



# Sharnbasveshwar

College of Science  
Kalaburagi - 585103  
(Karnataka)

Estd 1956



## ಶರಣಬಸವೇಶ್ವರ

ವಿಜ್ಞಾನ ಮಹಾವಿದ್ಯಾಲಯ,  
ಕಲಬುರಗಿ-೫೮೫ ೧೦೩  
( ಕರ್ನಾಟಕ )



### Institutions Run by Centenary Celebrated

Sharnbasveshwar Vidya Vardhak Sangha, Gulbarga  
Sharnbasva University, Gulbarga 2013

1. Sharnbasveshwar Vidya Vardhak Sangha, Gulbarga 1903
2. Godutai Engineering College for Women, Gulbarga 2011
3. Appa Institute of Engineering & Technology, Gulbarga 2002
4. Appa Institute of Engineering Science & Technology M.Tech. in Comp. & Digital Electronics 2011
5. Veerappa Nisty Engineering College, Shorapur 2010
6. Lingraj Appa Engineering College, Bidar 2011
7. Doddappa Appa Institute for MCA, Gulbarga 1999
8. Doddappa Appa Institute of MBA, Gulbarga 1998
9. Appa Institute of MBA (VTU) Gulbarga 2007
10. Godutai Institute of MBA (For Women) Gulbarga 2011
11. Lingarajappa Institute of MBA, Bidar 2011
12. Veerappa Nisty Institute of MBA, Shorapur 2011
13. Appa Research Institute, Gulbarga 2012  
(Recognized by Mysore University, Mysore)
14. Sharnbasveshwar Science College, Gulbarga 1956
15. Post Graduate studies in Computer Science Sharnbasveshwar College of Science, Gulbarga 2012
16. Post Graduate studies in Master of Tourism Administration 5 year integrated Course (MTA) 2007
17. Post Graduate Studies in Master of Arts in Journalism & Mass Communication, Godutai College, Gulb. 2009
18. Post Graduate Studies in Master of Fine Arts, Sharnbasveshwar Arts College, Gulbarga 1957
19. Sharnbasveshwar Residential Public School, with State & CBSC Syllabus, Gulbarga 1967
20. Sharnbasva Public School Residential Independent Junior Science College, Shorapur. 2011
21. Sharnbasva Public School's Residential Independent Junior Science College, Bidar 2011
22. Sharnbasveshwar Antranwani Community Radio, (FM) Gulb. 2009
23. Mahadevi Girls Higher Primary School, Gulbarga 1934
24. Mahadevi Girls High School, Gulbarga 1960
25. Sharnbasveshwar Composite P.U. College, Gulbarga 1949
26. Sharnbasveshwar Ind. P.U. College of Science, Gulbarga 1956
27. Sharnbasveshwar College of Commerce, Gulbarga 1961  
with Post-Graduate Diploma in Business Management
28. SSK, Basveshwar College of Arts & Science, Basavakalyan 1967
29. Sharnbasveshwar Printing & Publication, Gulbarga 1969
30. Godutai Doddappa Appa P.U. College for Women, Gulbarga 1971
31. Godutai Doddappa Appa Arts & Commerce College for Women, Gulbarga 1973
32. Sharnbasveshwar Granthavishwa Vidya Nilaya, Gulbarga 1978
33. Sharnbasveshwar College of BBM, Gulbarga 1996
34. Doddappa Appa Residential P.U. Science College, Gulbarga 1999
35. Muktabika Residential Ind. P.U. Science College For Girls, Gulbarga 1999
36. Godutai Doddappa Appa BCA College for Women, Gulbarga 2001
37. Muktabika Residential BCA College for Women, Gulbarga. 2001
38. Doddappa Appa BCA College, Basavakalyan 2001
39. Sharnbasveshwar BCA College, Gulbarga 2001
40. Muktabika Residential BBM College, Gulbarga 2004
41. Sharnbasveshwar BBM College, Basavakalyan 2004
42. Godutai College of Education (B.Ed.) Gulbarga 2004
43. Sharnbasveshwar B.Ed. (J.M.) Gulbarga 2004
44. Godutai D.Ed. College for Women, Gulbarga 2004
45. Komalata Resi. P.U. College for Girls, Basavakalyan 2006
46. Sharnbasveshwar Residential Public School, Basavakalyan 2006
47. Sharnbasveshwar D.Ed. College, Basavakalyan 2004
48. Doddappa Appa B.Ed. College, Basavakalyan 2004
49. Sharnbasveshwar Public Library, Gulbarga 1918

(Affiliated to Gulbarga University, Kalaburagi and Recognised by the Government of Karnataka)

☎: (08472) 221941, • Fax : 08472-241492,

email: sbcscg@rediffmail.com, www.sharnscience.org

Ref.No .  
To,

Date :

The Under Secretary (FD-III)

University Grants Commission

New Delhi-110002

Sub: Submission of COC Chemical Analysis details report & Audited

Utilization Certificate during the academic Year 2016-17

Ref: Your Letter F.No4-347/2011(COC), dated 12.01.2012

Sir,

With reference to the above mentioned subject, I am herewith submitting **Career Oriented Course-“Chemical Analysis”** detail report & Audited utilization Certificate of Expenditure of grants received under UGC scheme of Career Oriented Course for the academic year 2016-17

Kindly acknowledge the receipt of the same.

Thanking you.

Yours Faithfully

  
PRINCIPAL

Encl:

1. UGC Sanction Letter
2. Approved Syllabus copy.
3. Students Enrolment list.
4. Result Sheet.
5. Utilization Certificate-Annexure-IV
6. Statement of expenditure-Annexure-V
7. Remuneration paid to coordinator/Teaching Staff-receipt.
8. List of Equipments /Books Purchased.
9. Xerox copies of Bills paid .



**SHARNBASVESHWAR COLLEGE OF SCIENCE,  
GULBARGA-585103, KARNATAKA**  
(Affiliated To Gulbarga University, Gulbarga)

**Progress Report**  
**On**  
**Career Oriented Course - "*Chemical Analysis*"**  
For the academic year 2016-17

Approved By Gulbarga University Gulbarga &  
Sanctioned By



ज्ञान-विज्ञान विमुक्तये

**University Grant Commission**  
**New Delhi-110002**



ज्ञान-विज्ञान विमुक्तये

UNIVERSITY GRANTS COMMISSION  
35-FEROZSHAH ROAD  
NEW DELHI-110 001

F. No. 4- 347/2011(COC)

January, 2012  
12 JAN 2012

The Under Secretary (FD-III)  
University Grants Commission  
New Delhi-110002

Sub: - Release of Grant-in-aid to Shri. Sharanabasaveshwar Science College, Gulbarga, Dist. Gulbarga, Karnataka-585103 under the UGC scheme of Career Oriented Courses-reg.

