

Programme / Curriculum/ Syllabus of the courses

**KARNATAK UNIVERSITY
DHARWAD**

REGULATIONS, SCHEME AND SYLLABUS

for the course

**BACHELOR OF SCIENCE (Computer Science)
[B.Sc. (Computer Science)]
(Semester System)**

**Revised w.e.f
Academic Year 2005 – 2006 and onwards**

Sem No.	Paper No.	Title of the paper	Hrs/ Wk	Marks		IA	Total Marks	
				Max	Min		Max	Min
B.Sc. (C.S) - IV Semester	BSc.(C.S) 401	Information System Design *	4	80	32	20	100	40
	BSc.(C.S) 402	Basic Communications	4	80	32	20	100	40
	BSc.(C.S) 403	Management Information System	4	80	32	20	100	40
	BSc.(C.S) 404	Microprocessors	4	80	32	20	100	40
	BSc.(C.S) 405	Design and Analysis of Algorithms	4	80	32	20	100	40
	BSc.(C.S) 406	Computer Lab 4.1 (Based on B.Sc. (C.S) 404)	6	80	32	20	100	40
	BSc.(C.S) 407	Computer Lab 4.2 (Based on B.Sc. (C.S) 405)	6	80	32	20	100	40
B.Sc. (C.S) - V Semester	BSc.(C.S) 501	Signal and Systems	4	80	32	20	100	40
	BSc.(C.S) 502	System Programming	4	80	32	20	100	40
	BSc.(C.S) 503	Visual Basic	4	80	32	20	100	40
	BSc.(C.S) 504	Data Base Management Systems	4	80	32	20	100	40
	BSc.(C.S) 505	Internet Programming	4	80	32	20	100	40
	BSc.(C.S) 506	Computer Lab 5.1 (Based on B.Sc. (C.S) 503 & B.Sc. (C.S) 504)	6	80	32	20	100	40
	BSc.(C.S) 507	Computer Lab 5.2 (Based on B.Sc. 501 & B.Sc. (C.S) 505)	6	80	32	20	100	40
B.Sc. (C.S) - VI Semester	BSc.(C.S) 601	Computer Networks	4	80	32	20	100	40
	BSc.(C.S) 602	Operating Systems	4	80	32	20	100	40
	BSc.(C.S) 603	Internet concepts & Web Designing	4	80	32	20	100	40
	BSc.(C.S) 604	Digital Signal Processing	4	80	32	20	100	40
	Project Work							
BSc.(C.S) 605(A)		Project Report	12	200	80	----	200	120
BSc.(C.S) 605(B)		Viva - voce	-----	100	-----	-----	100	-----
GRAND TOTAL MARKS							4200	

- Note: 1) Duration of Examination of each Theory/Practicals shall be of 3 (Three) hours duration.
- 2) The title of B.Sc. (Information Science) course is proposed to be revised and renamed as B.Sc. (Computer Science) w.e.f 2005 – 2006.
- 3) The contents of "Computer Applications" compulsory paper of Group III is spread over the various computer papers in earlier semesters of B.Sc. (C.S) and hence it is not included in B.Sc.(C.S) IV Semester.



B.Sc. Programme

Syllabus for

ELECTRONICS (Optional)

AS DISCIPLINE SPECIFIC COURSE (DSC),
DISCIPLINE SPECIFIC ELECTIVE (DSE) and
SKILL ENHANCEMENT COURSE (SEC)
UNDER
CHOICE BASED CREDIT SYSTEM (CBCS)



Effect from 2020-2021

Discipline Specific Course(DSC), Discipline Specific Elective and Skill Enhancement Course Topics under CBCS in Electronics

Sem	Type	Course
1	DSC ELET:101	BASIC ELECTRONICS
	DSC ELEP:102	PRACTICALS 1
2	DSC ELET:201	LINEAR AND DIGITAL INTEGRATED CIRCUITS
	DSC ELEP:202	PRACTICALS 2
3	DSC ELET:301	COMMUNICATION ELECTRONICS
	DSC ELEP:302	PRACTICALS 3
4	DSC ELET:401	PHOTONICS AND MICROCONTROLLER
	DSC ELEP:402	PRACTICALS 4
5	DSE ELET:501A OR ELET:501B	C-Programming, VLSI and Embedded System (Elective) OR Sensors,C-Programming and Embedded System (Elective2)
	DSE ELEP:502A OR ELEP:502B	PRACTICALS 5
6	SEC-1 ELEP:503	EMBEDDED SYSTEMS EXPERIMENTS USING MICROCONTROLLER/ARDUINO PRACTICALS 6
	SEC-2 ELEP:504	PCB DESIGN AND SIMULATION EXPERIMENTS PRACTICALS 7
	DSE ELET:601A OR ELET:601B	Power Electronics and DSP (Elective 1) OR Power Electronics VLSI,VHDL and Python (Elective 2)
	DSE ELEP:602A OR ELEP:602B	PRACTICALS 8
	SEC-1 ELEP:603	PC HARDWARE AND BASIC NETWORKING CONCEPTS PRACTICALS 9
	SEC-2 ELEP:604	PROJECT WORK PRACTICALS 10

