# জগন্নাথ বৰুৱা মহাবিদ্যালয় অসমীয়া বিভাগৰ স্নাতক পৰ্যায়ৰ বিদ্যা পৰিষদৰ প্ৰথম বৈঠক তাৰিখঃ ০৬.০৫.১৬ স্থানঃ অসমীয়া বিভাগৰ শিক্ষকৰ জিৰণী কোঠা

## উপস্থিতসকল —

ড' মানিক শইকীয়া — মুৰবী অধ্যাপক, অসমীয়া বিভাগ, সভাপতি ড' অৰ্পণা কোঁৱৰ — বিশ্ববিদ্যালয়ৰ উপাচাৰ্যৰ মনোনীত প্ৰতিনিধি ড° এন গোবিন্দ সিংহ — বিদ্যা পৰিষদৰ মনোনীত সদস্য ড° অপূৰ্ব বৰা শ্রীশাংকব কৌশিক বৰুৱা — উদ্যোগ/ব্যৱসায় প্ৰতিষ্ঠানৰ প্ৰতিনিধি শ্ৰীপৰিস্মৃতা হাজৰিকা — প্রাক্তন ছাত্রী ড° বীণাপাণি দেৱী — বিভাগৰ সদস্য ড' ৰূবী মহন্ত ড° চালিম আলি আহমদ ড° জ্যোতিৰেখা হাজৰিকা শ্ৰীশ্বামীম নাচৰিণ মিলান শ্ৰীপাপুমণি হাজৰিকা

বিদ্যা পৰিষদৰ মাননীয় সদস্যসকলক অভিবাদন জনাই বিভাগীয় প্ৰধান ড° মানিক শইকীয়াই সভাপতিৰ আসন গ্ৰহণ কৰে।

উদ্দেশ্য ব্যাখ্যা প্ৰসংগত ড° চালিম আলি আহমদে নিৰ্দিষ্ট বিষয়ভিত্তিক লেখ পদ্ধতিত অসমীয়া বিভাগৰ পাঠ্যক্ৰমৰ গাঁঠনিগত খচৰা আৰু ইতিমধ্যে বিভাগৰ তৰফৰ পৰা প্ৰস্তুত কৰী৷ প্ৰথম আৰু দ্বিতীয় যান্মাসিকৰ সন্মা আৰু ঐচ্ছিক পাঠ্যক্ৰম আলোচনৰা বাবে উত্থাপন কৰে।

বিশ্ববিদ্যালয়ৰ মাননীয় উপাচাৰ্যৰ মনোনীত প্ৰতিনিধিকে ধৰি সকলো সদস্যই গুৰুত্ব সহকাৰে আলোচনাৰ পিছত বৈঠকে তলত দিয়া ধৰণে প্ৰস্তাবসমূহ গ্ৰহণ কৰে। আলোচনা সাপেক্ষে বিভাগৰ তৰফৰ পৰা উত্থাপিত যান্মাসিক অনুসাৰে কৰা পাঠ্যক্ৰমৰ গাঁঠনি আৰু পাঠ্যক্ৰমৰো কিছু সংশোধন ঘটোৱা হয়।

#### প্রস্তাব নং ১ ঃ

আজি ৬. ৫.১৬ তাৰিখে জগন্নাথ বৰুৱা মহাবিদ্যালয়ৰ অসমীয়া বিভাগৰ শিক্ষক জিৰণী কোঠাত,বিশ্ববিদ্যালয়ৰ মাননীয় উপাচাৰ্যৰ মনোনীত প্ৰতিনিধিকে ধৰি পৰিষদৰ সকলো সদস্যৰ উপস্থিতিতঅনুষ্ঠিত 'বিভাগীয় বিদ্যা পৰিষদ' ৰবৈঠকত গৃহীত প্ৰথম প্ৰস্তাব অনুসৰি তলত দিয়া ধৰণে স্নাতক পৰ্যায়ৰ সন্মান (CORE) ঐচ্ছিক (GENERIC ELECTIVE), বিষয় নিৰ্দিষ্ঠ ঐচ্ছিক (DECISPLINE SPECIFIC ELECTIVE), দক্ষতা বিকাশ (SKILL BASED)পাঠ্যক্ৰম তলত দিয়া ধৰণে হ'ব লাগে বুলি প্ৰস্তাব গ্ৰহণ কৰি অনুমোদনৰ বাবে মহাবিদ্যালয়ৰ বিদ্যা পৰিষদলৈ আগবঢ়োৱা হয়—

## প্রথম বাঝাসিক

সন্মান পাঠ্যক্রম

১০১ -স অসমীয়া সাহিত্যৰ ইতিহাস (১)

১০২ -স অসমীয়া ভাষাৰ ইতিহাস আৰু বিকাশ (২)

ঐচ্ছিক পাঠ্যক্রম

১০১ -ঐ অসমীয়া ভাষা আৰু লিপি (১)

দ্বিতীয় ষাগ্মাসিক

সন্মান পাঠ্যক্রম ২০১-স আধুনিক অস. সাহিত্যৰ ইতিহাস (ঊণবিংশ শতিকাৰ পৰা

বৰ্তমানলৈকে) (৩)