Sir,

With reference to the proposal submitted by Shri. Sharanabasaveshwar Science College, Gulbarga, Dist. Gulbarga, Karnataka-585103 under the UGC scheme of Career Oriented Courses, I am directed to convey the approval of the University Grants Commission for starting the following Career Oriented Courses in the above mentioned College from the academic year 2011-12.

Courses Approved	Seed Money approved (Rs. in lakh)	Grant released (90%)
<u>Science</u>		
1. Hardware and Networking	Rs. 10.00	Rs. 9,00,000/-
2. Chemical Analysis	Rs. 10.00	Rs. 9,00,000/-
<b>Total</b>	<b>Rs. 20.00</b>	<b>Rs. 18,00,000/-</b>

I am also directed to convey the sanction of the University Grants Commission for payment of Rs. 18,00,000/- (Rupees Eighteen Lakh only) to the Principal, Shri. Sharanabasaveshwar Science College, Gulbarga, Dist. Gulbarga, Karnataka-585103 as 90% grant (Seed Money) under the scheme of Career Oriented Courses.

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OF SCIENCE, GULBARGA

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The assistance available in the programme is only in the form of a one - time as "**Seed Money**". The amount may be utilized for the purchase of books and journals augmentation of laboratory facilities, equipment and payment of remuneration to the Guest faculty only.

The terms and conditions of the approval and grant released are as per the guidelines of the scheme.

1. The sanctioned amount is dabitable to the following Heads and is valid for payment during the current financial year **2011-12.**

S. No.	Component	Head of A/c	Amount
1.	General 77.5%	5.(i) Code No. 31	13,95,000/-
2.	SC 15%	1B h(i) (b) Code No. 31	2,70,000/-
3.	ST 7.5%	1B h(ii) (b) Code No. 31	1,35,000/-

2. The amount of grant shall be drawn by the Under Secretary (Drawing and Disbursing Officer), University Grants Commission on the Grants -in -aid bill and shall be disbursed to the credited to the Principal, **Shri. Sharanabasaveshwar Science College, Gulbarga, Dist. Gulbarga, Karnataka-585103** through Demand Draft/Mail Transfer.
3. The grant is subject to the adjustment on the basis of Utilization Certificate in the prescribed proforma submitted by the University/College/Institution.
4. The University/College shall maintain proper accounts only on approved items of expenditure.
5. The Utilization Certificate to the effect that the grant has been utilized for the purpose for which it was sanctioned shall be furnished to the University Grants Commission **On receipt of the same, 10% grant would be sanctioned to the grantee Institution.**
6. The assets acquired wholly or substantially out of the University Grants Commission grant shall not be disposed or encumbered or Utilized for the purposes other than those for which the grant was given, without proper sanction of the University Grants Commission and should, at any time the college ceases to function, such assets shall revert to the University Grants Commission.
7. A Register of Assets acquired wholly or substantially out of the grant shall be maintained by the University in the prescribed form.
8. The grantee institution shall ensure the Utilization of grants-in-aid for which it is being sanctioned/paid. In case non-utilization/part utilization, the simple interest @ 10% per annum as amended from time to time on unutilized amount from the date of drawl to the date of refund as per provisions contained in General Financial Rules of Govt. of India will be charged.

  
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COLLEGE OF SCIENCE, GULBARGA

9. The University/ College shall implement the programme from the academic year 2011-12 positively and UGC to be informed in this regard.
10. The University/Institute/College is strictly following the UGC Regulations on curbing the menace of Ragging in Higher Education Institutions 2009.
11. The interest earned by the University/College/Institute on this grants in aid shall be treated as additional grant and may be shown in the U.C./Statement of expenditure to be furnished by grantee institutions.
12. The University/College shall follow strictly all the instructions issued by the Govt. of India from time to time with regard to reservation of posts for scheduled Caste and Scheduled Tribes.
13. The University/College shall fully implement the Official Language Policy of Union Govt. and comply with the Official Language Act, 1963 and Official Language (use for officially purpose of the Union) Rules, 1976 etc.
14. The Sanction issues in exercise of the delegation of powers vide Commission office order No. 25/92 dated May.01, 1992.
15. **The Universities/ Colleges shall submit Annual Progress Report to the UGC office.**
16. **The Universities/ Colleges already running the Career Oriented Courses and completed 5 years would submit the audited utilization certificate/ statement of expenditure immediately to the UGC for settlement the accounts.**
17. The funds to the extent are available under the scheme and have been noted in BCR for the year 2011-12 at S. No. \_\_\_\_\_ Page No. \_\_\_\_\_.

Yours faithfully,

(Sunita Chugh)  
Under Secretary

**Copy forwarded for information and necessary action to:**

1. The Principal, Shri. Sharanabasaveshwar Science College, Gulbarga, Dist. Gulbarga, Karnataka-585103 to intimate the receipt of the letter as well as the receipt of the sanction grant.
2. The Secretary to the Government of Karnataka, Deptt. of Education, Bangalore.
3. The Registrar, Gulbarga University, Jnana Ganga, Gulbarga-585106.
4. Office of Director, General, Audit General Revenues, AGCR Bldg., I.P. Estate, New Delhi.
5. Guard File, UGC, New Delhi.

*Usha*  
(Usha Naidu)  
Section Officer

*B. S. Reddy*  
PRINCIPAL  
SHARNBASAVESHWAR COLLEGE  
OF SCIENCE, GULBARGA

*B. S. Reddy*  
PRINCIPAL  
SHARNBASAVESHWAR  
COLLEGE OF SCIENCE, GULBARGA



**GULBARGA UNIVERSITY**

"Jnana Ganga", GULBARGA - 585 106, Karnataka, India.



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Grams:

UNIGUL

ಕ್ರ. ಸಂ. ಗುಬಿಗು/ವಿಮವಿ/ಬಿಟಿಎಸ್/2012-13/ ೦/

ದಿನಾಂಕ: 1-4-13

ಅಧಿಸೂಚನೆ

ವಿಷಯ: 2012-13 ನೇ ಸಾಲಿನಿಂದ "Chemical Analysis of Water" COP

ಕೋರ್ಸಿನ ಸ್ನಾತಕ ಕೋರ್ಸಿನ ಪಠ್ಯಕ್ರಮ ಜಾರಿಗೊಳಿಸುವ ಬಗ್ಗೆ.