KARNATAK UNIVERSITY, DHARWAD



**SYLLABUS FOR
B.Sc. GEOLOGY (GENERAL)**

**VI- SEMESTER COURSE
UNDER CHOICE BASED CREDIT SYSTEM (CBCS)**



2020-21 Onwards

WG 115/150 Copies 2020

Karnatak University, Dharwad
**CBCS syllabus for Under Graduate Programme in Geology (opt.) as DISCIPLINE SPECIFIC
COURSE (DSC)**
Effective from 2020-21

Semester	Course Code	Name Of The Course	Theory/ Practical	Instruction Hrs/Week	Total Period	Duration Of Exam	Marks Obtained		Total Marks	Credits		
							Internal (CA)	External (ESI)				
I	(DSC) GLG-SCT-(A)-116	General Geology and Structural Geology	Theory	04	60	03 Hrs	20	80	100	04		
	(DSC) GLG-SCP-(A)-116	General Geology and Structural Geology	Practical	04	52	03 Hrs	10	40	50	02		
II	(DSC) GLG-SCT-(B)-226	Crystalllography and Mineralogy	Theory	04	60	03 Hrs	20	80	100	04		
	(DSC) GLG-SCP-(B)-226	Crystalllography and Mineralogy	Practical	04	52	03 Hrs	10	40	50	02		
III	(DSC) GLG-SCT-(C)-336	Petrology	Theory	04	60	03 Hrs	20	80	100	04		
	(DSC) GLG-SCP-(C)-336	Petrology	Practical	04	52	03 Hrs	10	40	50	02		
IV	(DSC) GLG-SCT-(D)-446	Stratigraphy and Palaeontology	Theory	04	60	03 Hrs	20	80	100	04		
	(DSC) GLG-SCP-(D)-446	Stratigraphy and Palaeontology	Practical	04	52	03 Hrs	10	40	50	02		
V	(DSE) *GLG-DEI-516-(E)-P-I/P-II	P-I-Economic Geology and Hydrogeology P-II- Geology of Karnataka	Theory	04 / 04	60 / 60	03 Hrs	20	80	100	04		
	(DSE) GLG-DEP-516-(E)-P-I/P-II	P-I-Economic Geology and Hydrogeology P-II	Practical	04	52	03 Hrs	10	40	50	02		
VI	(DSE) *GLG-DEP-626-(F)P-I / P-II	P-I-Elements of Applied Geology P-II- Dissertation/ Project Work	Theory/ Self Study	04 / 04	60 / 60	03 Hrs	20	80	100	04		
	(DSE) GLG-DEP-626-(F)P-I / P-II	P-I-Elements of Applied Geology P-II- Dissertation/ Project Work	Practical	04	54	03 Hrs	10	40	50	02		
Total	*Candidate shall choose either Paper-I or P-II but not both in DSE Theory						48 Hrs	672/120	180	720	900	36

Karnatak University, Dharwad



NAAC Accredited with
"A" Grade-2014

B.A. Programme

Syllabus for

GEOGRAPHY (OPTIONAL)

AS DISCIPLINE SPECIFIC COURSE (DSC)

and

SKILL ENHANCEMENT COURSE (SEC)

UNDER

CHOICE BASED CREDIT SYSTEM (CBCS)



Effect from 2020-2021

Particulars of the Semester wise Theory and Practical Papers and Paper Code of B.A. Course.

Semester	Paper Code	Title of the Paper	Course
I	GY T A	Physical Geography	DSC
	GY Pr. A	Scale and Maps	DSC
II	GY T B	Human Geography	DSC
	GY Pr. B	Interpretation of Indian Daily Weather Maps	DSC
III	GY T C	Regional Geography of Karnataka	DSC
	GY Pr. C	Interpretation of Topographical Maps	DSC
IV	GY T D	Environmental Geography	DSC
	GY Pr. D	Map Projections	DSC
V	GY T E-I	Regional Geography of India	DSE
	GY T E-II	Geography of Settlements	DSE
	GY Pr. E	Basic Statistics	DSE
	GY T E-III	Elements of Physical Geography	GE-I
	GY T E-IV	Regional Planning & Development	SEC-I
VI	GY T F-I	Economic Geography of the World	DSE
	GY T F-II	Population Geography	DSE
	GY Pr. F-I	Field Based Project report	DSE
	GY T F-III	Physical Geography of India	GE-II
	GY T F-IV	Basics of Remote Sensing	SEC-II

Note: All the DSC Courses are compulsory. Each DSE shall have at least two papers and student shall choose any one paper from each DSE and Practical is compulsory.

