



Kopergaon Taluka Education Society's

K. J. Somaiya College of Arts, Commerce and Science, Kopergaon

CRITERION- 1

CURRICULAR ASPECTS

Key Indicator- 1.1 Curricular Planning and Implementation

1.1.1 QnM:- The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal assessment

Participation in the design and development of the Curriculum for Short-Term Courses

2018-19 To 2022-23



Kopergaon Taluka Education Society's
K. J. Somaiya College of Arts, Commerce & Science, Kopergaon

Department of English

Date: 04 /08 /2018

To,
The Principal,
K. J. Somaiya College, Kopergaon
Dist-Ahmednagar.

Subject: Regarding syllabus reframing of the certificate course in 'Communication Skills in English'

Respected Sir,

As per the above mentioned subject the Department of English has reframed the syllabus of certificate course entitled 'Certificate Course in Communication Skills in English'. It is skilled based course to make students interact with communication skills in English language. We are quite sure about the success of this certificate course.

So, I request you to please give us the permission to reframe the new syllabus of certificate course in the subject of English.

Thanking you

Yours faithfully

Prof. Thange V. C.
Head, Dept. of English

Encl: Syllabus copy of Certificate Course
Head

Department of English
K. J. Somaiya College, Kopergaon



Principal
K.J. Somaiya College of Arts
Commerce & Science, Kop.



Kopargaon Taluka Education Society's

K.J. Somaiya College of Arts, Commerce & Science

Mohanirajnagar, Kopargaon - 423601, Dist. Ahmednagar (MH.)

Affiliated to Savitribai Phule Pune University, Pune ID No. PU/AN/ASC/07(1964)

☎ : 9146142000, 9146152000 Email ID : kjscollege@rediffmail.com, Website : kjscollege.com

NAAC ACCREDITED 'A' GRADE

AN ISO 9001-2015 CERTIFIED INSTITUTE

SAVITRIBAI PHULE PUNE UNIVERSITY "BEST COLLEGE AWARD"

Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : / /202

15 DEC 2021

To,
The Head
Department of History

Subject :- About Syllabus Framing of Certificate Course....

Respected Sir,

As per above cited subject, it is hereby informed that the syllabus of the certificate course entitle **"Travel & Tourism Management"** has to be framed by the following committee.

1. Dr. K. L. Giramkar (Head)
2. Prof. D. P. Bagul (Coordinator)
3. Prof. Y. P. Shinde (Member)

Principal

**K.J. Somaiya College of Arts
Commerce & Science, Kopargaon**



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Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : / /202
15 JAN 2018

To,
The Head
Department of History

Subject: - About Syllabus Framing of Certificate Course....

Respected Sir,

As per above cited subject, it is hereby informed that the syllabus of the certificate course entitle "**Travel & Tourism Management**" has to be framed by the following committee.

1. Dr. K. L. Giramkar (Head)
2. Prof. D. P. Bagul (Coordinator)
3. Prof. Y. P. Shinde (Member)

Principal

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Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : / /202

16 SEP 2021

To,
The Head
Department of History

Subject :- About Syllabus Framing of Certificate Course....

Respected Sir,

As per above cited subject, it is hereby informed that the syllabus of the certificate course entitle “**Modi Script**” has to be framed by the following committee.

1. Dr. K. L. Giramkar (Head & Coordinator)
2. Prof. D. P. Bagul (Member)
3. Prof. Y. P. Shinde (Member)

Principal

K.J.Somaiya College of Arts
Commerce & Science, Kopargaon



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Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : / /202
15 SEP 2018

To,
The Head
Department of History

Subject :- About Syllabus Framing of Certificate Course....

Respected Sir,

As per above cited subject, it is hereby informed that the syllabus of the certificate course entitle "**Modi Script**" has to be framed by the following committee.

1. Dr. K. L. Giramkar (Head & Coordinator)
2. Prof. D. P. Bagul (Member)
3. Prof. Y. P. Shinde (Member)

Principal

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Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : 26 / 11 / 2021

The Head,
Department of Economics

Subject: About Syllabus Framing of Certificate Course.....

Respected Sir,

As per above cited subject, it is hereby informed that the syllabus of the Certificate Course entitled "Financial literacy" has to be framed by the following committee:

1. Dr. S. B. Bhingardive (Head)
2. Prof. M.B. Khose (Coordinator)
3. Prof. D.R. Ghuge (Member)

Principal
Principal

K.J.Somaiya College of Arts
Commerce & Science, Kopargaon



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Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : 18 / 11 / 2018

The Head,
Department of Economics

Subject: About Syllabus Framing of Certificate Course.....

Respected Sir,

As per above cited subject, it is hereby informed that the syllabus of the Certificate Course entitled "Financial literacy" has to be framed by the following committee:

1. Dr. S. B. Bhingardive (Head)
2. Prof. M..B. Khose (Coordinator)
3. Prof. D.R. Ghuge (Member)


Principal
Principal

K.J. Somaiya College of Arts
Commerce & Science, Kopargaon



विश्वविद्यालय अनुदान आयोग
UNIVERSITY GRANTS COMMISSION
मानव ससाधन विकास मंत्रालय, भारत सरकार
MINISTRY OF HUMAN RESOURCE DEVELOPMENT, GOVT. OF INDIA
बहादुर शाह जफर मार्ग, नई दिल्ली: ११० ००२
BAHADUR SHAH ZAFAR MARG, NEW DELHI - 110 002



F. No. 1-25/2018 (NSQF)/1177

Date: 30/07/2019

K. J. SOMAIYA COLLEGE OF ARTS, COMMERCE AND SCIENCE,

Sub: **UGC approval to offer Skill Courses**

Sir/Madam,

I am directed to convey the approval of the University Grants Commission (UGC) for offering the following programmes/courses for the academic session 2019-2020-

S.No.	Name of the Programme	Specialization
1	Diploma	DIPLOMA IN GEOINFORMATICS
2	Certificate	FRUIT PROCESSING

The Institution must adhere to the following guidelines:

1. The Institutions must adhere to relevant UGC guidelines as amended from time to time.
2. The Skill Component should be aligned to National Skill Qualification Framework in terms of Qualification Packs (QPs) and National Occupational Standards (NOSs) of Sector Skill Council.
3. The Institution may admit upto a maximum of 50 students per course in Certificate, Diploma, Advanced Diploma and B.Voc programmes; and upto a maximum of 20 students per course in M.Voc and PG Diploma programmes.
4. The Institutions will not run the courses on online/distance education mode and through franchise arrangements.
5. On commencement of the course/programme, details of the students admitted must be uploaded on the www.ugc.aicte-india.org portal at the earliest.

With regards,

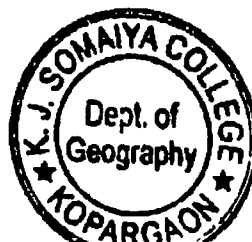
True Copy

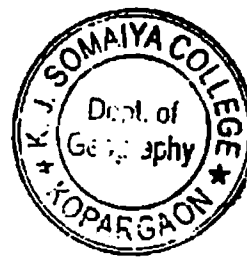
[Signature]
Principal

**K.J. Somaiya College of Arts
Commerce & Science, Kopergaon**

Dr. Mriganka Sekhar Sarma
(Education Officer)

Received by
[Signature]
30/7/2019.





Diploma in Geoinformatics



Kopargaoon Taluka Education Society's
K. J. Somaiya College of Arts, Commerce & Science, Kopargaoon.
Department of Geography

DIPLOMA IN GEOINFORMATICS (01 Year)

COURSE STRUCTURE

Paper Code	Paper Type	Title of the Paper	Total Marks
DG101	Theory	Surveying, Cartography and GPS	100
DG102	Theory	Fundamentals of Remote Sensing & Digital Image processing	100
DG103	Theory	Fundamentals of Geographical Information System (GIS)	100
DG104	Practical	Surveying, Cartography and GPS	100
DG105	Practical	Fundamentals of Remote Sensing & Digital Image processing	100
DG106	Practical	Fundamentals of Geographical Information System (GIS)	100
DG107	Project	Project (4 months), Seminar & Viva	100

Theory : 300 Marks, Practical : 300 Marks, and Project : 100 Marks Total 700 Marks


Head

Department of Geography
K. J. Somaiya College, Kopargaoon

3


Principal

K. J. Somaiya College of Arts, Commerce & Science


Principal

दि: 22/10/2018

मा. प्राचार्य साहेब,

के.जे.सोमैया महाविद्यालय, कोपरगाव.

विषय : भूगोल विभागामधील प्रमाणपत्र कोर्स बदलून डिप्लोमा कोर्स सुरु करण्यास परवानगी देणे बाबत.

महोदय,

वरील विषयास अनुसरून आपणास नम्र विनंती करतो की, सध्याच्या शैक्षणिक धोरणाच्या बदलत्या स्वरूपानुसार आपण विद्यार्थ्यांना विविध कौशल्य देणे आवश्यक आहे. यासाठी आपण एक सर्टिफिकेट कोर्स चालवत आहोत मात्र त्यापेक्षा थोडासा प्रगत प्रमाणपत्र एवजी एक वर्षाचा डिप्लोमा कोर्स केल्यास विद्यार्थ्यांना जास्तीत जास्त skill मिळतील व GIS व RS Industry मध्ये फायदेशीर राहिल त्या दृष्टीने भूगोल विभागामध्ये DIPLOMA IN GEOINFORMATICS हा कोर्स सुरु करण्याचा आमचा मानस आहे. सदर कोर्स हा एक वर्ष कालावधीचा असून त्यासाठी विभागास संगणक प्रणाली, जीआयएस सॉफ्टवेअर यांची आवश्यकता असेल, या कोर्समुळे विद्यार्थ्यांना आत्याधुनिक कौशल्य शिकता येतील. तसेच त्यामुळे विद्यार्थ्यांमध्ये कौशल्य विकसित होऊ ननोकरी मिळण्यास मदत होईल.

त्यासाठी आपणास नम्र विनंती की, आपणास या कोर्सच्या निर्मितीस परवानगी द्यावी.

कळावे


22/10/2018
विभागप्रमुख, भूगोल विभाग



Kopargaon Taluka Education Society's

K.J. Somaiya College of Arts, Commerce & Science

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SAVITRIBAI PHULE PUNE UNIVERSITY "BEST COLLEGE AWARD"

Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. : 4009/CC02/118-19

Date : 26/10/2018

दि: 26/10/2018

मा. विभागप्रमुख,

भूगोल विभाग,

विषय : भूगोल विभागातील डिप्लोमा कोर्स सुरु करण्यास मान्यतेबाबत.

संदर्भ : आपले दि - २२/१०/२०१८ रोजीचे पत्र.

महोदय,

वरील संदर्भ पत्रानुसार, आपणास Diploma in Geoinformatics या कोर्स निर्मितीस खालील अटींच्या आधीन राहून मान्यता देण्यात येत आहे.

1. सदर कोर्ससाठी आवश्यक बाबींची यादी आपण महाविद्यालयास कळवावी.
2. या कोर्सचा अभ्यासक्रम निर्मितीची कमिटी तयार करून त्यास मान्यता घ्यावी. या समितीमार्फत प्रात्यक्षिक आधारित अभ्यासक्रम तयार करावा.
3. सदर अभ्यासक्रमानुसार महाविद्यालयाच्या Board of Curriculum Development ची मान्यता घ्यावी.

वरील नियमांच्या आधीन राहून आपणास सदर कोर्सचा अभ्यासक्रम तयार करून तो महाविद्यालयात Permanent Non-Grant Basis वर राबविण्यास परवानगी देण्यात येत आहे.

कळावे

प्राचार्य

Principal

K. J. Somaiya College of Arts
Commerce & Science, Kopargaon

दि. 29/10/2018

मा. प्राचार्य साहेब,

के.जे.सोमैया महाविद्यालय,

कोपरगाव.

विषय : Diploma in Geoinformatics या कोर्सच्या अभ्यासक्रम निर्मितीच्या समिती सदस्यांच्या Syllabus Framing Committee Members नावास मान्यता मिळणेबाबत.

संदर्भ : आपले पत्र क्र. CC/22/2018-19 दि.26/10/2018.

महोदय,


भूगोल विभागामध्ये नवीन Diploma in Geoinformatics या कोर्ससाठीच्या अभ्यासक्रम निर्मितीसाठी खालील सदस्यांच्या नावास Syllabus Framing Committee Members म्हणून मान्यता द्यावी ही नम्र विनंती.

1. डॉ. जी.के.चव्हाण	विभागप्रमुख	K.J.S. College Kopargaon
2. डॉ. वि. एस. साळुंके	सदस्य	K.J.S. College Kopargaon
3. प्रा.ए.एस.सोनवणे	सदस्य	K.J.S. College Kopargaon
4. डॉ.आर.इ.नजन	सदस्य	पारनेर महाविद्यालय
5. डॉ.एम.सी.सांगळे	सदस्य	S.S.G.M.College

वरील सदस्यांना अभ्यासक्रम निर्मितीस सहभागी होण्यास मान्यता मिळावी .