ಉಲ್ಲೇಖ: 1) ರಸಾಯನಶಾಸ್ತ್ರ ಸ್ನಾತಕ ಅಧ್ಯಯನ ಪುಂಡಳಿ

ನಿರ್ಣಯ (1) ದಿನಾಂಕ: 28.09.2012

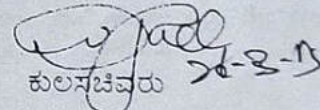
2) ವಿದ್ಯಾವಿಷಯಕ ಪರಿಷತ್ ಸಭೆಯ ಗೊತ್ತುಪಳಿ ಸಂಖ್ಯೆ 23

ದಿನಾಂಕ: 23.11.2012

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ಉಲ್ಲೇಖ (2) ರ ವಿದ್ಯಾವಿಷಯಕ ಪರಿಷತ್ ನಿರ್ಣಯದಂತೆ, "Chemical Analysis of Water" ಸ್ನಾತಕ "Career Orientation Programme" ನ ಕೋರ್ಸಿನ ಪಠ್ಯಕ್ರಮವನ್ನು 2012-13ನೇ ಸಾಲಿನಿಂದ ಜಾರಿಗೆ ಬರುವಂತೆ ಈ ಮೂಲಕ ಪ್ರಕಟಗೊಳಿಸಲಾಗಿದೆ.

ಸದರಿ ವಿಷಯವನ್ನು ವಿದ್ಯಾರ್ಥಿಗಳ ಹಾಗೂ ಸಂಬಂಧಪಟ್ಟ ಶಿಕ್ಷಕರ ಗಮನಕ್ಕೆ.

  
ಕುಲಸಚಿವರು

ಗುಲಬರ್ಗಾ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಗುಲಬರ್ಗಾ

ಗೆ.

1) ಅಧ್ಯಕ್ಷರು, ರಸಾಯನಶಾಸ್ತ್ರ ಅಧ್ಯಯನ ಪುಂಡಳಿ, ಗುಲಬರ್ಗಾ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಗುಲಬರ್ಗಾ.

2) ಸಂಬಂಧಪಟ್ಟ ಕೋರ್ಸು ಹೊಂದಿರುವ ಮಹಾವಿದ್ಯಾಲಯದ ಪ್ರಾಂಶುಪಾಲರಿಗೆ.

ಪ್ರತಿ:

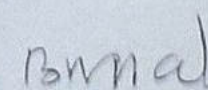
1) ಕುಲಸಚಿವರು (ಮೌಲ್ಯಮಾಪನ), ಗುಲಬರ್ಗಾ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಗುಲಬರ್ಗಾ.

2) ಕ್ಷೇತ್ರಪತಿಗಳ ಆಪ್ತ ಕಾರ್ಯದರ್ಶಿ / ಕುಲಸಚಿವರ ಆಪ್ತ ಸಹಾಯಕರ ಮಾಹಿತಿಗಾಗಿ.

*ಶಿಕ್ಷಣ, ವಾಣಿಜ್ಯ, ಸಾಹಿತ್ಯ ಮತ್ತು ಸಂಸ್ಕೃತಿ ಇಲಾಖೆ, ಗುಲಬರ್ಗಾ*  
*(Sd/-) (Signature)*  
**Chemical Analysis (Coordinator)**

*5/4/13*

D/ACA(BOS)(C-3)

  
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SHARNBASVESHWAR COLLEGE  
OF SCIENCE, GULBARGA

**Certificate Course in Chemical Analysis Of Water**  
**One year course (Approved by GUG)**

**I Teaching**

Theory: 4 hours per week (Paper- I & Paper- II).  
Practical: 3 hours per week (Practical- I) in first term.  
Similarly 3 hours per week (Practical- II) in Second term.  
*The above work has to be completed within the academic year.*

**II Examination**

Theory Paper- I and Paper- II of 3 hours duration each for 80 marks, internal assessment for 20 marks (conduct two tests and take average).

Practical- I and Practical- II of 3 hours for 50 marks each. (40 marks each for final examination and 10 marks each for internal assessment).

**Question paper pattern**

Theory: Question paper contains three sections.

Section A: There shall be Fifteen bits of one mark each; candidate has to answer all ( $1 \times 15 = 15$ ).

Section B: There shall be seven questions of 5 marks each; candidate has to answer any Five. Total marks will be 25 ( $5 \times 5 = 25$ ).

Section C: There shall be six questions of 10 marks each; candidate has to answer any Four. Total marks will be 40 ( $4 \times 10 = 40$ ).

Practical: Distribution of practical marks

Experiment	Journal	Viva-voce	Internal assessment	Total marks
Practical-I (30 marks)	05	05	10	50marks
Practical- II (30 marks)	05	05	10	50marks

**Paper-I**

**General Chemical Analysis (64 hours)**

**1 SI units:** Basic units, derived units, inter conversion of units 2 hours

**2 Stoichiometry:**

Mole concept, Avogadro number. Atomic weight, equivalent weight of elements, acids, bases, oxidizing agents and reducing agents. Molecular weight. Concept of Normality, molality and molarity.

Volumetric techniques and Gravimetric techniques in brief. 10 hours

**3 Analytical chemistry:**

Role of Analytical chemistry, types of analysis, classification of analytical methods, selecting an analytical method, factor affecting the analytical method, cleanliness and neatness in the analytical laboratory, laboratory note book and its importance, safety in the laboratory. 10 hours

**4 Laboratory Operations And Practices-**

Filtration, drying, measuring volume, stoichiometry and graphs, concentration, percentage solute, activity, titration of a solution, parts per thousand (ppt) and parts per million (ppm), standards, chemical standards, sample preparation, drying samples, weighing, dissolving, decomposition of organic matter, ionization, precipitation.