SEC Theory/Practical is compulsory of these two semesters.

The Practical batch is to be in accordance with University Norms.

Name of Papers in B.A./B.Sc. Geography

	Semester	Name of Subject	Marks +IA	Total
B.A./B.Sc. Geography	1 st Sem	Paper-I: Geomorphology	80+20	100
		Practical Paper I: Scales	40+10	50
B.A./B.Sc. Geography	2 nd Sem	Paper-II: Climatology and Oceanography	80+20	100
		Practical Paper II : Maps and Diagrams	40+10	50
B.A./B.Sc. Geography	IIIrd Sem	Paper-III: Regional Geography of Karnataka	80+20	100
		Practical Paper III: Introduction to Weather Maps and Instruments.	40+10	50
B.A/ B.Sc. Geography	IV th Sem	Paper- IV: Regional Geography of India	80+20	100
		Practical Paper IV : Interpretation of Topographical Maps	40+10	50
B.A./B.Sc. Geography	V th Sem	Paper-V: Evolution of Geographical Thought	80+20	100
	V th Sem	Paper-VI: Human and Economic Geography of the World	80+20	100
		Practical Paper V: Map Projections	40+10	50
		Practical Paper VI: Statistical Diagrams and Statistics	40+10	50
	VI th Sem	Paper-VII: Environmental Geography	80+20	100
		Paper-VIII: Geography of Agriculture and Rural Settlement.	80+20	100
		Practical Paper VII: Basic Computer Applications and GIS	40+10	50
		Practical Paper VIII: Field Study and Project Report	40+10	50

Karnatak University, Dharwad



NAAC Accredited with
"A" Grade-2014

B.A. Programme

Syllabus for

CRIMINOLOGY AND FORENSIC SCIENCE

AS DISCIPLINE SPECIFIC COURSE (DSC)
and
SKILL ENHANCEMENT COURSE (SEC)
UNDER
CHOICE BASED CREDIT SYSTEM (CBCS)



Effect from 2020-21

SCHEME OF PRACTICAL EXAMINATION

20

1. Identification

- a. Types of Nest (any 1)
- b. Castes in social insects (any 2)
- c. Coloration and mimicry
- d. Poultry breeds
- e. Commercially important fishes, crustaceans, molluscs, freshwater fish and marine water fish (one from each)
- f. Courtship behavior (any one)
- g. Parental care (any one).

2. Project

10

3. Viva

04

4. Journal

05

Total 40

Zoology:

XII.	POULTRY SCIENCE	05 hrs
	Introduction, breeds of fowls, poultry keeping, nutritive value of egg and meat, poultry diseases.	
XIII.	DAIRY TECHNOLOGY	05 hrs
	Introduction, breeds of cattle, breeding and cattle improvement in India nutritive value of milk and milk byproducts.	
XIV	SERICULTURE	05 hrs
	Introduction, Life cycle of Bombyx mori, Rearing of silkworm (Early and Late age), Types Of montages, Harvesting of cocoons and Spinning. Diseases of silkworm and control . Measures.	

Credit : 02 PRACTICAL DSCZOOP 5.1B

1. Identification of castes in social insects.
2. Observation of courtship behavior in animals.
3. Observation of parental care in animals.
4. Observation of different types of nests and nest materials.
5. Coloration and mimicry.
6. Breeds of poultry.
7. Study of commercially important
 - a. Crustaceans
 - b. Molluscs
 - c. Fishes
8. Visit to nearby dairy, poultry, bee keeping unit, vermiculture unit and termite mound for observation.



