

**KUVEMPU UNIVERSITY**  
**Department of P.G.Studies and Research in Microbiology**  
**Bioscience Complex, Jnanasahyadri, Shankaraghatta-577451.**

Proceedings of Under-Graduate Board of Studies in Microbiology, held on 5<sup>th</sup> December 2018, Department of Microbiology, Jnanasahyadri. Shankaraghatta at 10.30 AM. The Chairman has welcomed the members and placed the agenda for discussion and approval.

**AGENDA**


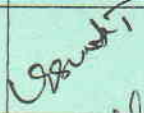
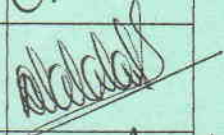
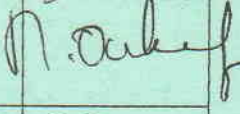

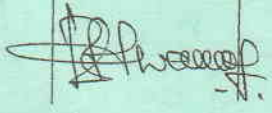
1. Approval of panel of examiners for B.Sc., Microbiology for the Academic year 2019-2020.
2. Under-Graduate B.Sc., Syllabus for the academic year 2019-2020.

**DECISION**

1. Board has approved the panel of Examiners for B.Sc., Microbiology for the academic year 2019-2020 and authorised to Chairman for needful.
2. Board has discussed and approved the B.Sc., Microbiology Syllabus with modification of I and II Semester for the academic year 2019-2020.

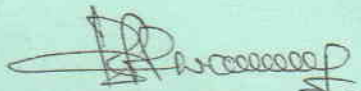
The Chairman thanked all the members.

**Members Present:**

01	Dr.Girish,K Dept. of Microbiology Maharani's Science College, Mysore.	External Member	
02	Dr.Vishwanath.T Dept. of Microbiology Maharani's Science College, Bengaluru.	External Member	
03	Sri.Nataraj.B.T Dept. of Microbiology Govt.Science College, Chitradurga	External Member	
04	Dr.R.Onkarappa Dept. of Microbiology Sahyadri Science College, Shivamogga.	Member	
05	Dr.N.Mallikarjuna Dept. of Microbiology Sahyadri Science College, Shivamogga.	Member	
06	Dr.B.Thippeswamy Chairman (BOS-UG) Dept. of Microbiology Kuvempu University Shankaraghatta	Chairman	

**Members Absent:**

01	Dr.Ravi Kala Dept. of Botany, University Science College, Tumkuru University, Tumkuru.	External Member	
----	--	-----------------	--

  
**Dr. B. Thippeswamy**  
**Chairman (BOS-UG)**

**KUVEMPU UNIVERSITY**  
**BOS (UG) in Microbiology**  
**Modification of the Theory and Practical Syllabus**  
**Effective from 2019-20 Academic Year**

The meeting of the Board of studies in UG-Microbiology was held on 5<sup>th</sup> December 2018 at the Dept. of Microbiology, Kuvempu University.

Following corrections were discussed, resolved and recorded :

**B. Sc., First Semester : Paper - I : General Microbiology**

**Theory** : Chapter 3 c. v. : Paramecium was added

**Practical - I** : 5. microcharts modified as microscopes  
10. Paramecium was added

**Scheme of Practical Examination : Practical - I**

2. Preparation of mounting techniques (Preparation-3 marks, Principle, Procedure & diagram-3 marks). was added.

**B.Sc., Second Semester : Paper-II : Microbiological techniques and Instrumentation Part I**

**Theory** : Chapter 1 a. iii. : Formaldehyde, Lead, Mercury, anion, cation, ETO & BPL, Antibiotics (Streptomycin, Penicillin) were added and rearranged.

**Practical - II** : 7. Robertson cooked meat broth (RCM) was added

**KUVEMPU UNIVERSITY**  
**BOS (UG) in Microbiology**  
**Modification of the Theory and Practical Syllabus**  
**Effective from 2019-20 Academic Year**

**FIRST SEMESTER :**

**Paper-I : General Microbiology**

60 hrs.