Analytical balances (electronic, mechanical, semi micro, micro), errors in weighing, cleaning glass apparatus, preparations before calibration operation, calibration of glassware. 16 hours

**5 Sampling:**

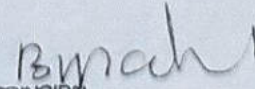
Sampling techniques, sampling statistics, variability in the sample, sample stability, field sampling. Sample preparation, sample decomposition and dissolution-decomposing samples with inorganic acids, microwave decomposing, decomposing organic samples, decomposing inorganic materials with fluxes, selecting and handling reagents. 10 hours


**6 Errors and evaluation:**

Central value, mean, arithmetic mean, median, precision, standard deviation, accuracy, types of errors, minimizing errors, significant figures and computations, reporting of analytical data, evaluation of data, uses of statistics. 08 hours

**7 Computers in water analysis:** Use of computers in the water analysis, handling analytical results, instrument control and signal processing, computer data bases for analytical information, laboratory information management, laboratory computer systems. 08 hours

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### Books Recommended:

1. Analytical Chemistry –Dr Alka L Gupta, Pragathi Prakashan, Meerut.
2. The Chemical Analysis of Water: General Principles and Techniques– DTE Hunt, Anthony Leslie Wilson
3. Fundamentals of Analytical Chemistry–D A Skoog, DM West, Holler and Crouch, Saunders publishing, Newyork.
4. Qualitative Analysis– RA Day and AL Underwood,Prentice Hall, Inc, New Delhi.
5. Instrumental methods of Chemical Analysis–Chatwal and Anand, Himalaya Publications.
6. Modern Analytical Chemistry–Harvey, Harcourt Publishers.
7. Vogel's text book of Quantitative Chemical Analysis– J Mendham, RC Denney, Indian reprint Pearson Education Pvt, Ltd., New Delhi.
8. Instrumental methods and Chemical Analysis—H Kaur, Pragathi Prakashan, Meerut.
9. Text book of Quantitative Chemical Analysis—A I Vogel (ELBS)
10. Text book of Organic Chemistry—Bahl and Arun Bahl

### Paper-II

#### Water Analysis (64 hours)

1. **Water as a component of environment:**  
Sources of water- atmospheric water, surface water, stored water, ground water, human use of water. 2hours
2. **Water pollution:**  
Water pollutants, classification of water pollutants with explanation, origin of water pollutants, sources of water pollutants-Natural, domestic sewage, agricultural wastes, industrial wastes, radioactive wastes.  
Effect of water pollutants-physicochemical effects, biological effects, toxic effects, pathogenic effects. Types of water pollution-physical pollution, inorganic pollution, organic pollution, biological pollution, oil pollution, pesticide pollution, radioactive pollution. 10hours
3. **Water quality standards:**  
Water quality standards related to public health, environment and agriculture-Drinking water standards, bacteriological standards, irrigation standards- salinity, water infiltration rate, specific ion toxicity, miscellaneous, sodium concentration, stream standards, effluent standards. Chemical and biological parameters for evaluation of aquatic environment. 12hours
4. **Collection of Water samples:**  
Ruttner water sampler, Von Dorn water sampler, Thermos-flask water sampler, pump samplers. Collection of water samples for irrigation, Handling and preservation of water samples, collection of biological matter of water. 06hours
5. **Physical analysis of water:**  
colour-platinum-cobalt method, Forel-Ule colour method, Movement, Temperature- measurement of surface temperature, measurement of sub-surface temperature, Odour and taste, Transparency, Turbidity. 06hours
6. **Chemical analysis of water:**  
 $P^H$ , conductivity, measurement of Electrical conductivity(soluble salts concentration), acidity, alkalinity, total dissolved salts, total solids, dissolved oxygen(oxygen meter method, Winkler's method), calcium by Versenate method (temporary hardness), calcium plus magnesium (total hardness), sodium and potassium, chloride, fluorides, sulphate, boron, free carbon dioxide, total carbon dioxide, hydrogen sulphide, silica, phosphates, total carbohydrate, dissolved carbohydrate, oil and grease. Biochemical Oxygen demand (BOD), Chemical Oxygen demand (COD). 12 hours
7. **Analysis of Different Forms Of Nitrogen:**  
Ammonia, nitrite, nitrate, total organic nitrogen (TON), dissolved organic nitrogen (DON), particulate organic nitrogen (PON) present in water samples. 06hours
8. **Instrumental Analysis of water:** Applications of the following instruments in the physico-chemical analysis of water-Uv solution spectro photometry and colorimetry, Flame emission spectrometry, Atomic-Absorption Spectrometry (AAS), Mass spectrometry, Infrared spectrometry, High performance liquid chromatography,  $P^H$ -meter and turbidometry. 10hours

### Books Recommended:

*B. M. Acharya*  
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*Principals*  
PRINCIPAL

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1. Methods in Environmental Analysis Water soil and air—PK Gupta
2. Water pollution—VP Kudesia, Pragathi Prakashan, Meerut.
3. Analytical Chemistry—Dr Alka L. Guptha, Pragathi Prakashan, Meerut.
4. The Chemical Analysis of Water: General Principles and Techniques—DTE Hunt, Anthony Leslie Wilson.
5. Analytical Chemistry Vol I, II and III—Subhash and Sathish, Pragathi Prakashan, Meerut.
6. Instrumental methods of Chemical Analysis—Gurudeep R Chatwal and Anand, Himalaya Publications.
7. Chromatography—BK Sharma, GOEL Publications.
8. Basic concepts of Analytical Chemistry—SM Khopkar, New Age International Publications.
9. Standard methods of Chemical analysis—FJ Welchar, Vol. I and II.
10. Electroanalytical Chemistry—BH Voigics, John Wiley Publications.

#### Practical-I

- I.
  1. Introduction to the laboratory glass wares used in chemical analysis.
  2. Giving knowledge about laboratory note book and its importance, safety in the analytical laboratory, laboratory operations and practices.
  3. Calibration of Burette, pipette, volumetric flask and fractional weights.
  4. Use of balances: rough, chemical and electronic balances.
- II. Volumetric Analysis:
  1. Determination of total hardness (Ca & Mg) present in the water
  2. Estimation of alkalinity due to Sodium carbonate and bicarbonate in the given water sample.
  3. Determination of Acidity of a given water sample.
  4. Determination of dissolved oxygen in the given water sample.
  5. Estimation of Chemical Oxygen Demand
  6. Estimation of amount of chloride present in the given water sample by using Mohr's method.
- III Gravimetric Analysis:
  1. Estimation of Mg as its axinate present in 250ml of given sample of water.
  2. Estimation of sulphate present in 250ml given solution using barium chloride.
  3. Estimation of Ca as calcium oxalate present in 250ml of given sample of water.