22
14/7/2005

REGULATIONS, SCHEME AND SYLLABUS

for the course

BACHELOR OF COMPUTER APPLICATIONS (BCA)

(Semester System)

Revised w.e.f
Academic Year 2005 – 2006 onwards

Sem No.	Paper No.	Title of the paper	Hrs /Wk	Marks			Total Marks	
				Max	Min	IA	Max	Min
IV ✓	BCA401	Design & Analysis of Algorithms	4	80	32	20	100	40
	BCA402	System Analysis & Design	4	80	32	20	100	40
	BCA403	System Programming	4	80	32	20	100	40
	BCA404	Data communications	4	80	32	20	100	40
	BCA405	Microprocessors	4	80	32	20	100	40
	BCA406	Computer Lab 4.1 (Based on BCA 401 & BCA 404)	6	80	32	20	100	40
	BCA407	Computer Lab 4.2 (Based on BCA 405)	6	80	32	20	100	40
V ✓	BCA501	Operating Systems	4	80	32	20	100	40
	BCA502	Internet Programming	4	80	32	20	100	40
	BCA503	Data Base Management Systems	4	80	32	20	100	40
	BCA504	Software Engineering	4	80	32	20	100	40
	BCA505	Operations Research	4	80	32	20	100	40
	BCA506	Computer Lab 5.1 (Based on BCA 502)	6	80	32	20	100	40
	BCA507	Computer Lab 5.2 (Based on BCA 503)	6	80	32	20	100	40
VI ✓	BCA601	Computer Graphics	4	80	32	20	100	40
	BCA602	E-Commerce & Web Designing	4	80	32	20	100	40
	BCA603	Introduction to UNIX	4	80	32	20	100	40
	BCA604	Object Oriented System Design	4	80	32	20	100	40
	BCA 605	Computer Networks	4	80	32	20	100	40
		Project Work						
	BCA606 (A)	Project Report : Viva – voce	12	200	80	----	200	
	BCA606 (B)			-----	100	-----	100	120
GRAND TOTAL MARKS							400	

Note: 1) Duration of Examination of each Theory/Practicals shall be of 3 (Three) hours duration.
 2) The contents of "Computer Applications" compulsory paper of Group III is spread over the various computer papers in earlier semesters of BCA and hence it is not included in BCA IV Semester.

Paper Code	Paper & Title	Credits	No. of Hrs/ week Theory/ Practical	Duration of exam in Hrs Theory/ Practical	Internal Assessment Marks Theory/ Practical	Marks at the Exams	Total Marks
III Semester							
PG83T301	Measure Theory	4	4	3	25	75	100
PG83T302	Complex Analysis-II	4	4	3	25	75	100
PG83T303	Topology-II	4	4	3	25	75	100
PG83T304	Differential Geometry-I	2	2	2	15	35	50
PG83T305	Numerical Methods	2	2	2	15	35	50
PG83P306	Programming Lab-II	2	4	3	15	35	50
PG83T307A	Discrete Mathematical Structures	4	4	3	25	75	100
Total of III Semester		22					550
IV Semester							
PG83T401	Functional Analysis	4	4	3	25	75	100
PG83T402A	(a) Fuzzy Topology OR						
PG83T402B	(b) Dimension Theory OR						
PG83T402C	(c) Relativity OR						
PG83T402D	(d) Ring Theory OR						
PG83T402E	(e) Galois Theory OR						
PG83T402F	(f) Number Theory						
PG83T403A	(a) Graph Theory OR						
PG83T403B	(b) Differentiable Manifolds OR						
PG83T403C	(c) Nevanlinna Theory OR						
PG83T403D	(d) Geometric Function						
PG83T403E	Theory OR						
PG83T403F	(e) Group Theory OR						
PG83T403G	(f) Commutative Algebra						
PG83T404	Differential Equations-III	2	2	2	15	35	50
PG83T405	Differential Geometry-II	2	2	2	15	35	50
PG83T406	Integral Transforms and Integral Equations	2	2	2	15	35	50
PG83P407	Programming Lab - III	2	4	3	13	25	50
PG83T408	Project Work	4	4		25	75	100
Total of IV Semester		24					600
	Grand total of all semesters (I to IV)	90					2250

Note: CT – Compulsory Theory

CP – Compulsory Practical

CPW – Compulsory Project Work

OEC – Open Elective Course (for other Department Students)



Dharwad
Department of Physics

Syllabus based on Choice Based Credit System (CBCS)

(2018 Scheme)

for

M. Sc. Course in PHYSICS

*With effect from the year 2018 for the I & II Semesters and from
the year 2019 for III & IV Semesters Onwards*