**1. Introduction**

20 hrs

Definition and history of microbiology, Contribution of Anton Von Leeuwenhoek, Edward Jenner, Louis Pasteur, Robert Koch, Joseph Lister, Beijerinck, Elie Metchnikoff, Alexander Flemming, Iwanowsky to the development of Microbiology. Scope of microbiology as modern science. Branches of microbiology: Bacteriology, Virology, Phycology, Mycology, Protozoology, Food and dairy microbiology, aquatic microbiology, soil microbiology, air microbiology, agriculture microbiology, Industrial and Medical microbiology.

**2. Microscopy**

10 hrs

Discovery of microscope, Detailed study of compound Microscope and its principles, Different types of microscope-Dark field, phase contrast, Stereomicroscope, Fluorescent Microscope, Electron microscope- scanning and transmission microscope and their applications.

**3. General account of microorganisms**

30 hrs

- a. Comparative study of typical cell of prokaryotes and Eukaryotes and their cellular organization.
- b. General principles of classification and nomenclature of microorganisms (kingdom, domain concepts).
- c. Study of the following (With reference to general characteristics, structure, classification and reproduction).
  - i. Viruses : Plant, animal, bacterial viruses, prions and viroids
  - ii. Bacteria: Classification (According to Bergey's Manual) up to the levels of section : bacteria, Mycoplasmas, Rickettsias, Actinomycetes, Chlamydiae, Cyanobacteria. (*Microcystis, Spirulina, Nostoc*).
  - iii. Algae : *Chlorella*, Diatoms
  - iv. Fungi : *Pythium, Saccharomyces, Aspergillus, Agaricus* and *Fusarium*
  - v. Protozoa : *Entamoeba, Trichomonas, Plasmodium* and *Paramecium*

## PRACTICAL-I: General Microbiology

Safety measures in microbiology laboratory

2. Study of micrometry
3. Contributions of microbiologists (Based on theory)
4. Study of different parts of compound microscope including oil immersion.
5. Study of different types of microscopes
6. Study of bacteria-bacilli, Cocci
7. Microscopic mounting techniques-wet mount, dry mount and scotch mount preparations
8. Study of fungi *Pythium*, *Saccharomyces*, *Aspergillus*, *Agaricus*, *Fusarium*
9. Study of algae *Microcystis*, *Spirulina*, *Nostoc*, *Chlorella* and *Diatoms*.
10. Study of protozoa *Entamoeba*, *Trichomonas*, *Plamodium vivax* and *Paramecium*

### Scheme of Practical Examination

#### B. Sc., I Semester Microbiology Practical-I : General Microbiology

Max. Marks : 40

Time : 03 hours

1. Make a microscopic preparation of the given materials A, B and C with labeled diagrams and reasons (one specimen from bacteria, cyanobacteria, algae, fungi and protozoans mentioned in the syllabus) (Identification-1 mark, labeled with diagram-1 mark and reasons 1-mark) 3x3=9 marks
2. Demonstration/calculation 'D' write the principle and applications of micrometry (Calibration - 2 marks, principle-2 marks and applications/results- 2 marks) / Preparation of mounting techniques (Preparation-3 marks, Principle, Procedure & diagram-3 marks) 06 marks
3. Write critical notes E and F (Pictures of scientists, different types and parts of microscopes, path of light in microscope) (Identification-1/2 mark, diagram-1/2 mark, critical notes-2 mark). 2x3=06 marks
4. Identify the microslides G, H and I giving reasons with labeled diagrams (Identification-1 mark, Labeled diagram with reason-2 marks). Each slide from bacteria, cyanobacteria, Algae, fungi and Protozoa 3x3=09 marks  
05 marks
5. Class record 05 marks
6. Viva voce

**Note : The candidate must submit the duly certified class record at the time of first appearance without which he/she will not be permitted to take the practical examination.**