#### Practical-II

- I. Identification of following ions present in the water sample by chemical tests.  
 Acid radicals—Carbonate, bicarbonate, chloride, fluoride, sulphate, nitrate  
 Basic radicals—copper, lead, cadmium, iron, zinc, calcium, magnesium, sodium and potassium
- II. Instrumentation Exercises:
  1. Estimation of  $\text{Cu}^{+2}$  present in the given solution colorimetrically.
  2. Estimation of  $\text{CO}_3^{-2}$  and  $\text{HCO}_3^{-1}$  present in the given solution by  $\text{P}^{\text{H}}$  meter.
  3. Determination of  $\text{P}^{\text{H}}$  of acetate buffer by potentiometrically.
  4. Determination of Ferrous ammonium sulphate using standard  $\text{K}_2\text{Cr}_2\text{O}_7$ , potentiometrically

#### Books Recommended:

1. Advanced Practical Inorganic chemistry—Gurudeep Raj (goel publications)
2. Advanced practical Physical Chemistry—JB Yadav
3. Instrumental methods of Chemical Analysis—Gurudeep chatwal and Anand (Himalaya publications)
4. Industrial Chemistry—BK Sharma (goel publications)
5. Practical Chemistry—OP Pandey, DN Bajpai (S Chand publications)
6. A Text book of Quantitative chemical analysis—AI Vogel
7. A Text book of Qualitative chemical analysis—AI Vogel
8. Analytical Chemistry—Dr Alka L Guptha, Pragathi Prakashan, Meerut.
9. The Chemical Analysis of Water: General Principles and Techniques—DTE Hunt, Anthony Leslie Wilson
10. College practical chemistry—Patel, Jakali, Mohandas, Israney, Turakhia (Himalaya Publishing House)

# Sharnbasveshwar College of Science, Gulbarga

Final List of the selected students for chemical analysis course – 2016-17

S.No	College Roll No.	Register No.	Name	Father name
1.	5	1537769	ASHWINI P	GURUBHIMARAYA
2.	7	1537772	AMARENDRA	BAAVARAJAYYA
3.	8	1537774	AMBIKA	ASHOKKUMAR
4.	10	1537776	AMBIKA	VISHWANATH REDDY
5.	15	1537781	BHAGYASHREE BADIGER	LAXMAN BADEGER
6.	30	1537798	KANAKA	PRAKASH
7.	31	1537799	LAXMI	AMRUTRAO PATTANSHETTY
8.	40	1537808	Mahananda	Kallappa
9.	41	1537809	MALASHREE	BASAVARAJ MAINDARGI
10.	43	1537811	NEELAMBIKA	BASAVARAJ
11.	47	1537815	PREETI	BHEEMARAO PATIL
12.	49	1537817	POOJA S PATIL	SURESH PATIL
13.	50	1537818	POOJA Y M	YESHWANT
14.	52	1537820	PREETI	MALLIKARJUN
15.	54	1537822	POOJA S M	SANGAYYA M
16.	61	1537830	ROOPA	RAVINDRA CHINCHOLI
17.	68	1537838	SUDHARANI	SURYAKANTH
18.	86	1537858	SHRUTIKA	SANGAMANATH SALAPOOR
19.	90	1537862	UMADEVI	MALLIKARJUN
20.	91	1537863	VAIBHAVI V K	VIJAYAKUMAR K
21.	92	1537864	VIDYASHREE	SHIVASHANKAR SARASAMBI
22.	93	1537865	VIDYASHREE MALI	SHRIMANTH MALI
23.	198	1537941	ASHARANI	RAJKUMAR
24.	199	1537942	ANJALI P JOSHI	PANDURANG JOSHI
25.	200	1537943	ASMAT	HUSENSAB NADAF
26.	205	1537948	GEETA	SHREEMANT
27.	211	1537955	MAHMADAJURUDEEN	IMAMASAB
28.	218	1537963	RAMESH J P	JATTAPPA P
29.	219	1537964	ROOPA S K	SHIVABASAPPA KANDGAL
30.	221	1537966	SANTOSHKUMAR B	SHIVAPPA
31.	224	1537969	SWATI	SHIVALINGAPPA
32.	225	1537970	SHILPA	NAGANNA
33.	233	1537981	VIJAYALAXMI	VENKATESH
34.	106	1538007	REBAI	SHRISHAIL DESAI
35.	239	1538029	MALLIANATH B	SHRISHAIL B
36.	242	1538032	PRIYANKA	VISHWANATHREDDY
37.				
38.				
39.				
40.				



Coordinator  
Co-ordinator

Carrier Oriented Course (Chemical Analysis)  
Sharnbasveshwar College of Science  
GULBARGA-3