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|                                |                                                                                                                               |   |   |   |                                             |    |     |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---|---|---|---------------------------------------------|----|-----|
| PH CT4.2                       | Statistical and Thermal Physics                                                                                               | 4 | 4 | 3 | 75                                          | 25 | 100 |
| <b>Specialization Courses:</b> |                                                                                                                               |   |   |   |                                             |    |     |
| PH ST4.3                       | Electronics-III/<br>Condensed Matter Physics-III/ Atomic & Molecular Physics-III/<br>Nuclear & Particle Physics-III           | 4 | 4 | 3 | 75                                          | 25 | 100 |
| PH ST4.4                       | Electronics-IV/<br>Condensed Matter Physics-IV/ Atomic & Molecular Physics-IV/<br>Nuclear & Particle Physics-IV               | 4 | 4 | 3 | 75                                          | 25 | 100 |
| PH SP4.5                       | Practical Electronics-III/<br>Condensed Matter Physics-III/ Atomic & Molecular Physics-III/<br>Nuclear & Particle Physics-III | 4 | 4 | 4 | 75                                          | 25 | 100 |
| PHSPJ4.6                       | <b>Project:</b><br>Electronics/<br>Condensed Matter Physics/ Atomic & Molecular Physics/<br>Nuclear & Particle Physics        | 6 | 6 | 4 | 75<br>(Dissertation) +<br>50(Viva-<br>voce) | 25 | 150 |

KARNATAK UNIVERSITY, DHARWAD



NAAC Accredited with  
"A" Grade-2014

P.G. Department of Studies in Mathematics

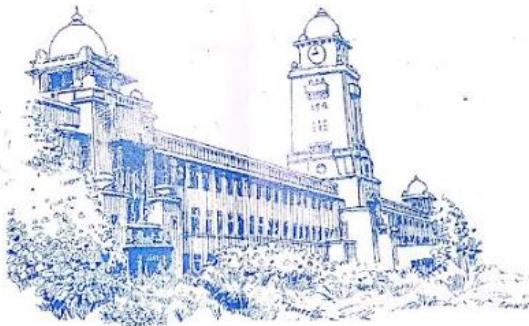
**Regulations and Syllabus**

for

**MATHEMATICS**

(I to IV Semesters)