#### References :

- Microbiology: Pelczar, Chan and Kreig; Tata McGraw Hill Pub. Co. Ltd
- Microbiology, an introduction: Tortora, Funk and Case; Benjamin-Cummings Pub. Co.
- General Microbiology: RY Stanier; McMillan Press
- General Microbiology: Hans G Schiegel; Cambridge University Press
- A Textbook of Microbiology: R C, Dubey and D.K. Maheshwari; S. Chand Co. Ltd.
- Cell Biology: CB Powar; Himalaya Publishing House
- College Microbiology Volume 1: Sundararajan S; Vardhana Publications.
- Microbiology, Presscott Lansing M, Harley John P. and Klein's Donald A., WCB McGraw-Hill, New York.
- Microbiology- Sullia and Shantharam, • Microbiology- Aneja.

**Microbiological techniques**

- a. Sterilization:** Principles and methods of sterilization 18 hrs
  - i. Physical methods :** Heat-dry, Incineration and moist heat, Tyndallization, Autoclave, Pressure cooker, Hot air oven, Laminar air flow, filtration-Seitz filter, Membrane filter.
  - ii. Radiation methods :** Ionizing and non-ionizing radiations (UV Rays, Gamma Rays and cathode rays).
  - iii. Chemical methods :** Disinfectants (Phenol/Alcohol/Formaldehyde), Antiseptic (Iodine / hydrogen peroxide), Sanitizer (chlorine), Germicidal (Glutaraldehyde/octenidene), Microbicidal (Silver nitrate), Microbiostatic agents (Sodium azide), Gaseous agents (Eto & BPL), Heavy metals (Lead & Mercury) and detergents (Anion & Cation), Antibiotics (Streptomycin, Penicillin).
- b. Stains and staining technique** 12 hrs
  - i. Principles of staining. Types of stains, physical and chemical properties of stains, staining techniques-Simple staining. Differential staining-(Gram staining & acid fast staining), structural staining- (capsule, flagella and endospore).
  - ii. Motility in bacteria, fungi and protozoa 05 hrs
- 2. Instruments:** Inoculation chamber, Inoculation loop & needle, centrifuge, pH meter, Colony counter, Incubator (Principles, components and use). 05 hrs
- 3. Nutritional requirements** and their up take by microorganisms (passive, active and facilitative absorption). Macro nutrients and micronutrients, their physiological role. Nutritional classification of microorganisms. 10 hrs.
- 4. Culture media:** Definition, classification and types- solid, semisolid, broth, Natural, semisynthetic, synthetic, enrichment, enriched, differential and selective media, transport media, anaerobic media. Nutrient agar (NA), nutrient broth, Potato dextrose agar (PDA), Yeast extract mannitol agar (YEMA), Sabouraud's dextrose agar (SDA), Mac Conkey's agar (MA), Blood agar (BA), Chocolate agar (CA), Cary Blairs media, Robertson cooked meat broth (RCM). 10 hrs.

## PRACTICAL-II: Microbiological techniques and instrumentation Part I

Preparation and use of chromic acid.

Preparation of glassware for sterilization.

Use of antiseptics and disinfectants : Phenol, ethyl alcohol, formaldehyde, iodine, Detergents, hydrogen peroxide, mercuric chloride and sodium hypochlorite.

- Demonstration of laboratory equipments: Autoclave, Hot air oven, incubator, laminar air flow, Inoculation needle, Inoculation loop, Membrane filter, Seitz filter, pH meter and centrifuge.
- Preparation of staining reagents : Saffranin, Crystal violet, Nigrosine, cotton blue, Malachite green, Methylene blue, Carbol fuchsin, Acid alcohol mixture, Grams iodine, 95% alcohol.
- Staining techniques: Staining of bacteria and fungi.
  - Direct staining
  - Negative staining
  - Grams staining
  - Endospore staining
  - Fungal staining
- Preparation of media- nutrient broth, nutrient agar, Mac Conkey's agar, Potato dextrose agar, Sabouraud's Dextrose agar, Blood agar, Chocolate agar, EMB, Transport media and RCM
- Study of bacterial motility by hanging drop method.