कळावे

आपला विश्वासू


29/10/2018
डॉ. जी. के. चव्हाण



Kopargaon Taluka Education Society's

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Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. : Geo/CC 141 18-19

Date : 01/11/2028

दि : 01/11/2018

मा. विभागप्रमुख,

भूगोल विभाग,

विषय : भूगोल विभागातील डिप्लोमा कोर्स साठीच्या अभ्यासक्रम निर्मितीसाठीच्या सदस्यांच्या नावास परवानगी बाबत.

महोदय,

आपले दि. 29/10/2018 रोजीच्या पत्रातील खालील सदस्यांना भूगोल विभागाच्या डिप्लोमा कोर्ससाठी अभ्यासक्रम निर्मिती करण्यास महाविद्यालयाची कोणतीही हरकत नाही.

अन.	सदस्यांची नावे	पत्ता
1.	डॉ. जी.के.चव्हाण	विभागप्रमुख K.J.S. College Kopargaon
2.	डॉ. व्ही. एस. साळुंके	सदस्य K.J.S. College Kopargaon
3.	प्रा.ए.एस.सोनवणे	सदस्य K.J.S. College Kopargaon
4.	डॉ.आर.इ.नजन	सदस्य पारनेर महाविद्यालय पारनेर
5.	डॉ.एम.सी.सांगळे	सदस्य S.S.G.M.College Kopargaon

वरील सदस्यांची दिवाळी सुट्टीनंतर 20 दिवसांच्या आत सदर अभ्यासक्रम तयार करून जमा करावा.
कळावे

प्रत महितीसाठी

- IQAC
- All above committee member

Coordinator
IQAC, K. J. Somaiya College
Kopargaon, Dist. A.Nagar

Principal
K. J. Somaiya College of Arts
Commerce & Science, Kopargaon

Date: 20/11/2018

Meeting Notice

Department Of Geography Organized Meeting Held On Friday 23rd Nov. 2018 at 12:30 am in Geography Department.

Agenda & Meeting

1. Congratulation of two new members in dept. for syllabus framing of diploma course
2. Discussion on various courses & practical's structure of Syllabi of Diploma in Geoinformatics.
3. Finalize the same syllabus.

Discussion

Discussion by committee members online at first time
finalize syll format of subjects, Theory & practicals
Today's meeting organized for finalize the
Syllabus for next Diploma course and print-
submitted to IQAC for prior permission.

Attendance of Members

1. Dr.G.K.Chavhan
2. Dr.V.S. Salunke
3. Prof. A.S. Sonawane
4. Dr. R.E. Najan
5. Dr.S.B.Sangle

[Signatures of Dr. G.K. Chavhan, Dr. V.S. Salunke, Prof. A.S. Sonawane, Dr. R.E. Najan, and Dr. S.B. Sangle]

[Signature]
Head

Department of Geography.

[Signature]
Principal

Principal
K. J. Somaiya College of Arts
Commerce & Science, Kopergaon

[Signature]
Coordinator
IQAC, K. J. Somaiya College
Kopergaon, Dist. A.Nagar

Theory Paper I

DG101: Introduction to Surveying, Cartography and GPS

Unit-1: Surveying

- The Earth its shape and size: Datum and co-ordinate systems and its effect on surveying
- Trigonometrical surveying; Calculation of height & distance
- Introduction to surveying instruments
- Introduction to Drone Surveying.

Unit-2: Map Projection

- Concept, Classification, types and uses of map
- Geographical and projected co-ordinate system and grid system
- Choice and classification of map projections

Unit-3: Cartography

- History and Development of Cartography
- Sources of cartographic data; Scale: types and importance
- Cartographic methods and techniques for preparation of maps and diagrams
- Types and applications of General maps and Thematic maps
- Introduction to Digital Cartography

Unit-4: Global Positioning System

- Introduction to GPS;
- Types of GPS, GPS satellite; data receiver and control points
- Differential GPS; Sources of GPS errors; Application of GPS in surveying, mapping and navigation.

References:

1. Bailey, T. and Gatrell, A. C. (1995): Interactive Spatial Data Analysis. Longman, Harlow.
2. Dorling, D. and Fairborn, D. (1997): Mapping. Ways of Representing the World. Longman, Harlow.
3. Fraser Taylor, D.R. (1980): The Computer in Contemporary Cartography. John Wiley and Sons, New York.
4. Fraser Taylor, D.R. (ed.) (1983): Graphic Communication and Design in Contemporary Cartography. John Wiley and Sons, New York.
5. Griffith, D. A. and Amehin (1997): Multivariate Statistical Analysis for Geographers. Prentice Hall, Englewood Cliffs, New Jersey.
6. Griffith, D. A. and Amehin (1997): Statistical Analysis for Geographers. Prentice Hall, Englewood Cliffs, New Jersey.

Theory Paper II

DG102: Fundamentals of Remote Sensing and Digital Image Processing

Unit-1: Introduction & Principles of Remote Sensing

- Definition and scope of remote sensing
- History and development of remote sensing technology
- Electromagnetic radiation (EMR) and electromagnetic spectrum
- EMR interaction with atmosphere
- Types of remote sensing
- Introduction to hyper spectral remote sensing.

Unit-2: Aerial photography

- Aerial photographs: types, scale, & resolution

- Types of aerial cameras and photographic films
- Geometry of aerial photographs; Flight planning, Impact of season, time and topography on aerial photographs; Parallax, relief displacement.
- Elements of visual image interpretation, Aerial photos vs. satellite imagery;

Unit-3: Satellite remote sensing

- Satellite: types and their characteristics
- Types of Sensors; Orbital and sensor
- Characteristics of major earth resource satellites: LANDSAT, SPOT, IRS.
- Recent developments of Indian remote sensing satellite programme
- Environmental, meteorological & communicational satellites.

Unit-4: Digital Image Processing

- Digital image: Introduction and data formats
- Introduction to image processing
- Sources of Errors: Geometric and radiometric
- Image rectification and Image enhancement: methods and techniques
- Spatial filtering
- Image classification: Supervised and unsupervised, Image accuracy assessment.

References

1. Aber, J.S., Marzoff, I., and Ries, J. (2010): Small-Format Aerial Photography: Principles, Techniques and Geoscience Applications, Elsevier, Amsterdam, 268pp.
2. Campbell, J.B., and Wynne, R.H. (2011): Introduction to Remote Sensing (5th Ed.), Guilford Press, New York, 667pp.
3. Jensen, J.R. (2006): Remote Sensing of the Environment: An Earth Resource Perspective (2nd Ed.), Prentice Hall, New Jersey, 608pp.
4. Konecny, G. (2003): Geoinformation: Remote sensing, Photogrammetry and Geographic Information Systems, Taylor & Francis, London, 266pp.
5. Lillesand, T.M., Kiefer, R.W., and Chipman, J.W. (2007): Remote Sensing and Image Interpretation (6th Ed.). Wiley, New Jersey, 804pp.
6. Morgan, D., and Falkner, E. (2001): Aerial Mapping: Methods and Applications (2nd Ed.), CRC Press, Boca Raton, Florida, 216pp.

Theory Paper III

DG103: Fundamentals of Geographical Information System

Unit 1: Introduction to GIS

- Definition, History and development of GIS,
- Components of GIS, Hardwares and Softwares,
- GIS operations
- Future of GIS.

Unit 2: Basic GIS

- Types of Geographic data
- Raster and Vector data model
- Fundamental of data storage: block code, run length code, chain code, quad tree
- Spatial data input: Digitization and Conversion; Point, line and polygon
- Concept of Arc, node and vertices
- Digitization errors, Topological relationship, Topology: Error and editing.

Unit 3: GIS Analysis

- Vector data analysis
- Buffering, Overlay analysis, Network analysis.
- Raster data analysis; Interpolation techniques in GIS.
- Terrain analysis: DEM, DTM and TIN
- Non-spatial data: Database Management system (DBMS), Relational data model (tables and relationships), Spatial queries.

Unit 4: Applications of Geospatial Technology

Geospatial Technology in Urban and Regional planning, Water resource management, Soil resource Management, Agriculture & Crop Monitoring, Forestry and Environment, Public utilities, Land use/ land cover mapping, Landform analysis and Natural hazards assessment.

References:

1. Adriaans, P., and D. Zantinge. 1996. Data Mining. New York: Addison-Wesley.
2. Bernhardsen, Tor. 1999. Geographic Information Systems: An Introduction. Toronto: John Wiley & Sons, Inc.
3. Bishop, Michael P. and Shroder, John F. (Eds.) 2004. Geographic Information Science and Mountain Geomorphology. Chichester, U.K.: Praxis Publishing (Springer). 11
4. Bracken, Ian and Webster, Christopher. 1990. Information Technology in Geography and Planning (Including Principles of GIS). London & New York: Routledge.
5. Burrough, Peter A. and McDonnell, Rachael A. 1998. Principles of Geographical Information Systems – Spatial Information Systems and Geostatistics. Oxford University Press.
6. Batten field, B.P. and R.P. McMaster 1991. Map Generalization: Making Rules for Knowledge Presentation. New York: Wiley.

Practical paper I

DG104: Practical in Surveying, Cartography and GPS

Practical in Surveying

- Introduction to Surveying
- Dumpy level surveying
- Theodolite surveying

Practical in Cartography

- Introduction to Map Scale: types and conversion, vertical exaggeration, enlargement and reduction
- Map Projection: concept, classification, uses, and types.
- Introduction and Interpretation to SOI topographical maps
- Digital Cartography: Choropleth maps, Isopleth maps, Dot maps, Cadastral and Thematic maps

Practical in GPS

- GPS instrument
- Basic functions
- GPS surveying: Setting of GPS coordinates, Waypoints demarcation, Area Calculation
- Navigation by Mobile GPS application.
- Transfer of data in GIS software

Principal

References:

1. Bailey, T. and Gatrell, A. C. (1995): Interactive Spatial Data Analysis. Longman ,Harlow.
2. Dorling, D. and Fairborn, D. (1997): Mapping. Ways of Representing the World. Longman, Harlow.
3. Fraser Taylor, D.R. (1980): The Computer in Contemporary Cartography. John Wiley and Sons, NewYork.
4. Fraser Taylor, D.R. (ed.) (1983): Graphic Communication and Design in Contemporary Cartography. John Wiley and Sons, NewYork.
5. Griffith, D. A. and Amehein (1997): Multivariate Statistical Analysis for Geographers. Prentice Hall, Englewood Cliffs, New Jersey.
6. Griffith, D. A. and Amehein (1997): Statistical Analysis for Geographers. Prentice Hall, Englewood Cliffs, New Jersey.
7. Kanetkar, T.P. and Kulkarni, S.V. (1967): Surveying and Levelling, Part II, A.V.G. Prakashan, Poona.

Practical II

DG105: Practical in Photogrammetry, Remote Sensing and Digital Image Processing

Practical in Photogrammetry

- Indexing of aerial photographs.
- Introduction to vertical aerial photographs and its geometry.
- Introduction to stereoscopes
 - I. Orientation & construction of 3-D model under Pocket stereoscope and Mirror
 - II. stereoscope Stereoscopic Vision test
- Determination of scale
 - i) By establishing relationship between Photo distance and Ground distance
 - ii) By establishing relationship between Photo distance and Map distance
 - iii) By establishing relationship between Focal length and Flying height
 - iv) Determination of Average Scale of Vertical Aerial Photograph
- Relief Displacement
 - i) Calculation of Relief Displacement
 - ii) Object height determination from relief Displacement
- Parallax
 - i) Introduction to Parallax bar
 - ii) Object height determination from Parallax
- Visual Interpretation and Mapping of Aerial photographs: Land use/ Land

Cover mapping

Practical in Satellite Remote Sensing

- Annotations of Satellite image
- Study of satellite image browsing system
- Visual interpretation of FCC satellite image and Land use / Land cover mapping

Practical in DIP

- Introduction to DIP software
- Loading of image data, study of histogram and layer information
- Image Rectification and Registration: Image to map, Image to image
- Image Enhancement Techniques: Contrast enhancement-linear and nonlinear
- Density slicing

Chalun *najon* *Example*
Asmame *Prate* *Bar*

- Spatial filtering- low and high frequency, edge enhancement
- Band rationing
- Resolution merge
- Supervised Classification and Unsupervised classification
- Accuracy assessment
- Hyper spectral Image Analysis

References:

1. American Society of Photogrammetry, (1983). Manual of Remote Sensing, (2nd edition), ASP, Falls Church, Virginia.
2. Agarwal, C.S. and Garg, P.K. 2000. Textbook of Remote Sensing in Natural Resources Monitoring and Management. New Delhi: Wheeler Publishing.
3. Avery, T.E. 1985. Interpretation of aerial Photographs. Minneapolis, Minnesota: Burgess Publishing Company.
4. Bakker, Wim H., et al. 2001. Principles of Remote Sensing - An Introductory Textbook. Enschede, The Netherlands: ITC.
5. Banerjee, R.K. and Banerjee, B. 2000. Remote Sensing for Regional Development. New Delhi: Concept Publishing Company.
6. Campbell, James B. 1996. Introduction to Remote Sensing (Second Edition). London: Taylor & Francis.
7. Colwell, Robert N. (ed.) 1983. Manual of Remote Sensing, Second Edition, Volume 1 and 2. Falls Church, Virginia: American Society of Photogrammetry.
8. Gibson, Paul J. (2000). Introductory Remote Sensing - Principles and Concepts. Routledge.