PRINCIPAL  
SHARNBASVESHWAR  
COLLEGE OF SCIENCE, GULBARGA

COLLEGE CODE: C312 Class: BSc V and VI Sem FOR ACADEMIC YEAR 2016-17

Sl No	Roll No	Reg. No	Candidates Name	Father Name	Theory Paper-I			Theory Paper-II			Practical-I			Practical-II			Grand Total
					General Chemical Analysis			Water Analysis			For 50 M			For 50 M			
					Theory	LA for 80M	LA for 20M	Total 100	Theory	LA for 80M	LA for 20M	Total 100	Exp	LA for 40M	LA for 10M	Total	
1	5	1537769	ASHWINI P	GURUBHIMARAYA	60	19	79	65	18	83	38	10	48	36	10	46	256
2	7	1537772	AMARENDRA	BAAVARAJIYYA	69	19	88	69	17	86	39	10	49	37	10	47	270
3	8	1537774	AMBIKA	ASHOKKUMAR	73	18	91	67	19	86	37	10	47	36	10	46	270
4	10	1537776	AMBIKA	VISHWANATH REDDY	71	19	90	63	19	82	38	10	48	37	10	47	267
5	15	1537781	BHAGYASHREE BADIGER	LAXMAN BADEGER	66	18	84	68	18	86	37	10	47	37	10	47	264
6	30	1537798	KANAKA	PRAKASH	69	17	86	69	17	86	38	10	48	36	10	46	266
7	31	1537799	LAXMI	AMRUTRAO PATTANSHETTY	73	19	92	70	19	89	36	10	46	38	10	48	275
8	40	1537808	Mahananda	Kallappa	72	18	90	71	18	89	38	10	48	36	10	46	273
9	41	1537809	MALASHREE	BASAVARAJ MAINDARGI	71	19	90	69	18	87	37	10	47	37	10	47	271
10	43	1537811	NEELAMBIKA	BASAVARAJ	70	19	89	71	17	88	37	10	47	37	10	47	271
11	47	1537815	PREETI	BHEEMARAO PATIL	65	18	83	68	17	85	39	10	49	36	10	46	263
12	49	1537817	POOJA S PATIL	SURESH PATIL	71	19	90	72	17	89	37	10	47	37	10	47	273
13	50	1537818	POOJA Y M	YESHWANT	68	19	87	71	18	89	37	10	47	37	10	47	270
14	52	1537820	PREETI	MALLIKARJUN	72	18	90	67	17	84	38	10	48	38	10	48	270
15	54	1537822	POOJA S M	SANGAYYA M	68	19	87	70	19	89	39	10	49	36	10	46	271
16	61	1537830	ROOPA	RAVINDRA CHINCHOLI	68	19	87	69	18	87	38	10	48	36	10	46	268
17	68	1537838	SUDHARANI	SURYAKANTH	69	17	86	69	19	88	39	10	49	37	10	47	270
18	86	1537858	SHRUTIKA	SANGAMANATH SALAPOOR	73	19	92	72	18	90	36	10	46	37	10	47	275
19	90	1537862	UMADEVI	MALLIKARJUN	66	19	85	62	17	79	37	10	47	36	10	46	257
20	91	1537863	VAIBHAVI V K	VUJAYAKUMAR K	71	19	90	67	19	86	38	10	48	37	10	47	271
21	92	1537864	VIDYASHREE	SHIVASHANKAR SARASAMBI	69	19	88	70	18	88	38	10	48	37	10	47	271
22	93	1537865	VIDYASHREE MALI	SHRIMANTH MALI	67	19	86	70	19	89	39	10	49	36	10	46	270
23	198	1537941	ASHARANI	RAJUMAR	72	19	91	68	19	87	36	10	46	37	10	47	271
24	199	1537942	ANJALI P JOSHI	PANDURANG JOSHI	71	19	90	70	19	89	37	10	47	37	10	47	273
25	200	1537943	ASMAT	HUSENSAB NADAF	70	18	88	72	19	91	38	10	48	37	10	47	274
26	205	1537948	GEETA	SHREEMANT	74	19	93	70	19	89	36	10	46	36	10	46	274
27	211	1537955	MAHMADAUURUDEEN	IMAMASAB	70	19	89	71	19	90	37	10	47	37	10	47	273
28	218	1537963	RAMESH J P	JATTAPPA P	69	18	87	71	18	89	38	10	48	36	10	46	270
29	219	1537964	ROOPA S K	SHIVABASAPPA KANDGAL	73	18	91	72	19	91	37	10	47	37	10	47	276
30	221	1537966	SANTOSHKUMAR B	SHIVAPPA	76	19	95	71	19	90	38	10	48	38	10	48	281
31	224	1537969	SWATI	SHIVALINGAPPA	74	19	93	69	18	87	37	10	47	37	10	47	274
32	225	1537970	SHILPA	NAGANNA	71	18	89	72	19	91	36	10	46	36	10	46	272
33	233	1537981	VUJAYALAXMI	VENKATESH	73	18	91	71	19	90	37	10	47	37	10	47	275
34	106	1538007	REBAI	SHRISHAIL DESAI	68	19	87	71	19	90	38	10	48	36	10	46	271
35	239	1538029	MALLIANATH B	SHRISHAIL B	68	19	87	70	19	89	38	10	48	37	10	47	271
36	242	1538032	PRIVANKA	VISHWANATHREDDY	72	18	90	69	17	86	38	10	48	37	10	47	271

Principal  
PRINCIPAL

Co-ordinator  
Sharnbasveshwar College of Science  
GULBARGA-3

Sharnbasveshwar College of Science, Gulbarga

Result of UGC Sponsored (Gulbarga University Gulbarga Approved) COC course in **Chemical Analysis**, examination held in March-2017 is here by declared.

The candidates with following Register Number are passed with distinction.

College: C312 Sharnbasveshwar College of Science, Gulbarga

1537769	1537772	1537774	1537776	1537781
1537798	1537799	1537808	1537809	1537811
1537815	1537817	1537818	1537820	1537822
1537830	1537838	1537858	1537862	1537863
1537864	1537865	1537941	1537942	1537943
1537948	1537955	1537963	1537964	1537966
1537969	1537970	1537981	1538007	1538029
1538032				

**Result Analysis**

College: C312 Sharnbasveshwar College of Science, Gulbarga  
Department: Chemistry  
Course: UGC Sponsored (Gulbarga University Gulbarga Approved)  
COC course in **Chemical Analysis**.

Number of candidates registered for the course: 36  
Number of candidates appeared for the examination: 36  
Number of candidates passed the examination: 36  
Percentage of passing: 100%



Coordinator  
Co-ordinator  
UGC, Carrier Oriented Course (Chemical Analysis)  
Sharnbasveshwar College of Science,  
GULBARGA-3



Principal  
PRINCIPAL  
SHARNBASVESHWAR  
COLLEGE OF SCIENCE, GULBARGA



**SHIVASHARANAPPA & COMPANY**

Cell : +91-99863 10941

**CHARTERED ACCOUNTANTS**

Plot No. 2, Near Mahadevi Flour Mill, Udaya Nagar, Jewargi Colony

KALABURAGI-585 102 - E-mail : s\_hbiradar@yahoo.co.in - sharanu.ca2009@gmail.com

**CA. Shivasharanappa H. Biradar**

B.Com,ACA

Date :

Ref:

## UTILIZATION CERTIFICATE

It is to certified that the grant of **Rs.18,00,000/-**(Rupees Eighteen Lakh only) approved by the University Grant Commission for Career Oriented Courses in colleges for Hardware and Networking and Chemical Analysis has been utilized by the College as per details given in the University Grants Commission in its letter No-F.No.4-347/2011(COC) dated 12-01-2012 and that all these terms and conditions have been fulfilled by the college and the grant has been utilized for the purpose for which it was approved. It is further certified that the inventories of permanent or semi-permanent assets created/ acquired wholly or mainly out of the grants given by the University Grants Commissions as indicated above are being maintained in the prescribed form and are being kept up-to-date and these assets have not been disposed off, encumbered or utilized for any other purpose. If as a result of check or audit objection, some irregularity is noticed at a later stage, the college shall be bound to refund the amount objected to.

PLACE: KALABURAGI.

DATE: 28-04-2017.



For SHIVASHARANAPPA & CO.  
CHARTERED ACCOUNTANTS

SHIVASHARANAPPA.H.BIRADAR.  
(PROPRIETOR)

PRINCIPAL  
SHARNBASVESHWAR  
COLLEGE OF SCIENCE, GULBARGA

PRINCIPAL  
SHARNBASVESHWAR COLLEGE  
OF SCIENCE, GULBARGA

**SHIVASHARANAPPA & COMPANY**

Cell : +91-99863 10941

**CHARTERED ACCOUNTANTS**

Plot No. 2, Near Mahadevi Flour Mill, Udaya Nagar, Jewargi Colony

KALABURAGI-585 102 - E-mail : s\_hbiradar@yahoo.co.in - sharanu.ca2009@gmail.com

**CA. Shivasharanappa H. Biradar**

B.Com,ACA

Date :

Ref No.