Under Choice Based Credit System



With effect from 2013-14

| <b>Sl.<br/>No.</b>                                       | <b>Paper &amp; Title</b>                                                                                                                                                                               | <b>Credits</b> | <b>No. of<br/>Hrs/<br/>week<br/>Theory/<br/>Practical</b> | <b>Duration<br/>of exam<br/>in Hrs<br/>Theory/<br/>Practical</b> | <b>Internal<br/>Assessment<br/>Marks<br/>Theory/<br/>Practical</b> | <b>Marks<br/>at the<br/>Exams</b> | <b>Total<br/>Marks</b> |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------------------------------------|------------------------------------------------------------------|--------------------------------------------------------------------|-----------------------------------|------------------------|
| <b><i>III Semester (w.e.f. 2012-13)</i></b>              |                                                                                                                                                                                                        |                |                                                           |                                                                  |                                                                    |                                   |                        |
| 3.1                                                      | Measure Theory                                                                                                                                                                                         | 4              | 4                                                         | 3                                                                | 25                                                                 | 75                                | 100                    |
| CT                                                       |                                                                                                                                                                                                        |                |                                                           |                                                                  |                                                                    |                                   |                        |
| 3.2                                                      | Complex Analysis-II                                                                                                                                                                                    | 4              | 4                                                         | 3                                                                | 25                                                                 | 75                                | 100                    |
| CT                                                       |                                                                                                                                                                                                        |                |                                                           |                                                                  |                                                                    |                                   |                        |
| 3.3                                                      | Topology-II                                                                                                                                                                                            | 4              | 4                                                         | 3                                                                | 25                                                                 | 75                                | 100                    |
| CT                                                       |                                                                                                                                                                                                        |                |                                                           |                                                                  |                                                                    |                                   |                        |
| 3.4                                                      | Differential Geometry-I                                                                                                                                                                                | 2              | 2                                                         | 2                                                                | 15                                                                 | 35                                | 50                     |
| CT                                                       |                                                                                                                                                                                                        |                |                                                           |                                                                  |                                                                    |                                   |                        |
| 3.5                                                      | Numerical Methods                                                                                                                                                                                      | 2              | 2                                                         | 2                                                                | 15                                                                 | 35                                | 50                     |
| CT                                                       |                                                                                                                                                                                                        |                |                                                           |                                                                  |                                                                    |                                   |                        |
| 3.6                                                      | Programming Lab-II                                                                                                                                                                                     | 2              | 4                                                         | 3                                                                | 15                                                                 | 35                                | 50                     |
| CT                                                       |                                                                                                                                                                                                        |                |                                                           |                                                                  |                                                                    |                                   |                        |
| 3.7                                                      | Discrete Mathematical Structures                                                                                                                                                                       | 4              | 4                                                         | 3                                                                | 25                                                                 | 75                                | 100                    |
| OEC3                                                     |                                                                                                                                                                                                        |                |                                                           |                                                                  |                                                                    |                                   |                        |
| <b><i>Total of III Semester</i></b>                      |                                                                                                                                                                                                        | <b>22</b>      |                                                           |                                                                  |                                                                    |                                   | <b>550</b>             |
| <b><i>IV Semester (w.e.f. 2012-13)</i></b>               |                                                                                                                                                                                                        |                |                                                           |                                                                  |                                                                    |                                   |                        |
| 4.1                                                      | Functional Analysis                                                                                                                                                                                    | 4              | 4                                                         | 3                                                                | 25                                                                 | 75                                | 100                    |
| CT                                                       | 4.2CT(a) Fuzzy Topology OR<br>4.2CT(b) Dimension Theory OR<br>4.2CT(c) Relativity OR<br>4.2CT(d) Ring Theory OR<br>4.2CT(e) Galois Theory OR<br>4.2CT(f) Number Theory                                 | 4              | 4                                                         | 3                                                                | 25                                                                 | 75                                | 100                    |
| CT                                                       |                                                                                                                                                                                                        |                |                                                           |                                                                  |                                                                    |                                   |                        |
| 4.3                                                      | 4.3CT(a) Graph Theory OR<br>4.3CT(b) Differentiable Manifolds OR<br>4.3CT(c) Nevanlinna Theory OR<br>4.3CT(d) Geometric Function Theory OR<br>4.3CT(e) Group Theory OR<br>4.3CT(f) Commutative Algebra | 4              | 4                                                         | 3                                                                | 25                                                                 | 75                                | 100                    |
| CT                                                       |                                                                                                                                                                                                        |                |                                                           |                                                                  |                                                                    |                                   |                        |
| 4.4                                                      | Differential Equations-III                                                                                                                                                                             | 2              | 2                                                         | 2                                                                | 15                                                                 | 35                                | 50                     |
| CT                                                       |                                                                                                                                                                                                        |                |                                                           |                                                                  |                                                                    |                                   |                        |
| 4.5                                                      | Differential Geometry-II                                                                                                                                                                               | 2              | 2                                                         | 2                                                                | 15                                                                 | 35                                | 50                     |
| CT                                                       |                                                                                                                                                                                                        |                |                                                           |                                                                  |                                                                    |                                   |                        |
| 4.6                                                      | Integral Transforms and Integral Equations                                                                                                                                                             | 2              | 2                                                         | 2                                                                | 15                                                                 | 35                                | 50                     |
| CT                                                       |                                                                                                                                                                                                        |                |                                                           |                                                                  |                                                                    |                                   |                        |
| 4.7                                                      | Programming Lab - III                                                                                                                                                                                  | 2              | 4                                                         | 3                                                                | 15                                                                 | 35                                | 50                     |
| CT                                                       |                                                                                                                                                                                                        |                |                                                           |                                                                  |                                                                    |                                   |                        |
| 4.8                                                      | Project Work                                                                                                                                                                                           | 4              | 4                                                         | 25 (Viva)                                                        | 75                                                                 | <b>100</b>                        |                        |
| CPW                                                      |                                                                                                                                                                                                        |                |                                                           |                                                                  |                                                                    |                                   |                        |
| <b><i>Total of IV Semester</i></b>                       |                                                                                                                                                                                                        | <b>24</b>      |                                                           |                                                                  |                                                                    | <b>690</b>                        |                        |
| <b><i>Grand total of all semesters<br/>(I to IV)</i></b> |                                                                                                                                                                                                        | <b>90</b>      |                                                           |                                                                  |                                                                    |                                   | <b>2250</b>            |

Note: CT – Compulsory Theory  
 CP – Compulsory Practical  
 CPW – Compulsory Project Work  
 OEC – Open Elective Course (for other Department Students)

# KARNATAK UNIVERSITY



## M. Sc. Chemistry

Choice Based Credit System  
(CBCS)

*Revised Syllabus*  
(w.e.f. 2019-20)