Practical III

DG106: Practical in Geographical Information System

Introduction to Auto CAD

- AutoCAD Screen Components, Working with Commands and Introduction to drawing, Reading, Basic Drawing & Editing Commands: Drawing Lines, Erasing Objects, Drawing Rectangles, Drawing Circles, Object Snap Tracking.
- Making Changes in Drawing: Selecting Objects for Editing, Moving, Copying, Rotating.
- Advanced Object Types: Drawing Arcs, Drawing Poly lines, Offsetting Objects, Editing Poly lines, Drawing Ellipses, and Properties, Working with Layers.
- Basic Introduction to 3D Mapping.
- Advanced Layouts and Printing.

Introduction to ErDas Imagin

- Familiarization with Image Processing System
- Image rectification
- Image enhancement techniques: contrast enhancement, band rationing, edge enhancement, density slicing
- Spatial filtering
- Image classification techniques: supervised and unsupervised and accuracy assessment

Introduction to Q GIS

- Introduction of Q GIS, Projection and Reprojection
- Geo referencing: Toposheets & Image Registration.

Principal

- Digitization of Toposheets.
- Map preparation or Map Layout.
- Data exploration & working with tables.
- Data query: Spatial & Attribute.
- Working with Google Earth.

Introduction to Arc GIS

- Overview of Arc GIS: Introduction Arc Map, Arc Catalogue and Arc Toolbox.
- Georeferencing in ArcGIS: Coordinating system, datum conversion, map projection, projection information.
- Vector data: creating new features, editing functions, digitization, errors and creation of topology.
- Aspatial data: Understanding tables, field types, table manipulation, table relation, creation of graphs and reports.
- Spatial analysis: attribute, Buffer, overlay analysis, Interpolation methods, View shed analysis.
- Applications: Calculation of vegetation Indices, slope & Contour, Network Analysis.
- Map design: Layout and map composition.

References:

1. Adriaans, P., and D. Zantinge. 1996. Data Mining. New York: Addison-Wesley.
2. Bernhardsen, Tor. 1999. Geographic Information Systems: An Introduction. Toronto: John Wiley & Sons, Inc.
3. Bishop, Michael P. and Shroder, John F. (Eds.) 2004. Geographic Information Science and Mountain Geomorphology. Chichester, U.K.: Praxis Publishing (Springer). 11
4. Bracken, Ian and Webster, Christopher. 1990. Information Technology in Geography and Planning (Including Principles of GIS). London & New York: Routledge.
5. Burrough, Peter A. and McDonnell, Rachael A. 1998. Principles of Geographical Information Systems – Spatial Information Systems and Geostatistics. Oxford University Press.
6. Buttenfield, B.P. and R.P. McMaster 1991. Map Generalization: Making Rules for Knowledge Presentation. New York: Wiley.
7. Chang, Kang-tsung. 2002. Introduction to Geographic Information Systems. New Delhi: Tata McGraw-Hill Publishing Company Limited.
8. Chrisman, N. 1998. "Academic Origins of GIS," In T. Foresman (Ed): The History of Geographic Information Systems. Upper Saddle River, NJ: Prentice Hall, pp. 33-43.

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Kopargaon Taluka Education Society's

K.J. Somaiya College of Arts, Commerce & Science

Mohanirajnagar, Kopargaon - 423601, Dist. Ahmednagar (MH.)

Affiliated to Savitribai Phule Pune University, Pune ID No. PU/AN/ASC/07(1964)

☎ : 9146142000, 9146152000 Email ID : kjscollege@rediffmail.com, Website : kjscollege.com

NAAC ACCREDITED 'A' GRADE

AN ISO 9001-2015 CERTIFIED INSTITUTE

SAVITRIBAI PHULE PUNE UNIVERSITY "BEST COLLEGE AWARD"

Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : 12/08/2022

To,
The Head,
Department of BBA_CA,
K.J.S. College of Arts, Commerce and Science,
Kopargaon.

Sub: Certificate Course Syllabus Framing

Respected Sir

As per above cited subject, it is hereby informed that the syllabus of the certificate course entitled "CYBER SECURITY" has to be framed by the following committee:

1. Prof. Gudaghe P. G. (Head)
2. Prof. Gudaghe P. G. (Coordinator)
3. Prof. Jagdhane V. H. (Member)


IQAC Coordinator
Coordinator
IQAC, K. J. Somaiya College
Kopargaon, Dist. A. Nagar


Principal
Principal
K.J. Somaiya College
Kopargaon



Kopergaon Taluka Education Society's

K.J. Somaiya College of Arts, Commerce & Science

Mohanirajnagar, Kopergaon - 423601, Dist. Ahmednagar (MH.)

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NAAC ACCREDITED 'A' GRADE

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SAVITRIBAI PHULE PUNE UNIVERSITY "BEST COLLEGE AWARD"

Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. : 2045/2018-2019

Date : 22/09/2018

To,
Head,
Department of Chemistry,
K.J. Somaiya College of Art's, Commerce & Science,
Kopergaon-423601
Dist. Ahmednagar

Subject: Restructuring of syllabus for certificate course.

Reference: Your letter dated on 17/07/2018.

Dear Sir,

We pleased to inform you that, the proposal for restructuring of syllabus for certificate course **Industrial Inplant Training Programme** is approved and the committee for restructuring of syllabus of the same is as follows:


Sr. No.	Committee	Name of faculty
1.	Head of the Department (Chairman)	Dr. S.B. Kale
2.	Member	Dr. N.R. Dalvi
3.	Member	Dr. N.T. Dhokale
4.	Member	Dr. S.G. Konda
5.	Member	Prof. S.S. Nagre

You are supposed to submit the restructured curriculum at an earliest for further approval so that the course can be commenced from the academic year 2018-19.

Date:

Place: Kopergaon




Principal
K. J. Somaiya College of Arts,
Commerce & Science, Kopergaon



Kopargaoon Taluka Education Society's
K. J. Somaiya College of Arts, Commerce & Science, Mohanirajnagar, Kopargaoon

Syllabus for certificate course

Industrial Inplant Training Programme

Theory Paper: (2 Credits) (30 L)



1) Introduction to Laboratory Safety:

(10 L)

Meaning safety signs on container of chemicals, safety handling of chemicals, MSDS sheets: Detailed explanation at least for 4 different types of substances (e.g. nitric acid, benzene, potassium dichromate, bromine, etc.), Handling of glassware's and care to be taken, handling of organic flammable as well as toxic solvents in laboratory, use of safety goggles, shoes and gloves, fire extinguisher and its use, action to be taken in accidental cases e.g. cleaning of acid spill over, use eye wash station and bath station in emergency, etc. (compulsory)

2) Purification Techniques

(10 L)

- a) Purification of organic solids by recrystallization
- b) Purification of organic liquids by upward/downward/traditional distillation technique
- c) Column Chromatography technique
- d) Sublimation by Cold Thumb Method
- e) Thin Layer Chromatography technique

3) Introduction to Green Chemistry

(5 L)

Concept of green chemistry, twelve principles of green chemistry, applications of green chemistry for sustainable development, Atom economy, Monitoring of reaction using TLC

4) Spectroscopic Techniques

(5 L)

Introduction to spectroscopy, Types of spectroscopy, U.V. spectroscopy, I.R. spectroscopy, N.M.R. spectroscopy, Mass spectroscopy, Spectral analysis of molecules.

5) Field Work:-Industrial Inplant Training in Godavari Biorefineries Limited, Sakarwadi.

Aims and Objectives:

After completing the course, the student will be acquainted with:

- Different safety features at work place.
- To understand laboratory safety.
- Standard laboratory facilities.
- Hazardous chemicals in laboratory and their proper handling.
- How to avoid laboratory accidents.
- Alarm system in laboratory.
- First aid during chemical accidents.
- Proper way for equipment handling.
- Use of spectroscopic methods for characterization.
- Disaster management during gas leakages, fires, chemical spilling.



References:

1. Introduction to Spectroscopy – D.L. Pavia, G.M. Lampman, G.S. Kriz, 3rd ED. (Harcourt college publishers).
2. Spectrometric identification of organic compounds R.M. Silverstein F.X. Webster 6th Ed. John Wiley and Sons.
3. Chemical Laboratory Safety and security, Hisa Moran and Masciangioli.
4. A guidebook of chemical laboratory safety and security, National Academics Press Washington, DC.



Kopargaon Taluka Education Society's
K. J. Somaiya College of Arts, Commerce & Science Kopargaon
Department of Chemistry
Industrial Inplant Training Programme



Programme Outcomes

The department of Chemistry has started the industrial inplant training programme in collaboration with Godavari Biorefineries Ltd. Sakarawadi keeping in view to inculcate the knowledge on industrial platform to the students. The syllabus for the given programme has designed in pursuing these goals. After successful completion of the programme the students will be able to -

- Know the different units of the chemical industry.
- Know different safety features at work place.
- Understand laboratory safety.
- Learn the handling of organic flammable as well as toxic solvents in laboratory.
- Learn proper handling of hazardous & bulk chemicals in laboratory and industry.
- Learn about the laboratory accidents.
- Learn alarm system in laboratory.
- First aid during chemical accidents.
- Learn the proper way for equipment handling.
- Learn about the disaster management during gas leakages, fires, chemical spilling.
- Learn about the Effluent Treatment Plant.
- Know the standard laboratory facilities.

Course Outcomes

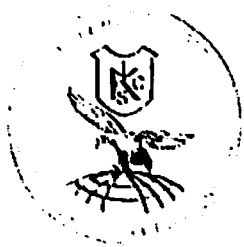
After completion of the course the students will be able to -

CO 1: Learn the safety features to follow in a chemical laboratory.

CO 2: Learn the utility & applications of disaster management.

CO 3: Apply critical thinking & problem-solving abilities on chemical accidents.

CO 4: Apply skills to control pollution.



Kopergaon Taluka Education Society's

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SAVITRIBAI PHULE PUNE UNIVERSITY "BEST COLLEGE AWARD"

Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (B.A. M.L.A.)

Ref. No. :

Date : 21/7/2018

21/7/2018

To,

The Head,

Department of Physics,

Subject: About Syllabus Framing of Certificate Course.....

Dear Sir,

As per above cited subject, it is hereby informed that the syllabus of the Certificate Course entitled "C"- Programming Language has to be framed by the following committee:

1. Dr. B. B. Bhosale (Head)
2. Prof. P. S. Lodha (Coordinator)
3. Prof. A. N. Gaikwad (Member)

Principal

K. J. Somaiya College of Arts
Commerce & Science, Kopergaon



Pune District Education Association's
Prof. Ramkrishna More Arts, Commerce & Science College

Estd. : June 1992

Sec. No. 28, Ganganagar, Pradhikaran,
AKURDI, PUNE - 411 044.
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FAX : 020 - 27659740
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Affiliated to Savitribai Phule Pune University
(Id No. PU/PN/ASC/090/1992)
NAAC Grade B(2.73)

Outward No. : RMC/A/

Date :

President
Ajit Pawar

Vice President
Rajendra Ghadge

Hon. Secretary
Adv. Sandeep Kadam

Treasurer
Adv. Mohanrao Deshmukh

Dy. Secretary
L. M. Pawar

Principal
Dr. M.G.Chaskar
M Sc. Ph.D
Senate Member, SPPU, Pune

"Resource Person for ON-LINE
SYLLABUS Workshop"

To,

Dr. Bapusaheb Bhosale,
Head,
Dept. of Physics,
K.J. Somiya College, Kopargaon.

Sub.:- Thanks Letter.....

Respected Sir,

We express our sincere thanks for accepting our invitation for online One day teachers workshop on " Revised syllabus of T.Y.B.Sc. physics " on Thursday 09.09.2021 under DBT Star College scheme.

Your presentation and interaction was extremely beneficial to all the participants. Thank you for your valuable inputs. We look forward for your cooperation in future.

Thanking you,


HEAD

Physics Department
Prof. Ramkrishna More Arts, Commerce &
Science College, Akurdi, Pune-411 044.

Yours faithfully,


(Dr. A. J. Mandagale)
PRINCIPAL

Prof. Ramkrishna More Arts, Commerce &
Science College, Akurdi, Pune-411 044



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Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : / / 2022
Date: 02 / 11 / 2022

Board of Curriculum Development

To,
Head of the Department,
Department of Mathematics,
K. J. Somaiya College, Kopargaon.