### Scheme of Practical Examination

#### B.Sc., II Semester Microbiology

#### Practical II: Microbiological techniques and instrumentation Part 1

Max. Marks: 40

Time : 03 hours

1. Make a temporary slide on a clean and dry slide of the given material A and identify giving reasons 08 marks

Draw a diagram and leave the preparation for evaluation (Direct staining/ Negative Staining/ Gram staining/Endospore staining/Motility by hanging drop method/Fungal staining) (Procedure-2 marks, preparation-3 marks, diagram-1 marks, result-2 marks).

2. Prepare/demonstrate the experiment B \_\_\_\_\_ giving the procedure and principle. 07 marks  
(Nutrient broth, nutrient agar, Mac Conkey's agar, Potato dextrose agar, Sabouraud's Dextrose agar, Blood agar, Chocolate agar, EMB and Transport media)  
(Composition 3 marks, procedure and principle 4 marks).

3. Identify the material and write the significance of C, D, E, F and G. 5x3=15 marks  
(Identification – 1 mark, Labelled diagram with reason-2 marks).

(Autoclave, Hot air oven, incubator, Inoculation loop, Membrane filter, Inoculation needle, Seitz filter, pH meter, centrifuge, staining reagents, antiseptics and disinfectants).

4. Class record 05 marks

5. Viva voce 05 marks

**Note : The candidate must submit the duly certified class record at the time of first appearance, without which he/she will not be permitted to take the practical examination.**



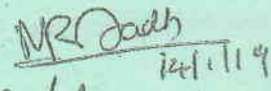
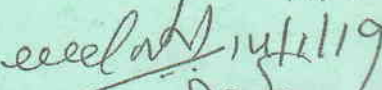

#### References :

- Microbiology: Pelczar, Chan and Kreig; Tata McGraw Hill Pub. Co. Ltd.
- Microbiology, an introduction: Tortora, Funk and Case; Benjamin-Cummings Pub. Co.
- General Microbiology: RY Stanier; McMillan Press.
- Methods in Microbiology- Microscopy and Staining: Desai and Desai; Emkay Publications.
- General Microbiology: Hans G Schiegel; Cambridge University Press.
- Microbiology- Upadhaya and Upadhaya.

PROCEEDINGS OF THE BOS (UG) MEETING **GEOLOGY**

The B.O.S meeting was convened on 14<sup>th</sup> Jan 2019 at 10:00AM in the Department of Geology, Sahyadri Science College. Following members were present.

**Members present**

Name	Designation	Signature
1. Prof. Syed Ashfaq Ahmed,	Chairman	
2. Dr. S.C. Chougala	Member	
3. Dr. Janardhana M.R.	Member	
4. Dr. Patel M.E	Member	
5. Sri Ravikumar R	Invited Member	

**Members absent:**

1. Sri Chandrappa	Member
-------------------	--------

**Proceedings:**

Chairman welcomed the members and the following agenda was discussed:

**1. Approval of III and IV semesters syllabus**

After detailed discussion, the syllabus, Model theory and practical question papers for the Third and fourth semesters B.Sc degree course in geology was framed and passed.

**2. Preparation of panel of examiners for the year 2019-2020**

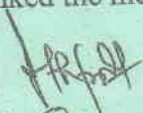
List of panel of examiners was approved.

**3. Any other matter**

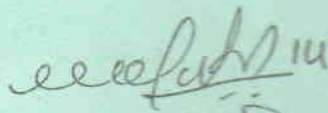
Nil

Chairman, BOS (UG) thanked the members for their cooperation.

1. Prof. Syed Ashfaq Ahmed



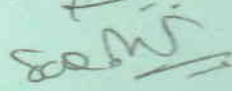
4. Dr. Patel M.E



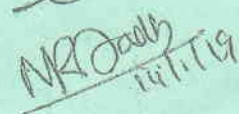
2. Dr. S.C. Chougala



5. Sri Ravikumar R



3. Dr. Janardhana M.R.



Paper III: Petrology

Teaching hours: 60

Marks: 60(50+10 IA)

Unit: I

15 hrs

**Introduction-** Definition, relationship of petrology with other branches of geology, petrography, petrogenesis. Classification of rocks- Igneous, sedimentary and metamorphic and their distinguishing features, rock cycle.

