - Mathematical analysis

Students will able to-

- Decideintegrability of functions. 2. Test the convergence & divergence of improper integral.
- Verify Cauchy-Reimann equation and find the analytic function by Milne Thomson method, 4. Find critical points and decide the types of transformation.

#### Semester V: Maths X - Mathematical methods

Students will able to

- 1. Find Fourier series, Fourier series of even and odd function.. 2. Find Laplace transform of elementary function.
- 3. Solve ordinary D. E., partial D. E. and simultaneous D. E. by L. T.
- 4. Find Fourier transform, Finite Transform, F-sine Transform and F-cosine Transform of the function.

### Semester VI: Maths XI - Linear Algebra

Students will able to-

1. Define vector space, span, dependent and independent vectors, basis and dimension.



- Find range space and null space of linear transformation and verify rank nullity theorem.
- 3. Find Eigen value and Eigen vectors of linear transformation. 4. Find orthogonal and orthonormal sets,

# Semester VI: Maths XII - Graph Theory

Students will able to-

- 1. Describe the origin of Graph theory 2. Illustrate different types of graphs.
- 3. Determine degree, vertex and edges of graph. 4. Draw diagrams of different graphs.

DIGRAS

# B.B.Arts, N.B.Commerce and B.P.Science College Digras

### Department of Mathematics

Programme outcomes

At the end of programme graduate would be able to

- Enhance the knowledge of students in all basic science
- Identify, formulate and develop solutions to computational challenges
- Develop scientific temper and think in critical manner
- 4. Build up progressive and successful career in academics industry, and society
- 5. Develop students abilities and aptitudes to apply the mathematical ideas

### **PSOs**

After completion of programme successfully students would be able to understand

- 1. Major concepts in all disciplines of mathematics
- 2. Formulate and develop mathematical argument in a logical manner
- 3. Gain good knowledge and understanding in advance mathematics
- Create and awareness of the impact of mathematics on environment, society and development outside the scientific community
- Create sensitivity towards environmental concerns and contribute in the development of nation.

DIGRAS