Subject: Permission for the certificate course in Mathematics

Respected sir,

As per your application dated 1/11/2022. The members of BCD conducted a meeting and after thorough discussion we have decided to accept your proposal of certificate course 'Principles of Programming Language' in Mathematics. The Committee has permitted to Department of Mathematics for 30 contact hrs. Certificate course 'Principles of Programming Language' under following conditions.

The Term and Condition are follows:

1. Syllabus to be completed in stipulated time.
2. Conduct Theory examination at the end of the course.
3. Minimum 15 admissions are permissible for conducting the course.


Members of the committee -

- | | |
|------------------------|----------------------------|
| 1. Dr. B. S. Yadav | 2. Dr. S. R. Pagare |
| 3. Prof. V. C. Thange | 4. Prin. Dr. Goswami |
| 5. Prin. Dr. Gurasal | 6. Dr. B. B. Bhosale |
| 7. Dr. S. B. Kale | 8. Dr. G. K. Chavhan |
| 9. Smt. N. B. Shinde | 10. Prof. P. S. Bhadane |
| 11. Shri. Sachin Ingle | 12. Shri Satyajeet Gondkar |

Copy to-

1. IQAC, KJS College.
2. Head, Dept. of Mathematics
3. Account Officer, KJS College


Prof. Vijay Thange
Co-ordinator, IQAC
K. J. Somaiya College, Kopargaon


Dr. B. S. Yadav
Principal

Principal
K. J. Somaiya College of Arts
Commerce & Science, Kopargaon

K. J. Somaiya College, Kopargaon

Department of Mathematics

Notice

Date: 17th Feb. 2022

All the faculty of department of Mathematics are here by informed that the departmental meeting for A.Y. 2021-22 is scheduled to be held on 18/02/2022 in the department of Mathematics at 12.00 pm. The brief agenda of meeting is as follows. All are therefore requested to kindly make it convenient to attend the meeting.

AGENDA

- 1) To revise syllabus and structure of certificate course.
- 2) Any other matter with the permission of Chairperson.



Dr. B. D. Gavhane
Head

Department of Mathematics
K. J. Somaiya College, Kopargaon



- 1) Prof. Mr. Ukirde S.R.



- 2) Prof. Mr. Dube S. S.

K. J. Somaiya College, Kopargaon

Department of Mathematics

Notice

Date: 17th Feb. 2022

All the faculty of department of Mathematics are here by informed that the departmental meeting for A.Y. 2021-22 is scheduled to be held on 18/02/2022 in the department of Mathematics at 12.00 pm. The brief agenda of meeting is as follows. All are therefore requested to kindly make it convenient to attend the meeting.

AGENDA

- 1) To revise syllabus and structure of certificate course.
- 2) Any other matter with the permission of Chairperson.



Dr. B. D. Gavhane
Head

Department of Mathematics
K. J. Somaiya College, Kopargaon



1) Prof. Mr. Ukirde S.R.



2) Prof. Mr. Dube S. S.

Minutes of the Meeting

Date- 18th Feb. 2022


Time- 12.00 pm

Present Members-03

At the outset, Dr. B. D. Gavhane welcomed all the faculty of department of Mathematics. The following agenda items were discussed during the meeting and it was unanimously resolved to implement them. The meeting was adjourned after the vote of thanks by Prof. Ukirde S.R. to the chair.

Sr. No.	Agenda	Resolution
1	To revise syllabus and structure of certificate course.	The discussion was held on the revision in the old syllabus and structure of certificate course and some new addition-deletion in the syllabus.
2	Any other matter with the permission of Chairperson.	No matter was raised during the meeting.

Following faculty were present for Mathematics department's first meeting for A.Y. 2021-22 on 18th Feb. 2022 in department of Mathematics at 12.00 pm.:

Name of faculty	Signature
Prof. Dr. B.D.Gavhane	
Prof. Mr. S.R. Ukirde	
Prof. Mr. S.S. Dube	

Report of Compliance

In compliance with the resolution made in the meeting for the A.Y. 2021-22 which was held on 18th Feb. 2022. The following activities are successfully carried out.

Subject	Action Taken/ Compliance
To revise syllabus and structure of certificate course.	The discussion was held on the old syllabus and structure of certificate course, some new topics added in old syllabus and new syllabus was designed.



Dr. B. D. Gavhane
Head

Department of Mathematics
K. J. Somaiya College, Kopargaon



Principal

K. J. Somaiya College of Arts
Commerce & Science, Kopargaon

Syllabus

Department of Mathematics

Certificate Course: "Principles of Programming Language"

(Computer based Practical)

Syllabus: 2021-22

Objectives:

- 1) The course is designed to provide principles of programming in C language.
- 2) Students will be able to develop logics which will help them to create programs, applications in C.
- 3) To provide exposure to problem solving through programming.
- 4) Also by learning the basic programming constructs they can easily switch over to any other language in future.
- 5) To study and implementation of numerical analysis to solve problems in Mathematics for which a quantitative theory already exists.

Chapter No.	Topic Name	No. of Lectures
1	Concepts of programming 1. Definition and Properties of algorithms, Algorithm development. 2. Flow charts- symbols and simple flowcharts. 3. Flow charts and Algorithms for Kinematic equations, Free fall, Equation of state, Factorial of a number. 4. Types of programming language: Lower, middle and higher level languages.	6
2	Programming with C 1. Structure of C program, Character set, key words, Constants and variables, Variable names, Data types and their declarations, Symbolic Constants. 2. Input/output functions: scanf (), printf (), getchar (), putchar (), getch (), gets (), puts (). 3. Operators and Expressions: Arithmetic Operators, Relational Operators, Logical Operators, Assignment Operators, Conditional Operator. Formatted input and formatted Console, Loop control structures. 4. Formatted input/output Control statements: If, if else, while, do while for loop, nested control structures (nested if, nested loops), break, continue, switch- case statement, go to statement.	12

	5. Function Use of Library functions: e.g. mathematical, trigonometric, graphics. 6. Arrays: 1-D, 2-D and String 7. Concept of Pointers	
3	Computational Numerical Methods 1. Errors in Computation: Inherent errors in storing numbers due to finite bit representation to use in Computer, Truncation error, round off errors (Explain with the help of examples) 2. Iterative methods: Discussion of algorithm and flowcharts and writing C programs for finding single root of equation using Bisection method, False Position Method, Newton- Raphson method, Gauss-Elimination Method, Gauss-Jordon Elimination Method. 3. Discussion of algorithm and flowcharts and writing C program for Trapezoidal rule and Simpson's 1/3rd rule, Simpson's 3/8th rule.	12
Total No. of Lectures		30

Following programs will be discussed in theory lectures:

1. Sum of digits of an integer
2. To find factorial of a number
3. Checking and printing of prime numbers
4. Root of equation/s-Bisection method, Newton Raphson method, Gauss-Elimination Method
5. Numerical integration- Trapezoidal, Simpson's 1/3rd rule, Simpson's 3/8th rule.

Reference Books:

1. Numerical Methods In Engineering And Science- B. S. Grewal, Mercury Learning And Information
2. Introductory methods of Numerical Analysis-S.S. Sastry, PHI Learning Private Limited, New Delhi.
3. Let Us C-Yashavant P. Kanetkar



Head
Department of Mathematics
K. J. Somaiya College, Kopergaon



Principal
K. J. Somaiya College of Arts
Commerce & Science, Kopergaon



Kopargaon Taluka Education Society's

K.J. Somaiya College of Arts, Commerce & Science

Mohanirajnagar, Kopargaon - 423601, Dist. Ahmednagar (MH.)

Affiliated to Savitribai Phule Pune University, Pune ID No. PU/AN/ASC/07(1964)

☎ : 9146142000, 9146152000 Email ID : kjscollege@rediffmail.com, Website : kjscollege.com

NAAC ACCREDITED 'A' GRADE

AN ISO 9001-2015 CERTIFIED INSTITUTE

SAVITRIBAI PHULE PUNE UNIVERSITY "BEST COLLEGE AWARD"

Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : 18/02/2022

To,
Head,
Department of Mathematics,
K.J. Somaiya College, Kopargaon.

Subject: Approval for the certificate course and committee.

Reference: Your letter dated on 10/02/2022.

Dear Sir, we leased to inform you that, the proposal of the certificate course "**Principles of programming language**" is approved and committee for designing of the curriculum of the same as follows:

Sr. No.	Committee	Name of Faculty
1	Head of the department (Chairman)	Dr. B.D. Gavhane
2	Course Co-ordinator	Mr. S.R. Ukirde
3	Member	Mr. S.S. Dube

You are supposed to submit the designed curriculum at an earliest for further approval so that the course can be commenced from the academic year 2019-20.

Date: 18/02/2022

Place: kopargaon.


Principal
K. J. Somaiya College of Arts
Commerce & Science, Kopargaon

K. J. Somaiya College, Kopargaon

Department of Mathematics

Notice

Date: 3rd July 2019

All the faculty of department of Mathematics are here by informed that the departmental meeting for A.Y. 2019-20 is scheduled to be held on 04/07/2019 in the department of Mathematics at 12.00 pm. The brief agenda of meeting is as follows. All are therefore requested to kindly make it convenient to attend the meeting.

AGENDA

- 1) To start certificate course for Mathematics students.
- 2) To prepare syllabus and structure of certificate course.
- 3) Any other matter with the permission of Chairperson.



Dr. B. D. Gavhane

Head

**Department of Mathematics
K. J. Somaiya College, Kopargaon**

1) Prof Mr. Ukirde S.R.



2) Prof. Ms. Barse M.B.



Minutes of the Meeting

Date- 4th July 2019

Time- 12.00 pm

Present Members-03

At the outset, Dr. B. D. Gavhane welcomed all the faculty of department of Mathematics. The following agenda items were discussed during the meeting and it was unanimously resolved to implement them. The meeting was adjourned after the vote of thanks by Prof. Ukirde S.R. to the chair.

Sr. No.	Agenda	Resolution
1	To start certificate course for Mathematics students.	The discussion was held on to start certificate course for Mathematics students and its title.
2	To prepare syllabus and structure of certificate course.	The discussion was held on syllabus and structure of certificate course.
3	Any other matter with the permission of Chairperson.	No matter was raised during the meeting.

Following faculty were present for Mathematics department's first meeting for A.Y. 2019-20 on 4th July 2019 in department of Mathematics at 12.00 pm.:

Name of faculty	Signature
Prof. Dr. B.D.Gavhane	
Prof. Mr. Ukirde S.R.	
Prof. Ms. Barse M.B.	


Report of Compliance

In compliance with the resolution made in the meeting for the A.Y. 2019-20 which was held on 4th July 2019. The following activities are successfully carried out.

Subject	Action Taken/ Compliance
To start certificate course for Mathematics students.	It was decided to start certificate course 'Principles of Programming Language' (computer based Practicals) for Mathematics students.
To prepare syllabus and structure of certificate course.	The discussion was held on the syllabus and structure of certificate course that is duration, eligibility, course fee, total lectures and Practicals, exam. structure (theory + practical).


Dr. B. D. Gavhane

Department of Mathematics
K. J. Somaiya College, Kopargaon


Principal
K. J. Somaiya College of Arts
Commerce & Science, Kopargaon



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NAAC ACCREDITED 'A' GRADE

AN ISO 9001-2015 CERTIFIED INSTITUTE

SAVITRIBAI PHULE PUNE UNIVERSITY "BEST COLLEGE AWARD"

Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : 04/07/2019

To,
Head,
Department of Mathematics,
K.J. Somaiya College, Kopargaon.

Subject: Approval for the certificate course and committee.

Reference: Your letter dated on 03/07/2019.


Dear Sir, we leased to inform you that, the proposal of the certificate course "**Principles of programming language**" is approved and committee for designing of the curriculum of the same as follows:

Sr. No.	Committee	Name of Faculty
1	Head of the department (Chairman)	Dr. B.D. Gavhane
2	Course Co-ordinator	Mr. S.R. Ukirde
3	Member	Ms. M.B. Barse

You are supposed to submit the designed curriculum at an earliest for further approval so that the course can be commenced from the academic year 2019-20.

Date: 04/07/2019

Place: Kopargaon.


Principal
K. J. Somaiya College of Arts
Commerce & Science, Kopargaon

Syllabus

Department of Mathematics

Certificate Course: **"Principles of Programming Language"**

(Computer based Practical)

Syllabus: 2019-20

Objectives:

- 1) The course is designed to provide principles of programming in C language.
- 2) Students will be able to develop logics which will help them to create programs, applications in C.
- 3) To provide exposure to problem solving through programming.
- 4) Also by learning the basic programming constructs they can easily switch over to any other language in future.
- 5) To study and implementation of numerical analysis to solve problems in Mathematics for which a quantitative theory already exists.