**Igneous Petrology**

Classification of Igneous rocks- Chemical, mineralogical and textural. Textures and structures of igneous rocks.

Unit:II

15 hrs

**Petrogenesis:** Magma - its generation, nature and composition. Bowen's reaction principle.

Crystallization of binary magma-Albite-Anorthite, Diopside-Anorthite, Tertiary magma-Diopside-Wollastonite-Silica system. Phase diagram with their significance. Magmatic differentiation and assimilation.

Composition, origin and mode of occurrence of granite, syenite, diorite, gabbro, peridotite, dunite, charnockites, anorthocites and alkaline rocks.

Unit: III

15 hrs

**Sedimentary petrology:-** Introduction, Processes of sedimentation, lithification and diagenesis, size, shape, sedimentary structure and texture and significance, clastic and non-clastic rocks & their classification. Elementary concepts of depositional environments, sedimentary facies and provinces.

Types of deposits- Mechanical/Clastic, Residual deposits their modes of formation, characters and types-laterites and Bauxite.

Origin and characteristics of quartz arenites, arkose, greywacke, siliceous and calcareous deposits of chemical and organic origin.

Unit:IV

15 hrs

**Metamorphic petrology:** - Metamorphism, metamorphic rocks- agents and types of metamorphism.

Metamorphic grades, index minerals, zones and facies, ACF, AKF, and AEM diagram. Texture and structure of metamorphic rocks.

Metamorphism of argillaceous, arenaceous, calcareous and basic rocks. Metasomatism Migmatites and granulites.

Reference Books:

- |                                      |   |                           |
|--------------------------------------|---|---------------------------|
| 1. Principles of petrology           | - | Tyrrell W.                |
| 2. Igneous and metamorphic petrology | - | Turner W and Verhoogen J. |
| 3. Evolution of Igneous rocks        | - | N I Bowen                 |
| 4. Sedimentary Petrology             | - | Petijohn.                 |
| 5. Metamorphic petrology             | - | Winkler HCF               |
| 6. Text book of geology              |   | P.K.Mukherjee             |



No. of practical: 15, each three hours of duration.

Marks: 40 (30 + 05 record + 05 viva)

1. Megascopic identification of minerals in rocks 1 Pra
2. Megascopic identification of Igneous, sedimentary and metamorphic rocks 6 Pra
  - A. **Igneous rocks:** Granite, Syenite, Diorite, Gabbro, Peridotite, Dunite, **Porphyries-** Granite, Syenite, Diorite, Aplite, Felsite, Pegmatite. Dolerite, Trachyte, Rhyolite, Basalt, Obsidian, Pitch stone
  - B. **Sedimentary rocks:** Sandstone, Shale, Conglomerate, Breccia, Grit, Limestone
  - C. **Metamorphic rocks:** Quartzite, Marble, Schist, Gneiss, Charnockite, Slate.
3. Microscopic identification of minerals in rocks 2 Pra

Study of the optical properties of following rock forming minerals:- Quartz, Orthoclase, Plagioclase, Microcline, Biotite mica, Hornblende, Augite, Hyperstene, Calcite, Olivine, Garnet, Actinolite, Sillimanite and Tourmaline.
4. Microscopic identification of Igneous, sedimentary and metamorphic rocks 6 Pra
  - A. **Igneous rocks:** Granite, Syenite, Diorite, Gabbro, Dunite, Syenite, Diorite, Aplite, Pegmatite. Dolerite, Trachyte, Rhyolite, Basalt.
  - B. **Sedimentary rocks:** Sandstone, Limestone.
  - C. **Metamorphic rocks:** Quartzite, Marble, Schist, Gneiss, Charnockite.