### FOURTH SEMESTER

| Description of Papers                                                               | Credits | No. of Hrs/ week<br>Theory/<br>Practical | Duration of exam.<br>in Hrs<br>Theory/<br>Practical | Internal Assessment Marks<br>Theory/<br>Practical | Marks at the exams. | Total Marks |
|-------------------------------------------------------------------------------------|---------|------------------------------------------|-----------------------------------------------------|---------------------------------------------------|---------------------|-------------|
| <b>A. Core Subjects</b>                                                             |         |                                          |                                                     |                                                   |                     |             |
| <b>Inorganic Chemistry</b>                                                          |         |                                          |                                                     |                                                   |                     |             |
| CHGT-4.1: Inorganic Chemistry                                                       | 4       | 4                                        | 3                                                   | 25                                                | 75                  | 100         |
| CHGT-4.2: Organic Chemistry                                                         | 4       | 4                                        | 3                                                   | 25                                                | 75                  | 100         |
| CHGT-4.3: Physical Chemistry                                                        | 4       | 4                                        | 3                                                   | 25                                                | 75                  | 100         |
| CHGP-4.4: Project Work*<br>Inorganic Chemistry/Organic Chemistry/Physical Chemistry | 6       | 4                                        | 8                                                   | 25                                                | 125**               | 150         |
| <b>Practical</b>                                                                    |         |                                          |                                                     |                                                   |                     |             |
| CHG(Pr)-4.5: Lab Course in Inorganic Chemistry                                      | 2       | 4                                        | 4                                                   | 10                                                | 40                  | 50          |
| CHG(Pr)-4.6: Lab Course in Organic Chemistry                                        | 2       | 4                                        | 4                                                   | 10                                                | 40                  | 50          |
| CHG(Pr)-4.7: Lab Course in Physical Chemistry                                       | 2       | 4                                        | 4                                                   | 10                                                | 40                  | 50          |
| Total                                                                               | 24      | 28                                       | 21                                                  | 130                                               | 395                 | 600         |



**KARNATAK UNIVERSITY, DHARWAD**  
**ACADEMIC (S&T) SECTION**  
**ಕರ್ನಾಟಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಧಾರವಾಡ**  
**ವಿಜ್ಞಾನಂಥ (ಎಸ್‌&ಟಿ) ವಿಭಾಗ**

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No. KU/Aca(S&T)/SSL-394A/2022-23/1056

Date: 23 SEP 2022

**ಅಧಿಕೂಹನೇ**

ದಿಷ್ಟಿಯ: 2022-23ನೇ ಕ್ರೀಡಿಕ ಸಾಲಿನಂದ ಎಳ್ಳ ಸ್ಕೂಲ್ ಕೋರ್ಸೆಗಳಿಗೆ 3 ಮತ್ತು 4ನೇ ಸೆಮ್ಸೆಂಟರ್  
NEP-2020 ಮಾದರಿಯ ಪರ್ಕ್ಯೂಮೆನ್ಸ್ ಅಧವಿಷಯ ಕುರಿತು.

- ಉಲ್ಲೇಖ: 1. ಸರ್ಕಾರದ ಅಧಿಕಾರಿ ಕಾರ್ಯದರ್ಶಿಗಳಿಗೆ(ವಿಶ್ವವಿದ್ಯಾಲಯ 1) ಉನ್ನತ ಕ್ರೀಡಾ ಜಾಲಾಯಿ ಇವರ  
ಅದೇರ ಸಂಖ್ಯೆ ಇಡೀ 260 ಯುನಿಫ್ ಡಿಜಿಟಲ್ 2019(ಫಾಗ-1), ರಿ:7.8.2021.  
2. ವಿಜ್ಞಾನ & ತಂತ್ರಜ್ಞಾನ ನಿರ್ವಾಯ ಸಭೆಯ ರಾಜ್ಯಾಧಿಕ ದಿನಾಂಕ: 06.09.2022  
3. ವಿಶೇಷ ವಿಜ್ಞಾನಿಯರ ಪ್ರಂಜಲ್ ಸಭೆಯ ರಾಜ್ಯಾಧಿಕ ಸಂ. 01, ದಿನಾಂಕ: 17.09.2022  
4. ಮಾನ್ಯ ಬುಲಬರಿಗಳ ಅದೇರ ದಿನಾಂಕ: 22-09-2022