Chapter No.	Topic Name	No. of Lectures
1	Concepts of programming 1. Definition and Properties of algorithms, Algorithm development. 2. Flow charts- symbols and simple flowcharts. 3. Flow charts and Algorithms for Kinematic equations, Free fall, Equation of state, Factorial of a number. 4. Types of programming language: Lower, middle and higher level languages.	6
2	Programming with C 1. Structure of C program, Character set, key words, Constants and variables, Variable names, Data types and their declarations, Symbolic Constants. 2. Input/output functions: scanf (), printf (), getchar (), putchar (), getch (), gets (), puts (). 3. Operators and Expressions: Arithmetic Operators, Relational Operators, Logical Operators, Assignment Operators, Conditional Operator. 4. Formatted input/output	12

	Control statements: If, if else, while, do while for loop, nested control structures (nested if, nested loops), break, continue, switch- case statement, go to statement. 5. Function Use of Library functions: e.g. mathematical, trigonometric, graphics. 6. Arrays: 1-D, 2-D and String 7. Concept of Pointers	
3	Computational Numerical Methods 1. Errors in Computation: Inherent errors in storing numbers due to finite bit representation to use in Computer, Truncation error, round off errors (Explain with the help of examples) 2. Iterative methods: Discussion of algorithm and flowcharts and writing C programs for finding single root of equation using Bisection method, Newton- Raphson method. System of Equations. 3. Discussion of algorithm and flowcharts and writing C program for Trapezoidal rule and Simpson's 1/3rd rule, Simpson's 3/8th rule (derivation of formula is not expected).	12
Total No. of Lectures		30

Following programs will be discussed in theory lectures:

1. Sum of digits of an integer
2. To find factorial of a number
3. Checking and printing of prime numbers
4. Root of equation/s-Bisection method, Newton Raphson method, Gauss-Elimination Method
5. Numerical integration- Trapezoidal, Simpson's 1/3rd rule, Simpson's 3/8th rule.

Reference Books:

1. Numerical Methods In Engineering And Science- B. S. Grewal, Mercury Learning And Information
2. Introductory methods of Numerical Analysis-S.S. Sastry, PHI Learning Private Limited, New Delhi.
3. Computer oriented Numerical Methods – V. Rajaraman.
4. Let Us C-Yashavant P. Kanetkar.



Head
Department of Mathematics
K. J. Somaiya College, Kopergaon



Principal
K. J. Somaiya College of Arts
Commerce & Science, Kopergaon



Kopergaon Taluka Education Society's
K. J. Somaiya College of Arts, Commerce and Science, Kopergaon
Department of Zoology

Curricular Design: As per syllabus designed by SPP University, Pune.

List of Faculty Participation in the Design and Development of University Curriculum

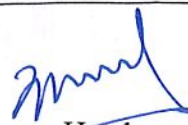
Sr. No.	Year	Name of teacher	Participated in Design and Development of Curriculum for University/ Add on /Certificate/ Diploma Courses
1.	2021-22	Dr. R. D. Gawali	Workshop: Restructuring of New Revised Syllabus of T.Y. B. Sc. Zoology, at Dept. of Zoology, Prof. Ramakrishna More Arts, Commerce & Science College, Akurdi, Pune, on 08 th September 2021.
2.	2021-22	Dr. N. G. Shinde	Workshop: Restructuring of New Revised Syllabus of T.Y. B. Sc. Zoology, at Dept. of Zoology, Prof. Ramakrishna More Arts, Commerce & Science College, Akurdi, Pune, on 08 th September 2021.
3.	2021-22	Mr. D. A. Rayate	Workshop: Restructuring of New Revised Syllabus of T.Y. B. Sc. Zoology, at Dept. of Zoology, Prof. Ramakrishna More Arts, Commerce & Science College, Akurdi, Pune, on 08 th September 2021.
4.	2021-22	Mr. H. N. Asane	Workshop: Restructuring of New Revised Syllabus of T.Y. B. Sc. Zoology, at Dept. of Zoology, Prof. Ramakrishna More Arts, Commerce & Science College, Akurdi, Pune, on 08 th September 2021.
5.	2021-22	Mr. S. S. Mokal	Workshop: Restructuring of New Revised Syllabus of T.Y. B. Sc. Zoology, at Dept. of Zoology, Prof. Ramakrishna More Arts, Commerce & Science College, Akurdi, Pune, on 08 th September 2021.
6.	2021-22	Miss. V. B. Petkar	Workshop: Restructuring of New Revised Syllabus of T.Y. B. Sc. Zoology, at Dept. of Zoology, Prof. Ramakrishna More Arts, Commerce & Science College, Akurdi, Pune, on 08 th September 2021.
7.	2021-22	Miss. V. B. Petkar	Workshop: Restructuring of New Revised Syllabus of T.Y. B. Sc. Zoology, at Dept. of Zoology, Prof. Ramakrishna More Arts, Commerce & Science College, Akurdi, Pune, on 08 th September 2021.
8.	2023-24	Dr. R. D. Gawali	One Day Workshop: Syllabus Framing of M.Sc. I Zoology 2023-24 (NEP-2020) at Loknete Vyankatrao Hire Arts, Science & Commerce College, Nashik, on 15 th July 2023.
9.	2023-24	Dr. N. G. Shinde	One Day Workshop: Syllabus Framing of M.Sc. I Zoology 2023-24 (NEP-2020) at Loknete Vyankatrao Hire Arts, Science & Commerce College, Nashik, on 15 th July 2023.


 Coordinator

IQAC, K. J. Somaiya College
 Kopergaon, Dist. A.Nagar


 Principal

K.J.Somaiya College
 Kopergaon


 Head,

Department of Zoology

Head
 Department of Zoology
 K. J. Somaiya College, Kopergaon

ZY 102 T: Cell Biology (2 Credits: 30 Lectures)

01	An overview of cell, cell shapes and types.	2L
02	Plasma membrane and cell surface: Structure, chemistry, receptors, transport, pinocytosis and phagocytosis, cell junctions, membrane potential and synaptic transmission, glycocalyx and cell wall	8L
03	Mitochondria; Structure, function, protein import, Chloroplast – PS I and PS II system, water-splitting complex.	5L
04	Subcellular organelles : (a) The endoplasmic reticulum smooth and rough, (b) The Golgi complex, (c) Lysosomes, (d) Peroxisomes and glyoxysomes, (e) Nucleus	10L
05	Cell cycle: Phases of cell cycle, checkpoints of cell cycle, regulation of cell cycle	5L

Reference Books:

- *The World of the Cell*, 7th edition (2005), Wayne M. Becker, Lewis J. Kleinsmith, Jeff Hardin. Publisher-Benjamin Cummings.
- *Molecular Cell Biology*, 6th edition (2007), Harvey Lodish, Arnold Berk, Chris A. Kaiser, Monty Krieger, Matthew P. Scott, Anthony Bretscher, Hidde Ploegh, Paul Matsudaira. Publisher - W. H. Freeman and Co.
- *Molecular Biology of the Cell*, 5th edition, (2007), Bruce Alberts, Alexander Johnson, Julian Lewis, Martin Raff, Keith Roberts, Peter Walter. Publisher - Garland Science.



ZY 318 T: Insect Biochemistry and Physiology (2 Credits = 30 L)

01	Integument – structure, chemistry, sclerotization, regulation, Function.	3L
	Insecticide detoxification, Type I and Type II reactions. Role of insecticide degradation.	2L
02	Fat body – structure and function	3L
	Hemolymph – chemical composition and function Household and stored grain pests and their control.	2L
03	Digestion and absorption, adaptation to special diet.	3L
	Bioluminescence	2L
04	Muscle – structure and physiology, biochemistry of flight muscle.	5L
05	Endocrine systems – Neurosecretion, chemistry and function Mechanism of hormone action.	5L
06	Excretion and water balance – structure and function of Microtubules, Water balance and nitrogen excretion.	3L
	Ventilatory mechanisms and their control.	2L

Reference Books:

- *The Insects: Structure and Function*. Forth ed., Chapman R. F. (1998), Cambridge University Press, UK.
- *Comprehensive Insect Physiology, Biochemistry & Pharmacology*. Vol. 3, 4, 5, 10 and 12 Gilbert L. I. and G. A. Kerkut (1985), Pergamon Press, Oxford.
- *Insect Physiology*. Prakash, M. (2008), iscovery Publishing House Pvt. Ltd., New Delhi.
- *Physiological Systems In Insects*. Second ed., Klowden, Marc (2007), Elsevier, USA.
- *The Principles of Insect Physiology*, Seventh ed. Wigglesworth, V.B. (1972), Chapman and Hall, London.

ZY 103 T: Fundamentals of Molecular Biology (2 Credits: 30 L)

- | | | | |
|-----------|-------------------------------|--|------------|
| 01 | Genome organization: | C value paradox and genome size, Cot curves, repetitive and non-repetitive DNA sequence, Cot ½ and Rot ½ values, Pseudogenes , Gene families, Gene clusters, Super-families
Organelle genome
Structure of chromatin, nucleosome, chromatin organization and remodeling, higher order organization - chromosome, centromere, telomere
Histone and its effect on structure and function of chromatin | 12L |
| 02 | DNA Replication: | DNA replication in <i>E. coli</i> , Origin of replication, , types of <i>E. coli</i> DNA polymerases, details of replication process, regulation of replication, connection of replication to cell cycle.
Different models of replication for linear and circular DNA, replication features of single stranded phages.
Eukaryotic DNA replication, multiple replicons, eukaryotic DNA polymerases, ARS in yeast, Origin Recognition Complex (ORC), regulation of replication | 8L |
| 03 | DNA damage and repair: | Different types in DNA damages,
Different DNA repair systems: Nucleotide excision repair, Base excision repair, mismatch repair, recombination repair, Double strand break repair, transcriptional coupled repair | 4L |
| 04 | Recombination: | Homologous and site specific recombination
Models for homologous recombination: The Holliday model, double strand break repair model
Proteins involved in recombination: RecA, RuvA,B,C
Gene conversion | 3L |
| 05 | Mobile DNA elements: | Transposable elements in bacteria, IS elements, composite transposons, replicative, non-replicative transposons, Mu transposition
Controlling elements in Tn A and Tn 10 transposition, SINES and LINES. Retroviruses and retrotransposon | 3L |

Reference books:

- *Genes IX*, 9th edition (2008), Benjamin Lewin, Publisher - Jones and Barlett Publishers Inc.
- *Molecular Biology of the Gene*, 5th Edition (2004), James D. Watson, Tania Baker, Stephen P. Bell, Alexander Gann, Michael Levine, Richard Lodwick. Publisher - Pearson Education, Inc. and Dorling Kindersley Publishing, Inc.

- 11 Origin of Universe (Big Bang Theory); Origin of life: coacervates, Origin of basic biological molecules; abiotic synthesis of organic monomers and polymers; concept of Oparin and Haldane; experiment of Miller (1953); the first cell; evolution of prokaryotes; origin of eukaryotic cells; evolution of unicellular eukaryotes; anaerobic metabolism, evolution of metabolic pathways. 7L
Evidences of Evolution: Evidences from fossils, geographic distribution, comparative anatomy & embryology. Radioactive dating for fossil age determination.
- 12 Post-Darwinian concepts of evolution: Gradualistic vs. non-gradualistic theories, Mayr's Founder Principle, Gould's punctuated equilibrium theory, Kimura's neutral theory, Endosymbiotic theory of Margulis contemporary views. 5L
-

Reference Books:

- This is Biology: The Science of Living world, Mayr, M. (1997), Universities Press Ltd.
- Evolution, 3rd edition, Strickberger, M. W. (2000), Jones and Bartlett Publishers London.
- J.R.B. Alfred and Ramakrishna (2004) Collection, Preservation and Identification of animals. Zoological Survey of India Publications.
- N.A. Campbell and J.B. Reece (2004) Biology, 7th edition, Benjamin Cummings Publ. [8th edition (2009)]
- P.D. Sharma (2005) Ecology and Environment, Rastogi Publications
- N.H. Barton et al. (2007) Evolution. Cold Spring Harbor Lab. Press



ZY 314 T+P: Advanced Genetics (2+3=5 C)
(5 Credits: Theory 2C: 30L + Practicals 3 C:45 H)

- 01 Advanced Quantitative Genetics:**
Concept of phenotypic variance and its partitioning into subcomponents, measurement of heritability and its application. Quantitative inheritance in humans, co-efficient of relationship and coefficient of inbreeding, twin studies and measurement of concordance. **6L**
- 02 Advanced Population and Evolutionary Genetics :**
Genetic polymorphism and selection strategies. Quantitative aspect of selection pressure, selection-mutation equilibrium and quantitation, genetic drift, genetics of speciation : classical and modern concepts, use of molecular information in evolutionary genetics, artificial selection and applications. **6L**
- 03 Inherited disorders and clinical genetics:**
Single gene, multifactorial and chromosomal disorders, loss of function and other mutations, somatic cell genetic analysis, organelle based genetic disorders, Inherited disorders of metabolism of nucleic acids, proteins, carbohydrate and lipids, detection of genetic disorders, family screening and counseling, risk assessment, conventional and prenatal diagnosis, pre-implantation diagnosis. Genetic basis of psychiatric disorders **6L**
- 04 Environment and Genome :**
(a) Imprinting and Epigenetics
(b) Genetics of Cancer (Oncogenes and tumour suppressor genes) **6L**
(c) Genetics of Ageing
- 05 Advanced Molecular genetic approaches and techniques :**
Molecular approaches in genetic analysis, Recapitulation of genome organizations, Application of molecular methodologies in genetic analysis, Gene-based therapeutic approaches, Mapping human genome, Genetic analysis using genomic data, Polymorphism and population analysis – SNPs and genotyping using sequence analysis and microarray. **6L**
-