1.Name of the College : Sharanabasveshwar College of Science

Name of the Career Oriented Course : Hardware &amp; Networking and Chemical Analysis.

2.No.&amp; date of UGC's approval No. : F.No.4- 347/2011(COC) Dated 12-01-12

3.Period to which the accounts related:w.e.f: 01/04/2016 to 31/03/2017 Details of actual expenditure incurred of Rs.5,16,554-00,Grant approved Rs.20,00,000-00 and Grant released Rs.18,00,000-00 and excess expenditure of Rs.09-00 contributed by the college .

Particulars	Amount
<b>I. Hardware &amp; Networking</b>	
a) Equipments / Chemicals	1,79,720-00
b) Books	12,266-00
c) Co Ordinator Remuneration	5,000-00
d) Remuneration to Guest Faculty	<u>75,000-00</u>
<b>II.Chemical Analysis</b>	
a) Equipments/Chemicals	1,64,568-00
b) Books	--
c) Co Ordinator Remuneration	5,000-00
d) Remuneration to Guest Faculty	<u>75,000-00</u>
<b>Total</b>	<b>5,16,554-00</b>

PLACE:KALABURAGI.

DATE: 28-04-2017.

For SHIVASHARANAPPA & CO.  
CHARTERED ACCOUNTANTSSHIVASHARANAPPA.H.BIRADAR.  
(PROPRIETOR)PRINCIPAL  
SHARNBASVESHWAR  
COLLEGE OF SCIENCE, GULBARGAPRINCIPAL  
SHARNBASVESHWAR COLLEGE  
OF SCIENCE, GULBARGA

# SHARNBASVESHWAR COLLEGE OF SCIENCE, GULBARGA-3

UGC Sponsored Career Oriented On Chemical Analysis

(Affiliated to Gulbarga University, Gulbarga)

Academic Year 2016-17

## EXPENDITURE

SI NO.	AMOUNT PAID	PARTICULARS	AMOUNT
01.	Ch.No391966, Dated:21-05-2016 for 17,200.00/-	Purchase of equipments	17,200.00
02.	Ch.No394863, Dated:18-03-2017 for 117673.00/-	Purchase of equipments	1,17,673.00
03.	Ch.No394864, Dated:26-03-2017 for 575.00/-	Net protector total security	575.00
04.	Dated30-03-2017 for 5,000.00/-	Remuneration to Coordinator	5,000.00
05.	Dated30-03-2017 for 75,000.00/-	Remuneration to Guest- Faculty	75,000.00
06.	Ch. No.394875, Dated 31-03-2017 For 29,120.00	Purchase of chemicals	29,120.00
Total Expenditure in Two Lack Forty Four Thousand Five Hundred And Sixty Eight Only/-			2,44,568.00



COORDINATOR

Co-ordinator

UGC, Carrier Oriented Course (Chemical Analysis)  
Sharnbasveshwar College of Science,  
GULBARGA-3.



PRINCIPAL

PRINCIPAL  
SHARNBASVESHWAR  
COLLEGE OF SCIENCE, GULBARGA

# DHANALAXMI ELECTRONICS

## LG SHOPPE

A.K.Asian Grand,Opp.KEB Office,,Station Road,KALBURGI - 585101,Phone :08472-233861

Tin No : 29130257912

### DELIVERY CHALLAN CUM TAX INVOICE

Customer Name :

THE PRINCIPAL  
SHARANBASAVESHWAR COLLAGE OF SCIENCE

Invoice No : LGS-351

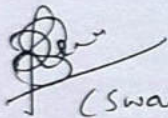
Invoice Date : 21-05-2016

Transport Mode : AUTO

GULBARGA  
08472-221941

Sl. No	Model No	Description	Qty	Rate	Gross	Vat %	Vat Amount	Net Value
1	GL-B221ASLS-DSLZEBN 602PRLU089656	21SLTR SCARLET LILY	1	17200.00	15021.83	14.50	2178.17	17200.00

Che. No : 391966  
21.5.2016



(Swarna Rani H)

Co-ordinator

UGC, Career Oriented Course (Chemical Analysis)  
Sharnbasveshwar College of Science,  
GULBARGA-3.

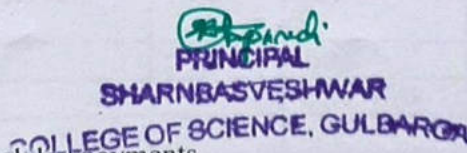
Total 1 15021.83 2178.17 17200.00

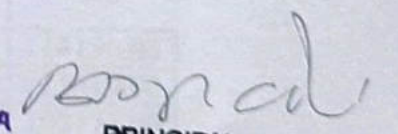
Amount in Words: SEVENTEEN THOUSAND TWO HUNDRED ONLY

Narration :

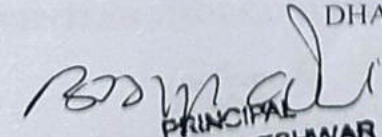
Terms & Conditions:

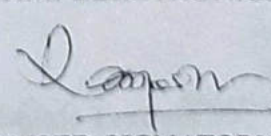
1. Goods once sold will not be taken back.
2. 2% Interest charges will charged for the for delay payments.
3. All disputes are subject to Gulbarga Jurisdiction.
4. DD/Cheque to be drawn in favour of Dhanalaxmi Electronics.
5. Bank Name : Bank of Baroda
6. Bank A/C No 13260500000481
7. IFSC Code : BARB0GULBAR
8. E.Sugam \_\_\_\_\_

  
PRINCIPAL  
SHARNBASVESHWAR  
COLLEGE OF SCIENCE, GULBARGA

  
PRINCIPAL  
SHARNBASVESHWAR  
COLLEGE OF SCIENCE, GULBARGA

DHANALAXMI ELECTRONICS

  
PRINCIPAL  
SHARNBASVESHWAR  
COLLEGE OF SCIENCE, GULBARGA

  
AUTHORISED SIGNATORY

Receiver's Sign, Date & Stamp





# Balaji Traders

TIN : 26351291632

1/78/763E, Uppar Lane, Station Area- Gulbarga - 585 102

Dealers in : Scientific Instruments, Electrical, Physics Computer, Stationary, Drawing Materials, Lab-Chemicals, Glassware, Office Appliance, Furniture & Novelties and all Institutional Supplies,

Final.