ಮೇಲ್ಬಾಯಿಕೆದ ದಿಷ್ಟಿಯ ಕಾಗಳ ಉಲ್ಲೇಖಗಳನ್ನಿಂದ ಮಾನ್ಯ ಬುಲಬರಿಗಳ ಆದೇಶದ ಮೇರೆಗೆ, 2022-23ನೇ ಕ್ರೀಡಿಕ ಸಾಲಿನಿಂದ ಅನ್ಯಾಯಾಗುವಂತೆ, ವಿಜ್ಞಾನ & ತಂತ್ರಜ್ಞಾನ ನಿರ್ವಾಯ ಎಳ್ಳ ಸ್ಕೂಲ್ ಕೋರ್ಸೆಗಳ ಗ್ರಾಹಕರಿಗೆ ಅನ್ಯಾಯ ಇಲ್ಲಿ (NEP)-2020 ರಂತೆ 3 ಮತ್ತು 4ನೇ ಸೆಮ್ಸೆಂಟರ್ಗಳಾಗಿ ವೀರೇಷ ವಿಜ್ಞಾನಿಯರ ಪರಿಷತ್ ಸಭೆಯ ಅನುಮೋದಿತ ಪರ್ಕ್ಯೂಮೆನ್ಸ್ ಪ್ರಕಳಣದಿಂದ್ ಸದರ ಪರ್ಕ್ಯೂಮೆನ್ಸ್ ಕ.ವಿ.ವಿ. [www.kud.ac.in](http://www.kud.ac.in) ಅಂತರಾಳದಿಂದ ತೋರಿಸಿದ ಮಾಡಿಕೊಳ್ಳಲು ಸಾಧಿಸುತ್ತಾ, ವಿಜ್ಞಾನಿಗಳು ಹಾಗೂ ಸಂಬಂಧಿಸಿದ ಎಳ್ಳ ಜೋರ್ಡರ ಗಮನ್ಯ ತಂಡ ಅದರಂತ ಕಾರ್ಯಪ್ರವೃತ್ತರಾಗಲು ಕರ್ತವೀ ಅಧಿಕಾರ / ಸಂಲಗ್ ಮತ್ತಾದಿವ್ಯಾಲಯಗಳ ಪ್ರಾಜೆಕ್ಟ್‌ರಾಗಳಿಗೆ ಸೂಚಿಸಿದ್ದಾರೆ.

ಅಧಕ: ಮೇರೆನಂತ

ಗ,  
ಕಾರ್ಯದರ್ಶಿ ವಿಶ್ವವಿದ್ಯಾಲಯದ ವಿಜ್ಞಾನಿಯರ ಬಹುದ ಎಳ್ಳ ಅಧಿಕಾರಿಗಳು ಸಂಲಗ್ ಮತ್ತಾದಿವ್ಯಾಲಯಗಳ ವಾಳಾಯಿಯರಾಗಿ (ಕ.ವಿ.ವಿ. ಅಂತರಾಳ ಹಾಗೂ ಮಿಂತಂತೆ ಮೂಲಕ ದತ್ತಪ್ರಸಂಗಾಳಿಸುತ್ತಾರೆ)

ದ್ವಿತೀ:

1. ಬುಲಬರಿಗಳ ಆಧ್ಯಾತ್ಮಿಕ ಕಾರ್ಯದರ್ಶಿಗಳು, ಕ.ವಿ.ವಿ. ಧಾರವಾಡ.
2. ಬುಲಬರಿಗಳ ಆಧ್ಯಾತ್ಮಿಕ ಕಾರ್ಯದರ್ಶಿಗಳು, ಕ.ವಿ.ವಿ. ಧಾರವಾಡ.
3. ಬುಲಬರಿಗಳ (ಮೌಲ್ಯಮಾರ್ಪಣ) ಆಧ್ಯಾತ್ಮಿಕ ಕಾರ್ಯದರ್ಶಿಗಳು, ಕ.ವಿ.ವಿ. ಧಾರವಾಡ.
4. ಅಧಿಕಾರಿ, ಪ್ರಶ್ನೆ ಪತ್ರಿಕೆ / ಗ್ರಂಥ / ಜೀವನೀ / ವಿಜ್ಞಾನಿ (ಸಂಪನ್ಮೂಲ) ವಿಭಾಗ, ಸಂಬಂಧಿಸಿದ ಶಿಳೆಸುಗಳ ವಿಭಾಗಗಳು ಪರಿಷತ್ ವಿಭಾಗ, ಕ.ವಿ.ವಿ. ಧಾರವಾಡ.
5. ನಿರ್ದೇಶಕರು, ಕಾರ್ಯ ಅಭಿವೃದ್ಧಿ / ವಿಜ್ಞಾನ ಕಲ್ಯಾಣ ವಿಭಾಗ, ಕ.ವಿ.ವಿ. ಧಾರವಾಡ.

**Details of Formative Assessment (IA) For DSAC theory/OEC: 40% weightage for Total Marks**

| Type of Assessment                                      | Weightage                                             | Duration   | Comment               |
|---------------------------------------------------------|-------------------------------------------------------|------------|-----------------------|
| Written Test- 1                                         | 10%                                                   | 1 hrs      | 8 <sup>th</sup> Week  |
| Written Test- 2                                         | 10%                                                   | 1 hrs      | 12 <sup>th</sup> Week |
| Seminar                                                 | 10%                                                   | 10 minutes | -----                 |
| Case study/<br>Assignment/<br>work/ Project<br>Activity | 10%                                                   | -----      | -----                 |
| Total                                                   | 40% of the Maximum<br>marks allotted for the<br>Paper |            |                       |



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