ZY 314 P: Laboratory Exercises in Advanced Genetics (3 C)

- 1** Estimation of heritability of quantitative traits
- 2** Chromosome preparation from bone marrow cells / peripheral blood samples, banding techniques (Light microscopic and Fluorescent microscopy based)
- 3** Allozyme variation in a population to study genetic polymorphism
- 4** Study of natural and artificial selection using *Drosophila* population



ZY 304 T: Introduction to Recombinant DNA Technology (2C:30 L)

1	Introduction to Recombinant DNA Technology	1L
2	General strategy of recombinant DNA technology and gene cloning : genomic libraries, cDNA libraries, single gene cloning	1L
3	Isolation, identification and characterization of DNA fragments to be cloned, preparation of cDNA	2L
4	Vectors in gene cloning: types of vectors and choice of vectors: plasmids, cosmids, lambda phage vectors, shuttle vectors, YACs, BACs, Other advanced vectors,	5L
5	Methods of transferring recombinant DNA to different host cells	2L
6	DNA modifying and degrading enzymes used in recombinant DNA technology	5L
7	Screening for transformants, Characterisation of transformants: different hybridization techniques, probe preparation using radioactive and nonradioactive ligands detection of hybrids, DNA sequencing, site directed mutagenesis	8L
8	Genetic manipulation of animals	2L
9	Gene transfer to plants	2L
10	Various expression vectors in bacteria and eukaryotes, choice of appropriate hosts, induce expression, Expression of industrially important	2L

Reference Books:

- Primrose S., Twyman R., Old D., Sixth Edition (2001) Principles of Gene Manipulation, Blackwell Science Ltd.
- Prirose S., Twyman R., Third Edition (2003) Principles of genome analysis and genomics., Blackwell Science Ltd.
- Alcamo I. Second Edition (2001) DNA Technology, the awesome skill, Harcourt Academic Press
- Brown T.A., Third Edition (2007) Genomes 3, Garland Science , Taylor and Francis Group.

K. J. Somaiya College of Arts, Commerce & Science, Kopargaoon
Department Of Zoology

Report on
Framing / Restructuring of Syllabus of Certificate Course in
‘Vermiculture in Vermicomposting’

All the faculty of Department of Zoology were participated in departmental meeting for Academic Year 2021 – 2022, which was scheduled on 18/02/2022 in the department of Zoology at 11.00 A.M. The brief agenda of meeting was as follows.


AGENDA

- 1) To revise syllabus and structure of certificate course, **Vermiculture and Vermicomposting**.
- 2) Any other matter with the permission of Chairperson.

Action Report:

With fruitful discussion among all the faculty members, the syllabus of Certificate Course, ‘Vermiculture and Vermicomposting’ is revised, and prepared draft of syllabus with Two (02) Credits, i.e. 30 lectures including theory and practical part.as per the copy attached, and implemented the said syllabus from Academic year 2021 - 2022.




Dr. R. D. Gawali

18/02/2022
Head
Department of Zoology
K. J. Somaiya College of Arts,
Commerce & Science, Kopargaoon



K. J. Somaiya College of Arts, Commerce and Science, Kopargaon

Permission Letter from IQAC for Organizing Programme

From,
The IQAC Coordinator,
K. J. Somaiya College, Kopargaon

To,
The Head,
Department of Zoology,
K. J. Somaiya College, Kopargaon.

Subject: Approval for the Certificate Course and Committee.

Reference: Your letter dated on 19/02/2022.

Dear Sir,

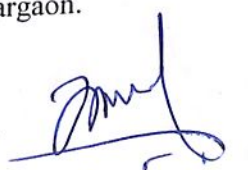
We are Pleased to inform you that, the proposal of the certificate course "**Vermiculture and Vermicomposting**" is approved and committee for designing of the curriculum of the same as follows:


Sr. No.	Committee	Name of Faculty
1	Head of the Department (Chairman)	Dr. R. D. Gawali
2	Course Co-ordinator	Dr. N.G. Shinde
3	Member	Mr. D. A. Rayate
4	Member	Mr. H. N. Asane

You are supposed to submit the designed curriculum at an earliest for further approval so that the course can be commenced from the academic year 2021-22.

Date:

Place: Kopargaon.


Head
Department of Zoology
K. J. Somaiya College of Arts,
Commerce & Science, Kopargaon


Coordinator
IQAC, K. J. Somaiya College
Kopargaon, Dist. A.Nagar

Letter to IQAC for seeking permission for the Certificate Course

Date: 19/02/2022

To,
The Coordinator,
IQAC,
K. J. Somaiya College, Kopergaon

Subject: Regarding Approval for the Restructuring of Syllabus of certificate course and Committee in our department of Zoology.

Respected Sir,

The Department of Zoology desires to Restructure / Revise the syllabus of a certificate course 'Vermiculture and Vermicomposting' for developing the skills and enhancing the employability of our students.

Sr. No.	Committee	Name of Faculty
1	Head of the Department (Chairman)	Dr. R. D. Gawali
2	Course Co-ordinator	Dr. N.G. Shinde
3	Member	Mr. D. A. Rayate
4	Member	Mr. H. N. Asane

Kindly give the permission and thank you and look forward for kind cooperation.



Yours sincerely,

A handwritten signature in blue ink, appearing to be 'M. N. Asane'.

Head

Department of Zoology
K. J. Somaiya College of Arts,
Commerce & Science, Kopergaon



Kopargaoon Taluka Education Society's
K. J. Somaiya College of Arts, Commerce and Science, Kopargaoon.
Department of Zoology
Revised Syllabus for Certificate Course in Vermiculture and Vermicomposting
(To be implemented from 2021-22)

(Syllabus)

Theory:

1. Definition and Scope of Vermiculture 02
2. Taxonomic Status of Earthworms/ Classification 01
3. Habit, Habitat and General Morphology 02
4. Anatomy of Earthworm with respect to Digestive System and Excretory System. Significance of Gut in the Formation of Vermicompost. 04
5. Useful Species of Earthworms and Economic Importance. 01
6. Methods of Vermiculture 06
 - a. Preparations of Vermiculture Bed.
 - b. Vermiculture technique: On Small scale.
 - c. Bioconversion of kitchen waste using vermiculture.
 - d. Vermiculture technique at Farm and production of vermicompost and Vermiwash: On large Scale. (Points to be covered: Containers, Shade, Vermi Bed, Feed Mixture, Maintenance, Harvesting, Packaging etc.)
7. Precautionary Measures: 01
8. Factors influencing Vermiculture: 02
Food, Moisture, Temperature, Sunlight, pH, Predators *etc.*
9. Concept of Commercial Farming 01
10. By-Products of Vermiculture: Vermicompost, Vermiwash, Vermigold 02

Practical:

- Preparation and Maintenance of Vermiculture Bed in the Field. 08
- Field Report

Duration 60 Days.

Total Lectures: 30



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Sham

Sham *Sham*

Sham
Head
Department of Zoology
K. J. Somaiya College of Arts,
Commerce & Science, Kopargaoon

Sham
Principal
K.J.Somaiya College of Arts
Commerce & Science, Kopargaoon



Kopergaon Taluka Education Society's
K. J. Somaiya College of Arts, Commerce and Science, Kopergaon.
Department of Zoology
Revised Syllabus for Certificate Course in Vermiculture and Vermicomposting
(To be implemented from 2013-14)

(Syllabus)

Theory:

- | | |
|---|----|
| 1. Definition and Scope of Vermiculture | 02 |
| 2. Taxonomic Status of Earthworms/ Classification | 01 |
| 3. Habit, Habitat and General Morphology | 02 |
| 4. Anatomy of Earthworm with respect to Digestive System and Excretory System. Significance of Gut in the Formation of Vermicompost. | 04 |
| 5. Useful Species of Earthworms and Economic Importance. | 01 |
| 6. Methods of Vermiculture | 06 |
| a. Preparations of Vermiculture Bed. | |
| b. Vermiculture technique: On Small scale. | |
| c. Bioconversion of kitchen waste using vermiculture. | |
| d. Vermiculture technique at Farm and production of vermicompost and Vermiwash: On large Scale. (Points to be covered: Containers, Shade, Vermi Bed, Feed Mixture, Maintenance, Harvesting, Packaging etc.) | |
| 7. Precautionary Measures: | 01 |
| 8. Factors influencing Vermiculture: Food, Moisture, Temperature, Sunlight, pH, Predators <i>etc.</i> | 02 |
| 9. Concept of Commercial Farming | 01 |
| 10. By-Products of Vermiculture: Vermicompost, Vermiwash, Vermigold | 02 |

Practical:

Preparation and Maintenance of Vermiculture Bed in the Field. 08

Field Report

Duration 60 Days.



Total Lectures: 30

Manoj D. G. Jais

Pradyumn

Dr. J. G. Sharma

[Signature]

Head

**Department of Zoology
K. J. Somaiya College of Arts,
Commerce & Science, Kopergaon**

[Signature]

Principal

**K. J. Somaiya College of Arts
Commerce & Science, Kopergaon**

K. J. Somaiya College of Arts, Commerce and Science, Kopargaon

Department of Zoology

Notice

Date: 17th Feb. 2022

All the faculty of Department of Zoology are hereby informed that the departmental meeting for A.Y. 2021- 2022 is scheduled to be held on 18/02/2022 in the department of Zoology at 11.00 A.M. The brief agenda of meeting is as follows. All are therefore requested to kindly make it convenient to attend the meeting.

AGENDA

- 1) To revise syllabus and structure of certificate course, Vermiculture and Vermicomposting.
- 2) Any other matter with the permission of Chairperson.



Dr. R. D. Gawali

Head

Department of Zoology
K. J. Somaiya College of Arts,
Commerce & Science, Kopargaon

1) Dr. N. G. Shinde.

2) Mr. D. A. Rayate.

3) Miss. S. S. Chavan.

4) Miss. V. B. Petkar.

5) Mr. H. N. Asane.

6) Mr. S. S. Mokal

Principal

K.J.Somaiya College of Arts
Commerce & Science, Kopargaon

Minutes of the Meeting

Date- 18th Feb. 2022

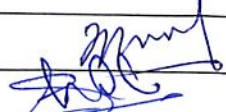
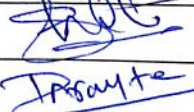


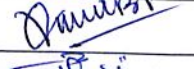


Time- 11.00 A.M.

Present Members-07


At the outset, Dr. R. D. Gawali welcomed all the faculty of department of Zoology. The following agenda items were discussed during the meeting and it was unanimously resolved to implement them. The meeting was adjourned after the vote of thanks by Dr. N. G. Shinde to the chair and staff members.

Sr. No.	Agenda	Resolution
1	To revise syllabus and structure of certificate course, 'Vermiculture and Vermicomposting'.	The discussion was held on the revision in the old syllabus and structure of certificate course and some new addition-deletion in the syllabus.
2	Any other matter with the permission of Chairperson.	No matter was raised during the meeting.

Following faculty were present for Zoology department's meeting for A.Y. 2021-22 on 18th Feb. 2022 in department of Zoology at 11.00 A. M.:

Name of faculty	Signature
Dr. R. D. Gawali	
Dr. N. G. Shinde.	
Mr. D. A. Rayate.	
Miss. S. S. Chavan.	
Miss. V. B. Petkar.	
Mr. H. N. Asane.	
Mr. S. S. Mokal	




Head
Department of Zoology
K. J. Somaiya College of Arts,
Commerce & Science, Kopergaon

Report of Compliance

In compliance with the resolution made in the meeting for the A.Y. 2021-2022 which was held on 18th Feb. 2022. The following activities are successfully carried out.

Subject	Action Taken/ Compliance
To revise syllabus and structure of certificate course, 'Vermiculture and Vermicomposting'	The discussion was held on the old syllabus and structure of certificate course, Some new topics added in old syllabus and new syllabus was designed.



A handwritten signature in blue ink, appearing to read 'R. D. Gawali'.