Time: 3 hours

Max. Marks: 50

Instructions to candidates:

1. Answer all questions.

2. Draw labelled diagrams wherever necessary.

I. Simple answer questions:

Answer the following in a word or a phrase or a sentence

6x1=6marks

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

II. Short answer questions:

Answer any TWO of the following

2x3=06 marks

- 7.
- 8.
- 9.
- 10.

III. Medium answer questions:

Answer ant THREE of the following

3x6=18 marks

- 11.
- 12.
- 13.
- 14.
- 15.

Iv. Long answer questions:

Answer any TWO of the following

2x10=20 marks

- 16.
- 17.

18. Explain

- a).
  - b).
-

SSC832  
SCOT30

Question paper pattern (Practical)  
Third Semester B.Sc., Degree Examinations  
**GEOLOGY**  
Paper-III: Petrology

SSC

Time: 3hours  
Max.Marks:40

Instructions to candidates:  
**PETROLOGY**

SD0132

Max. Marks: 40

Time: 3hours

1. Describe and identify the rock specimens from tray no. 1 to 6. 6x2=12
  2. Describe and Identify the texture / structure of the rock specimen in tray no. 7 1x2=2
  3. Describe and identify the mineral in thin sections from tray no. 8 to 9 2x3=6
  4. Describe and identify the rock thin sections from tray no. 10 to 13 and draw sketches 4x2 ½ =10
  5. Class records. = 05
  6. Viva= Voce. =05
-

**Practical IV: Palaeontology and Stratigraphy**

**No. of practical: 15, each of three hours duration. Marks: 40 (30+05 record+05 viva)**

1. Identification of fossils on the basis of mode of preservation. 2 Pra
2. Invertebrate palaeontology: Drawing, labelling, description, classification and identification with Geological age of the following invertebrate : (a) Corals, (b) Brachiopods, (c) Lamellibranches, (d) Gastropod, (e) Cephalopod & (f) Trilobites. 10 Pra
3. Drawing, labelling, description, classification, identification with Geological age of the following Plant fossils:  
(a) Calamites, (b) Lepidodendron, (c) Sigillaria, (d) Glossopteris, and (e) Ptilophyllum 1 Pra
4. Mapping of stratigraphic units of various group/formation of India. 2 Pra

SSD830  
~~SD0130~~

**Question paper pattern**

Fourth Semester B.Sc., Degree Examinations  
**GEOLOGY**

~~SSD~~

**Paper-IV: Palaeontology and Stratigraphy**

**Time: 3 hours**

**Max.Marks:50**

**Instructions to candidates:**

1. Answer all questions.
2. Draw labelled diagrams wherever necessary.

**I. Simple answer questions:**

Answer the following in a word or a phrase or a sentence

**6x1=6marks**

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

**II. Short answer questions:**

Answer any TWO of the following

**2x3=06 marks**

- 7.
- 8.
- 9.
- 10.

**III. Medium answer questions:**

Answer ant THREE of the following

**3x6=18 marks**

- 11.
- 12.

Paper IV: Palaeontology and Stratigraphy

Teaching hours: 60

Marks: 60(50+10 IA)

**Palaeontology:**

Unit: I

15 hrs

Introduction: Fossil-definition, classification of organic World –Animal kingdom (invertebrate and vertebrate), Plant kingdom, Nomenclature-Phylum, class, order, family, genera, species. Conditions for fossilization, Mode of preservation of fossils.

Uses/Significance of fossils.

Brief morphology, classification and geological history of plant fossils.

Kinds of fossils-i) Based on size- micro and macro fossils and it types, ii) based on persistence: Index, Synthetic, extinct. Microfossils and their Applications.

Unit: II

15 hrs

Invertebrate palaeontology: Study of morphology, classification and geological history including evolutionary trends of Corals, Brachiopods, Lemellibranchs, Gastropods, Cephalopods and Trilobites.