## TAX INVOICE

Bill No.: BT/16-17/017

Date: 20-08-2016

To  
The Principal,  
Sharanabasaveshwar College of Science,  
GULBARGA  
Dept. of Chemistry (COC)

Ch. No : 394863

18.03.2017

Sl.No.	Particulars	Qty.	Rate	Amount
<b>Equipments</b>				
1.	Refractometer Indian – For accurate measurement of indices of refraction transparent, liquids, solids and solutions. Measuring range 1.3000 to 1.7000, Measurement of sugar 0% to 95%. Complete in polished wooden box.	1 No.	8900/-	8900.00
2.	Stop watch racer	10 Nos.	475/-	4750.00
3.	Remi make Centrifuge machine 4 tube Laboratory grade.	2 Nos.	5600/-	11200.00
4.	Electrical Bunsen burner KBB-2	14 Nos.	2600/-	36400.00
5.	Bunsen burner with stop cock	48 Nos.	225/-	10800.00
6.	Elico Make Digital Conductivity Meter with conductivity Cell CC-03, Stand with cell holding clamp, instruction manual – Model CM-180	2 Nos.	13620/-	27240.00
7.	Stabilizer V-Guard 1KVA	2 Nos.	3250/-	6500.00
8.	Melting point apparatus Electrical	2 Nos.	2750/-	5500.00
9.	Hot and Cold air blower	2 Nos.	975/-	1950.00
10.	Infra Red Lamp – Complete with cord & stand	1 No.	950/-	950.00
			Total	114190.00
			Disc. 10%	11419.00
				102771.00
	Co-ordinator		Vat 14.5%	14901.79
	UGC Centre for Distance Education (Chemical Analysis)		G. Total	117672.79
	Sharanabasaveshwar College of Science, Gulbarga-585102.		Round off	117673.00

IN WORDS: Rs. ONE LAKHS SEVENTEEN THOUSAND SIX HUNDRED & SEVENTY THREE ONLY

TIN No. 26351291632

*(Signature)*  
PRINCIPAL

SHARNBASVESHWAR

For Balaji Traders

*(Signature)*  
PRINCIPAL

SHARNBASVESHWAR

COLLEGE OF SCIENCE, GULBARGA

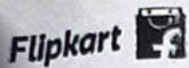
- Interest at 18% will be charged if the bill is not paid within 15 days of the date of issue.
- Our responsibility ceases when the goods are handed over to carriers and receipt obtained.

*(Signature)*  
PRINCIPAL

Autho. Signatory

Department of Chemistry

Sharanabasaveshwar College of Science



Contact us: 1800 208 9898 || cs@flipkart.com

Tax Invoice # F001400917-00030724

Beyond Toys And Gifts, Warehouse Address: Blocks B6 B8 Acorn Logistics and Industrial Complex, located at Drive Anjur Village, Opp Drive Petrol pump, NH-3, Mumbal - Nashik Highway Bhiwandi (Dist.), Mumbai, Maharashtra, INDIA - 421302

Order ID: OD208401078585562000

Order Date: 15-02-2017

Invoice Date: 16-02-2017

AT/TIN: 27250946579

ST #: 27250946579

**Billing Address**  
Mahantappa Limbitot  
S.B.College of Science, Gulbarga,  
Vidya Nagar.  
Gulbarga 585103 Karnataka  
Phone: 9845217424

**Shipping Address**  
Mahantappa Limbitot  
S.B.College of Science, Gulbarga,  
Vidya Nagar.  
Gulbarga 585103 Karnataka  
Phone: 9845217424

*"Keep this invoice and  
manufacturer box for  
warranty purposes."*

Product	Title	Qty	Price (₹)	Tax (₹)	Total (₹)
Total Security N. CE66HMJZFUGRAA	Net Protector Total Security 2016 5.00% CST	1	547.62	27.38	575.00
<b>Total</b>		<b>1</b>	<b>547.62</b>	<b>27.38</b>	<b>575.00</b>

**Grand Total ₹ 575.00**

*This is a computer generated invoice. No signature required.*

C.O.P

394864

26.3.2017

(H. Swarnya Rani)

Co-ordinator

UGC, Carrier Oriented Course (Chemical Analysis)  
Sharnbasveshwar College of Science,  
GULBARGA-3.

PRINCIPAL

SHARNBASVESHWAR  
COLLEGE OF SCIENCE, GULBARGA

HEAD

Department of Chemistry  
Sharnbasveshwar College of Science  
GULBARGA-585103

PRINCIPAL

SHARNBASVESHWAR  
COLLEGE OF SCIENCE, GULBARGA

We hereby certify that our registration certificate under the Maharashtra Value Added Tax Act, 2002 is in force on the date on which the sale of the goods specified in this tax invoice is made by us and that the transaction of sale covered by this tax invoice has been effected by us and it shall be accounted for in the turnover of sales while filing of return and the due tax, if any, payable on the sale has been paid to the tax authorities.



Thank You!  
for shopping with us

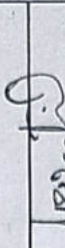



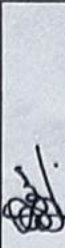
**Returns Policy:** At Flipkart we try to deliver perfectly each and every time. But in the off-chance that you need to return the item, please do so with the original Brand box/price tag, original packing and invoice without which it will be really difficult for us to act on your request. Please help us by helping you. Terms and conditions apply.

**REMUNERATION PAID TO FACULTY MEMBERS FOR CAREER ORIENTED PROGRAMME DURING THE ACADEMIC YEAR 2016-17  
(UGC XI-PLAN)**

NAME OF THE COLLEGE : SHARNBASVESHWAR COLLEGE OF SCIENCE, GULBARGA

NAME OF THE PROGRAMME : CHEMICAL ANALYSIS

GRANT SANCTION LETTER NO. : F No.4-347/2011(COC) JAN.2012

S.No	Name of Faculty members	No. of (Theory & Practical ) periods taken @ 250/- per period	Total amount paid to faculty member in Rs	Signature
01	Miss. Gouramma Patil	250	62,500	
02	Mr. Siddaram Patil	34	8,500	
03	Miss. Shaila H.K	10	2,500	
04	Miss. Babita Phand	06	1,500	
	Total amount dispersed to the faculty members	300 periods	75,000	
05	Dr Swarupani. H.	Remuneration to the programme coordinator	5,000	
	<b>TOTAL</b>		80,000	



Course coordinator

Dr. Swarupani H. H.  
Course Coordinator  
Sharnbasveshwar College of Science,  
Gulbarga

  
Principal

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