Dr. R. D. Gawali

Head
Department of Zoology
K. J. Somaiya College of Arts,
Commerce & Science, Kopergaon

11

Short Term Course Under Equal Opportunity Centre in Colleges
Funded by UGC (XIth Plan)

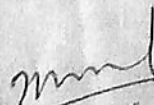
Certificate course in Vermiculture & Vermicomposting

(Syllabus)

* Theory *	No. Lectures
* Definition & Scope of Vermiculture.	01
* Taxonomic status/ Classification.	01
* Habit, Habitat & General Morphology.	02
* Useful Species of Earthworm.	01
* Methods of Vermiculture:	06
I) Preparation of Vermiculture bed.	
II) Culturing techniques in small scale.	
III) Bioconversion of kitchen waste using Vermiculture.	
IV) Culturing technique at farm & production of Vermicompost Technique.	
i) Containers ii) Shelter iii) Feed mixture	
iv) Manufacture of Vermicompost	
v) Harvesting.	
* Precautionary measures.	
* Factors influencing the culturing earthworms:	02
i) Food ii) Moisture iii) Temperature iv) Sunlight	
v) PH vi) Predators.	
* Significance of Gut in the formation of Vermicompost.	01
* Concept of Commercial Farming.	01
* Economic importance of earthworm.	01
* Vermicompost as a Bio-fertilizer.	01
* Concept of Vermiwash & Vermigold.	
* PRACTICALS *	
* Practical based on above theory course- Preparation & maintenance of Vermiculture bed in field.	08
* Field Report	

Duration 60 Days

Total 25 Lectures


15/03/18-19
Co-ordinator




PRINCIPAL
K. J. SOMAIYA COLLEGE
KOPARGAON



Kopargaon Taluka Education Society's

K.J. Somaiya College of Arts, Commerce & Science

Mohanirajnagar, Kopargaon - 423601, Dist. Ahmednagar (MH.)

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☎ : 9146142000, 9146152000 Email ID : kjscollege@rediffmail.com, Website : kjscollege.com

NAAC ACCREDITED 'A' GRADE

AN ISO 9001-2015 CERTIFIED INSTITUTE

SAVITRIBAI PHULE PUNE UNIVERSITY "BEST COLLEGE AWARD"

Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. : 2045/2017-18

Date : 05/01/2018

To,
Head,
Department of Botany
K. J. Somaiya College of Arts, Commerce & Science, Kopargaon.

Subject : Restructuring of syllabus for certificate course.
Reference: Your Letter dated on 05/01/2018

Dear Sir,


We pleased to inform you that, the proposal for restructuring of syllabus for short term certificate course titled "**Mushroom Cultivation**" is approved & the committee for restructuring of syllabus is as follows:

Sr.No.	Committee	Name of Faculty
1	Head of the Department (Chairman)	Dr.B.S.Gaikwad
2	Member	Dr.G.S.Shinde
3	Member	Mr.R.S.Landge
4	Member	Mr.R.S.Dhanavate

You are supposed to submit the restructured curriculum at an earliest for further approval so that the course can be commenced from the academic year 2017-18.

Date: 5/1/18

Place: Kopargaon


Principal
K.J.Somaiya College of Arts
Commerce & Science, Kopargaon



Letter to IQAC for seeking permission for the Certificate Course 'Mushroom Cultivation

Dr.B.S.Gaikwad
Head, Department of Botany
K.J.Somaiya College, Kopargaon

Date- 29/01/2018

To,
The Co-ordinator
Internal Quality Assurance Cell,
K.J.Somaiya College, Kopargaon- 423 601

Subject-Regarding permission for the Certificate Course "Mushroom Cultivation".

Respected Sir,

The Department of Botany desires to start a certificate course entitled "Mushroom Cultivation" for enhancing the self-employability in our students. The said course duration will be of one month. Those students who successfully complete the certificate course will received a completion certificate issued by the Department of Botany.

Kindly give the permission for commencing course.

Thank you & look forward for kind cooperation.

*Permission granted for
the said course from the
academic year 2018 to 2023
@Thangf*

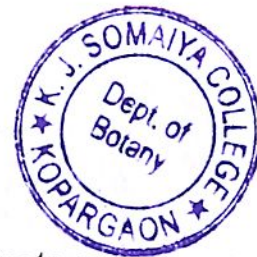
Dr. B.S. Gaikwad

Head

Department of Botany

Head

Department of Botany
K. J. Somaiya College, Kopargaon



Letter to IQAC for seeking permission for the departmental certificate course

Dr.B.S.Gaikwad

Head, Department of Botany

K.J.Somaiya College, Kopargaon

Date-2

To,

The Co-ordinator

IQAC

K.J.Somaiya College, Kopargaon

Subject-Regarding permission for the departmental certificate course.

Respected Sir,

The Department of Botany desires to start a certificate course on “Fruit Processing” for enhancing the self-employability in our students. The said course duration will be of two months & fees will be collected 100rs per student, Also students who successfully complete the course will received a certificate issued by department of Botany.

Kindly give the permission for commencing course.

Thank you & look forward for kind cooperation.


Head
Head
Department of Botany
K. J. Somaiya College, Kopargaon



Kopergaon Taluka Education Society's
K. J. Somaiya College of Arts, Commerce and Science, Kopergaon.

Department of Botany

Certificate Course on "Mushroom Cultivation"

Introduction

Mushrooms are being used as food and medicine from ancient times. Mushroom contains all essential amino acids, vitamin B complex, iron, calcium, potassium, phosphorous, folic acid and other biochemical compounds. It is also a good source of dietary fibre. It is regarded as highly edible even for people suffering from cholesterol problems, heart diseases, diabetes and cancer. Mushroom cultivation has now become a source for income generation since there is a large demand for healthy and quality food products. Many value added products are also obtained from mushrooms. The cultivation procedure is characterised by small initial investment and year round production. It is an eco-friendly agricultural practice. Considering the commercial viability and self-employment potential of mushroom cultivation and marketing, the Department is offering the same as an add on certificate course to the under graduate students of the College.

Committee for framing syllabus for a Short Term Certificate Course on "Mushroom cultivation" to be conducted by Department of Botany was as follows:

1. Prin. Dr .B.S. Yadav (Chairman)
2. Dr. B.S.Gaikwad (Head and Member)
3. Dr.G.S.Shinde (Member)
4. Prof R.S. Landge (Member)

Course Structure

Sr.No	Course	Lecture prescribed
1.	Theory	10 Lectures (20 Hrs)
2.	Practical	

Syllabus

Lecture 1.1. Basic Introduction & History of mushrooms

Lecture 1.2 Types and distribution of Edible & Poisonous Mushrooms;

Lecture 1.3 Life cycle of mushroom.

Lecture 2.1 Preparation of Pure Culture by using PDA

Lecture 2.2. Spawn introduction - Isolation of pure culture; raw material of spawn; sterilization; preparation of mother spawn and multiplication

Lecture 3.1. Preparation of substrate by using various organic waste- Wheat straw, Paddy Straw & Soya Straw etc

Lecture 3.2 Sterilization of substrate

Lecture 4.1 Actual Cultivation of mushroom, by using spawn

Lecture 4.2. Bagging & Maintenance to avoid contamination.

Lecture 4.3 Harvesting method and preservation of mushrooms.

Lecture 5.0 Nutrient values of mushroom – protein, carbohydrate, fat, fibre, vitamins and amino acids contents; short and long term storage of mushroom; preparation of various dishes from mushroom. Medicinal value of mushroom – cultivation, extraction, isolation and identification of active principle from mushroom.

Lecture 5.1 Pharmacological and economic values of mushroom.

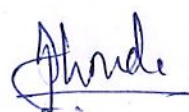
References:

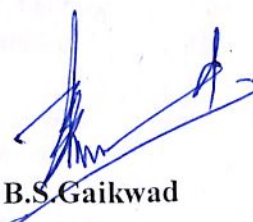
1. F.Y.B.Sc Botany Practical Handbook
2. Parveen Garg, Mushroom Cultivation, TECHNO WORLD PRESS
3. V.P.Sharma, .Mushroom Cultivation in India 2007
4. Ashok Agrawal *et.al.* A Textbook on Mushroom Cultivation Theory & Practice


Aims and Objectives:

- ❖ To enable the students to identify the edible and poisonous mushrooms.
- ❖ To provide hands-on training for the preparation of bed for mushroom cultivation and its harvesting, pests and diseases control and post harvesting management.
- ❖ To provide the students awareness about the marketing trends of Mushrooms.
- ❖ To give the students exposure to the experiences of experts in the field and to functioning mushroom farms
- ❖ To help the students to learn a means of self-employment and income generation.


Principal
K.J.Somaiya College
Konargaon
Prin .Dr .B.S. Yadav
(Chairman)


Dr.G.S.Shinde
(Member)


Dr. B.S.Gaikwad
(Head and Member)


Prof R.S. Landge
(Member)



**Kopergaon Taluka Education Society's
K. J. Somaiya College of Arts, Commerce and Science, Kopergaon.
Department of Botany
Short Term Course on Fruit Processing
Syllabus**

Committee for framing syllabus for a Short Term Certificate Course on “**Fruit Processing Technology**” to be conducted by Department of Botany was as follows:

1. Prin .Dr .B.S. Yadav (Chairman)
2. Dr. B.S.Gaikwad (Head and Member)
3. Dr.G.S.Shinde (Member)
4. Prof R.S. Landge (Member)

Aims and Objectives of the syllabus:

Sl. No	PRACTICAL (60 Marks)	THEORY (40 Marks)
1	Procure seasonal fruits and vegetable products	Introduction: - Importance of Fruits and Vegetables & its marketing aspects. Preservation Technology:-Nature of the fruits & vegetables in respect of their preservation. Different terms used in processing. Principle & techniques involved for different Fruit & Vegetable preservation
2	Practice to operate Canning operations: Guava, Tomato	Canning operations on fruits and vegetables. Process flow diagram for canning. Canning machineries. Pre-treatment's before canning operations.
3	Drying carryout operations on fruits and vegetables using different dryers.	Fruits and vegetable drying/dehydration: General methods of fruits &vegetable drying/dehydration, sun drying, mechanical drying. Types of dryers, characteristics of dried fruits and vegetables
4	Practice to make jam, jellies, juices etc. Practice to prepare the jelly from fruits like Guava, Prepare jam and jelly, Test end point in jam and jelly	Principle of making jam and jellies as per availability of the fruits. □Process flow diagram for jam and jellies. Principle and methods of production. Indian Food Standard :- FSSAI
6	Prepare tomato ketchup, sauce, puree & paste	Methods of preparation of tomato ketchup, Chutney, sauce, puree, paste
9	Pack the given food products and seal	Marketing
10	Practice to cost the estimate e of different products. Marketing through	Market survey procedures. Marketing strategies. Methods of marketing feedback. Cost analysis & attractive packaging. □Advertising procedure.

Aims and Objectives of the Syllabus:

1. Students are expected to understand the principle of fruit processing technology.
2. They are expected to understand quality and availability of fruits in the market.
3. The practicals are implemented to understand the concepts and types of preservation methods. It would help in the development of practical skills of the students.
4. To inspire students to take fruit processing technology as a small-scale industry.
5. To understand the benefits and economics of fruit processing industry.
6. To develop interdisciplinary approach of the subject.
- 7.

Section: I

Theory: 12 L

1. Introduction: Importance of Fruits and Vegetables & its marketing aspects.
2. Technology: Nature of the fruits & vegetables in respect of their preservation. Different terms used in processing. Principle & techniques involved for different fruit & vegetable preservation
3. Canning operations on fruits and vegetables. Process flow diagram for canning. Canning machineries. Pre-treatment's before canning operations.
4. Fruits and vegetable drying/dehydration: General methods of fruits & vegetable drying/dehydration, sun drying, mechanical drying. Types of dryers, characteristics of dried fruits and vegetables
5. Principle of making jam and jellies as per availability of the fruits. □ Process flow diagram for jam and jellies. Principle and methods of production.
6. Methods of preparation of ketchup, sauce, burphy, candies, juices
7. Marketing: Market survey procedures. Marketing strategies. Methods of marketing feedback. Cost analysis & attractive packaging. □ Advertising procedure.


Section: II

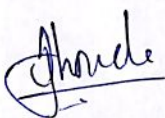
Practical: 36 L


1. Procure seasonal fruits and vegetable from market.
2. Drying operations of fruits and vegetables using different dryers.
3. Preparation of Jam.
4. Preparation of Jellies.
5. Preparation of Juices.

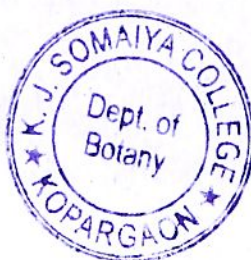
6. Preparation of Squashes.
7. Preparation on Burphy.
8. Preparation of Candies.
9. Packing, labeling and sealing of prepared fruit products.


Prin . **Principal**
K.J.Somaiya College
(Chairman)
Kopergaon


Dr. B.S. Gaikwad
(Head and Member)


Dr. G.S. Shinde
(Member)


Prof R.S. Landge
(Member)





Kopargaon Taluka Education Society's

K.J. Somaiya College of Arts, Commerce & Science

Mohanirajnagar, Kopargaon - 423601, Dist. Ahmednagar (MH.)