Unit: III & IV

30 hrs

**Stratigraphy:**

Principles of stratigraphy: Introduction, Fundamental laws of stratigraphy-Law of uniformitarianism, law of order of superposition, Conformity and unconformity, law of catastrophism and law of faunal and floral succession. Stratigraphic categories-litho, bio and chrono-stratigraphic units and nomenclature. Correlation-Lithological and paleontological. Geologic time scale.

Indian Stratigraphy: Physiographic divisions and outline of stratigraphy of India. A brief study of lithology, fossils, distribution, classification and economic importance of Precambrian rocks/cryptozoic rocks- Sargur & Dharwar super group, Peninsular Gneissic Complex (PGC), Cuddapah, Vindhyan, Kaladgi and Bhima groups.

A brief study including classification, distribution, lithology, life and economic importance of phanerozoic rocks- Gondwana Super Group and Cretaceous of Kutch, Spiti and Thiruchinapalli.

Brief account on (1) Deccan traps and its economic importance (2) Siwalik group

Reference books-

1. Principles of paleontology
2. Principles of invertebrate paleontology
3. Principles of invertebrate paleontology
3. Elements of paleontology
4. Principles of stratigraphy
5. Indian stratigraphy
6. Geology of India
6. Geology of India & Burma
7. Geology of Karnataka
8. Structural geology.

- H. Woods.  
Shrock & Twanhofal.  
Jain  
R.M.Black.  
Ravindrakumr  
Wadia.D.N  
Ramakrishnanand and Vaidyanathan  
M.S.Krishnan.  
B. P. Radhakrishna  
Billings.M.P

**Long answer questions:**

**Answer any TWO of the following**

**2x10=20 marks**

16.

17.

18. Explain

a).

b).

---

**Fourth Semester B.Sc. Degree Practical Examination.**

SSD832

~~SSD832~~

**GEOLOGY - PRACTICAL - IV**

**PALAEONTOLOGY AND STRATIGRAPHY**

**Time: 3 Hours**

**Max. Marks: 40**

1. Identify the mode of preservation of fossil in Tray no.1 1x3 =03
  2. Drawing, labelling, description, classification and identification with geological age of the fossils in Tray Nos. 2 to 7 6 X 3 = 18
  3. Drawing, labelling, description, classification and identification with geological age of the plant fossil in Tray Nos. 8 and 9 2 X 3 = 06
  4. Mapping of stratigraphic units/formation. 1 No. 1x3 =03
  5. Viva - Voce = 05
  6. Class Records =05
-

**Prof H.N Ramesh, M.B.A., Ph.D.,**  
**Professor & Chairman BOS (UG)**

KUS/IMS/ /2019-120

Date: 02-01-2019

**BOS -UG (BBA), Meeting Proceedings**

The meeting of the Board of Studies in BBA(UG), was held in the Institute of Management Studies and Research, Kuvempu University, Jnanasahyadri, on 02-01-2019. The Chairman of the board has formally extended welcome. The board has taken up the agenda for discussion.

**01 Review of question papers of June 2018 and Dec 2018 Examinations.**

The board has reviewed BBA question papers of June,2018 and Dec, 2018 and found them in order.

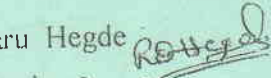




**02. Preparation and Approval of Panel of Examiners for 2019-20 Examinations.**

The Board has gone through the gradation list of Examiners and resolved to prepare a list of members on seniority basis for recommending to constitute Board of Examiners(BOE) in BBA for 2019-20 examinations.

**03 Others**

The board has discussed the question paper version of BBA examination for problem/quantitative papers and resolved to recommend the university to prepare in English version only

**Members**

1. Dr. Ramachandra Devaru Hegde 
2. Prof. Mallesh Naik B 
3. Prof. Hanumanthappa 
4. Prof. Smt. P.R Mamatha 
5. Prof. Palakshi Naik 

  
(Prof. N.N Ramesh)  
Chairman

BOS in Management (UG)  
Kuvempu University  
Jnanasahyadri  
Shankaraghatta-577 451  
(Shimoga Dist. Karnataka)