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SAVITRIBAI PHULE PUNE UNIVERSITY "BEST COLLEGE AWARD"

Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : 14 / 09 / 2018

To,
The Head,
Department of Microbiology
K. J. Somaiya College of Arts, Commerce and Science,
Kopargaon

Subject: Certificate Course Syllabus Framing

Respected Sir

As per the above subject, it is hereby informed that the syllabus of the certificate course for S. Y. B.Sc. Microbiology students entitled "Health and Environment Awareness" has to be framed by the following committee:

1. Asst. Prof. Deshmukh J. R.
2. Asst. Prof. Gautam K. R.

IQAC Coordinator


Principal
K.J. Somaiya College of Arts
Commerce & Science, Kopargaon



Kopargaoon Taluka Education Society's

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SAVITRIBAI PHULE PUNE UNIVERSITY "BEST COLLEGE AWARD"

Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : 17 / 1 / 2020

To,
The Head,
Department of Microbiology
K. J. Somaiya College of Arts, Commerce and Science,
Kopargaoon

Subject: Certificate Course Syllabus Framing

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As per the above subject, it is hereby informed that the syllabus of the certificate course for S. Y. B.Sc. Microbiology students entitled "Health and Environment Awareness" has to be framed by the following committee:

1. Asst. Prof. Deshmukh J. R.
2. Asst. Prof. Ghumrae R. R.

IQAC Coordinator


Principal
Principal
K.J. Somaiya College of Arts
Commerce & Science, Kopargaoon



Kopargaon Taluka Education Society's

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SAVITRIBAI PHULE PUNE UNIVERSITY "BEST COLLEGE AWARD"

Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : 15 / 01 / 2021

To,
The Head,
Department of Microbiology
K. J. Somaiya College of Arts, Commerce and Science,
Kopargaon

Subject: Certificate Course Syllabus Framing

Respected Sir

As per the above subject, it is hereby informed that the syllabus of the certificate course for S. Y. B.Sc. Microbiology students entitled "Health and Environment Awareness" has to be framed by the following committee:

1. Asst. Prof. Pawar A. D.
2. Asst. Prof. Chaudhari Y. S.

IQAC Coordinator


Principal
K.J. Somaiya College of Arts
Commerce & Science, Kopargaon



Kopargaoon Taluka Education Society's

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SAVITRIBAI PHULE PUNE UNIVERSITY "BEST COLLEGE AWARD"

Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : 7 / 12 / 2021

To,
The Head,
Department of Microbiology
K. J. Somaiya College of Arts, Commerce and Science,
Kopargaoon


Subject: Certificate Course Syllabus Framing

Respected Sir

As per the above subject, it is hereby informed that the syllabus of the certificate course for S. Y. B.Sc. Microbiology students entitled "Health and Environment Awareness" has to be framed by the following committee:

1. Asst. Prof. Pawar A. D.
2. Asst. Prof. Chaudhari Y. S.

IQAC Coordinator


Principal
K.J. Somaiya College of Arts
& Commerce & Science, Kopargaoon



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Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : 11 / 11 / 2022

To,
The Head,
Department of Microbiology
K. J. Somaiya College of Arts, Commerce and Science,
Kopargaon

Subject: Certificate Course Syllabus Framing

Respected Sir

As per the above subject, it is hereby informed that the syllabus of the certificate course for S. Y. B.Sc. Microbiology students entitled "Health and Environment Awareness" has to be framed by the following committee:

1. Asst. Prof. Chaudhari Y. S.
2. Asst. Prof. Gakkhad P. K.

IQAC Coordinator


Principal
K.J. Somaiya College of Arts
Commerce & Science, Kopargaon



Kopargaon Taluka Education Society's
K. J. Somaiya College of Arts, Commerce and Science, Kopargaon
DEPARTMENT OF MICROBIOLOGY
Academic Year 2018-19

Meeting of the Certificate Course for Health and Environment Awareness was held on 14/09/2018 at 10:15AM.

Agenda of the meeting:

1. Designing of Syllabus for Certificate Course
2. Workload discussion and distribution among faculties.
3. Lecture timetable

Minutes of Meeting:

The head of the microbiology department discussed with respective faculties about syllabus framing for Certificate Course of S. Y. B. Sc. Microbiology Students. Their lecture Schedules and Exam Timetable for corresponding Academic Year.

Following faculties were present for the meeting:

Asst Prof. Deshmukh J. R.

Asst Prof. Gautam K. R.

Action Taken Report

1. Follow-up taken by the honorable head department of microbiology regarding Syllabus Framing
2. HOD of microbiology distributed the workload to Certificate Course Coordinator.
3. Timetable was prepared for the Certificate Course.


Head
Department of Microbiology
K. J. Somaiya College, Kopargaon



Kopergaon Taluka Education Society's
K. J. Somaiya College of Arts, Commerce and Science, Kopergaon
DEPARTMENT OF MICROBIOLOGY
Academic Year 2019-20

Meeting of the Certificate Course for Health and Environment Awareness was held on 17/01/2020 at 10:15AM.

Agenda of the meeting:

1. Designing of Syllabus for Certificate Course.
2. Workload discussion and distribution among faculties.
3. Lecture timetable

Minutes of Meeting:

The head of the microbiology department discussed with respective faculties about syllabus framing for Certificate Course of S. Y. B. Sc. Microbiology Students. Their lecture Schedules and Exam Timetable for corresponding Academic Year.

Following faculties were present for the meeting:

Asst Prof. Deshmukh J. R.

Asst Prof. Ghumare. R. R.

Action Taken Report

1. Follow-up taken by the honorable head department of microbiology regarding Syllabus Framing
2. HOD of microbiology distributed the workload to Certificate Course Coordinator.
3. Timetable was prepared for the Certificate Course.

Head

Department of Microbiology
K. J. Somaiya College, Kopergaon



Kopergaon Taluka Education Society's
K. J. Somaiya College of Arts, Commerce and Science, Kopergaon
DEPARTMENT OF MICROBIOLOGY
Academic Year 2020-21

Meeting of the Certificate Course for Health and Environment Awareness was held on 15/01/2021 at 10:15AM.


Agenda of the meeting:

1. Designing of Syllabus for Certificate Course.
2. Workload discussion and distribution among faculties.
3. Lecture timetable

Minutes of Meeting:

The head of the microbiology department discussed with respective faculties about syllabus framing for Certificate Course of S. Y. B. Sc. Microbiology Students. Their lecture Schedules and Exam Timetable for corresponding Academic Year.


Following faculties were present for the meeting:

Asst Prof. Pawar A. D. 

Asst Prof. Chaudhari. Y. S. 

Action Taken Report

1. Follow-up taken by the honorable head department of microbiology regarding Syllabus Framing.
2. HOD of microbiology distributed the workload to Certificate Course Coordinator.
3. Timetable was prepared for the Certificate Course.


Head
Department of Microbiology
K. J. Somaiya College, Kopergaon



Kopergaon Taluka Education Society's
K. J. Somaiya College of Arts, Commerce and Science, Kopergaon
DEPARTMENT OF MICROBIOLOGY
Academic Year 2021-22

Meeting of the Certificate Course for Health and Environment Awareness was held on 17/12/2021 at 10:15AM.


Agenda of the meeting:


1. Designing of Syllabus for Certificate Course.
2. Workload discussion and distribution among faculties.
3. Lecture timetable

Minutes of Meeting:

The head of the microbiology department discussed with respective faculties about syllabus framing for Certificate Course of S. Y. B. Sc. Microbiology Students. Their lecture Schedules and Exam Timetable for corresponding Academic Year.

Following faculties were present for the meeting:

Asst Prof. Pawar A. D. 

Asst Prof. Chaudhari. Y. S. 

Action Taken Report

1. Follow-up taken by the honorable head department of microbiology regarding Syllabus Framing.
2. HOD of microbiology distributed the workload to Certificate Course Coordinator.
3. Timetable was prepared for the Certificate Course.


HOD

Department of Microbiology
K. J. Somaiya College, Kopergaon



Kopergaon Taluka Education Society's
K. J. Somaiya College of Arts, Commerce and Science, Kopergaon
DEPARTMENT OF MICROBIOLOGY
Academic Year 2022-23

Meeting of the Certificate Course for Health and Environment Awareness was held on 11/11/2022 at 10:15 AM.


Agenda of the meeting:

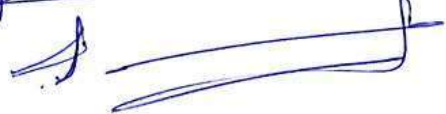
1. Designing of Syllabus for Certificate Course.
2. Workload discussion and distribution among faculties.
3. Lecture timetable

Minutes of Meeting:

The head of the microbiology department discussed with respective faculties about syllabus framing for Certificate Course of S. Y. B. Sc. Microbiology Students. Their lecture Schedules and Exam Timetable for corresponding Academic Year.

Following faculties were present for the meeting:

Asst Prof. Pawar A. D. 

Asst Prof. Chaudhari. Y. S. 

Action Taken Report

1. Follow-up taken by the honorable head department of microbiology regarding Syllabus Framing.
2. HOD of microbiology distributed the workload to Certificate Course Coordinator.
3. Timetable was prepared for the Certificate Course.


Head
Department of Microbiology
K. J. Somaiya College, Kopergaon



Kopargaoon Taluka Education Society's

K.J. Somaiya College of Arts, Commerce & Science

Mohanirajnagar, Kopargaoon - 423601, Dist. Ahmednagar (MH.)

Affiliated to Savitribai Phule Pune University, Pune ID No. PU/AN/ASC/07(1964)

☎ : 9146142000, 9146152000 Email ID : kjscollege@rediffmail.com, Website : kjscollege.com

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SAVITRIBAI PHULE PUNE UNIVERSITY "BEST COLLEGE AWARD"

Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : 30 / 12 / 2022

To,

The Head,

Department of BCA (Science),

K.J.S. College of Arts, Commerce and Science,


Kopargaoon.

Sub: Certificate Course Syllabus Framing

Respected Sir

As per above cited subject, it is hereby informed that the syllabus of the certificate course entitled "WEB DESIGNING AND DEVELOPMENT" has to be framed by the following committee:

1. Prof. Patil P. N. (Head)
2. Prof. Gudaghe M.B. (Coordinator)
3. Prof. More V.B. (Member)


IQAC Coordinator
IQAC, K. J. Somaiya College
Kopargaoon, Dist. A.Nagar


Principal
K.J.Somaiya College
Kopargaoon



Kopargaon Taluka Education Society's

K.J. Somaiya College of Arts, Commerce & Science

Mohanirajnagar, Kopargaon - 423601, Dist. Ahmednagar (MH.)

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NAAC ACCREDITED 'A' GRADE

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SAVITRIBAI PHULE PUNE UNIVERSITY "BEST COLLEGE AWARD"

Principal : Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

Ref. No. :

Date : 21 / 06 / 2019

To,

The Head

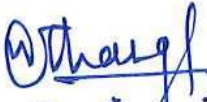
Department of Computer Science

Sub: Certificate Course Syllabus Framing

R/sir

As per above cited subject, it is hereby informed that the syllabus of the certificate course entitled COMPUTER HARDWARE and NETWORK has to be framed by the following committee:

1. Prof. Kusalkar A. A. (Head)
2. Prof. Kunjir G. M. (Coordinator)
3. Prof. Tambe S. N. (Member)
4. Prof Avhad P. R. (Member)


Co ordinator
IQAC, K. J. Somaiya College
Kopargaon, Dist. A.Nagar


Principal
K. J. Somaiya College of Arts
Commerce & Science, Kopargaon

Date: 06/07/2019

Notice

The meeting members of certificate course committee are hereby informed that, meeting about certificate course syllabus framing will be held on 09/07/2019 at 10.00 am in the Computer Science Department.

Agenda: Syllabus framing of Certificate Course.

1. Prof. Kusalkar A. A. (Head)
2. Prof. Kunjir G. M. (Coordinator)
3. Prof. Tambe S. N. (Member)
4. Prof Avhad P. R. (Member)

Kusalkar A.A.
Kunjir G.M.
SNT
Avhad P.R.

Kusalkar A.A.

HOD

Dept. of Computer Science
K.J. Somaiya College, Kopergaon

Principal

K. J. Somaiya College of Arts
Commerce & Science, Kopergaon

Date: 09/07/2019

Department of Computer Science

Meeting

The meeting of committee members was conducted in the Department of Computer Science and discussed the syllabus framing of certificate course entitled Computer Hardware and networking in detail for third year students. Following members were present for the meeting.

Minutes of meeting:

- After detail discussion of committee members, decided to frame the syllabus of certificate course.
- It will be implemented from current academic year 2019-20.

1. Prof. Kusalkar A. A. (Head)
2. Prof. Kunjir G. M. (Coordinator)
3. Prof. Tambe S. N. (Member)
4. Prof Avhad P. R. (Member)

Kusalkar A.A.

Kunjir G.M.

NT

Avhad P.R.

Kusalkar A.A.

HOD

Dept. of Computer Science
K.J.Somaiya College, Kopargaon

Bob

Principal

K. J. Somaiya College of Arts
Commerce & Science, Kopargaon