২০২-স ভাষাবিজ্ঞানৰ প্ৰাথমিক পৰিচয় (৪)

ঐচ্ছিক পাঠ্যক্রম ২০১-ঐ সাহিত্য তত্ত্ব আৰু সৃষ্টিশীল সাহিত্য (২)

তৃতীয় ষাগ্মাসিক

সন্মান পাঠ্যক্রম ৩০১-স সাহিত্য সমালোচনা তত্ত্ব (৫)

৩০২-স কবিতাৰ অধ্যয়ন (প্ৰাচীন, ৰোমান্টিক আৰু আধুনিক) (৬)

৩০৩-স অসমৰ ভাষা আৰু লিপিৰ অধ্যয়ন (৭)

ঐচ্ছিক পাঠ্যক্রম ৩০১-ঐ অসমীয়া গদ্য (৩)

দক্ষতা বিকাশ পাঠ্যক্রম ৩০১-দ.বি আর্হিপাঠ, পাল্ডুলিপি সম্পাদনা, ডি.টি.পি

চতুর্থ যাথাসিক

সন্মান পাঠ্যক্রম ৪০১- স ভাৰতীয় আর্যভাষা (৮)

৪০২- স অসমীয়া উপন্যাস আৰু চুটিগল্প (৯)

৪০৩ -স অসমীয়া নাটক (১০)

ঐচ্ছিক পাঠ্যক্রম ৪০১- ঐ অসমীয়া কবিতাৰ পৰিক্রমা (৪)

দক্ষতা বিকাশ পাঠ্যক্ৰম ৪০১-দ.বি কলাৰ ৰসাস্বাদন আৰু সমালোচনা (২)

পঞ্চম যাগ্মাসিক

সন্মান পাঠ্যক্রম ৫০১-স অসমীয়া গদ্য সাহিত্য (স ১১)

৫০২-স অসমৰ সংস্কৃতি(স ১২)

বিষয় নির্দিষ্ট ঐচ্ছিক পাঠ্যক্রম ৫০১-বি.নি. সংস্কৃতি অধ্যয়ন (১)

৫০২ -বি.নি. গণ মাধ্যম আৰু সাংবাদিকতা (২)

ষষ্ঠ ষাগ্মাসিক

সন্মান পাঠ্যক্রম ৬০১-স বিশ্ব সাহিত্যৰ পৰিচয় (স ১৩)

৬০২-স তুলনামূলক ভাৰতীয় সাহিত্য আৰু অনুবাদ অধ্যয়ন (স ১৪)

বিষয় নির্দিষ্ট ঐচ্ছিক পাঠ্যক্রম ৬০১-বি.নি. অসমীয়া ভাষাৰ ভাষাতাত্ত্বিক অধ্যয়ন আৰু প্রায়োগিক অসমীয়া (৩)

৬০২ -বি.নি. ক্ষুদ্র গৱেষণা প্রকল্প (৪)

আজি ৬. ৫.১৬ তাৰিখে জগন্নাথ বৰুৱা মহাবিদ্যালয়ৰ অসমীয়া বিভাগৰ শিক্ষক জিৰণী কোঠাত,বিশ্ববিদ্যালয়ৰ মাননীয় উপাচাৰ্যৰ মনোনীত প্ৰতিনিধিকে ধৰি পৰিষদৰ সকলো সদস্যৰ উপস্থিতিতঅনুষ্ঠিত 'বিভাগীয় বিদ্যা পৰিষদ' ৰবৈঠকত গৃহীত প্ৰথম প্ৰস্তাব অনুসৰি তলত দিয়া ধৰণে স্নাতকপৰ্যায়ৰ সন্মান (CORE) পাঠ্যক্ৰম তলত দিয়া ধৰণে হ'ব লাগে বুলি প্ৰস্তাব গ্ৰহণ কৰি অনুমোদনৰ বাবে মহাবিদ্যালয়ৰ বিদ্যা পৰিষদলৈ আগবঢ়োৱা হয়—

# CORE COURSE SEMESTER - I PAPER NO.: 101

HISTORY OF ASSAMESE LITERATURE: BEGENING TO POST-SANKARDEVA ERA

অসমীয়া সাহিত্যৰ ইতিহাস ঃ আৰম্ভণিৰে পৰা শংকৰোত্তৰ যুগলৈকে

TOTAL CREDIT: 6

TOTAL CLASS: 72

TOTAL MARKS: 100 (80 + INTERNAL ASSESMENT 20)

Objective : অসমীয়া সাহিত্যৰ ইতিহাসৰ যুগবিভাজনৰ লগতে আৰম্ভণিৰে পৰা শংকৰোত্তৰ যুগলৈকে এই সময়ছোৱাৰ সাহিত্য আৰু সেই সাহিত্যৰ বৈশিষ্ট্যৰ বিষয়ে এই কাকতখনে ধাৰণা দিব।

	শ্ৰেণী	নম্বৰ
গোট ১ ঃ অসমীয়া সাহিত্যৰ ইতিহাস-চৰ্চাৰ পৰিচয়	8	>0
গোট ২ ঃ অসমীয়া লোক সাহিত্যৰ পৰিচয়	20	>&
গোট ৩ ঃ প্ৰত্ন অসমীয়া সাহিত্যৰ পৰিচয়	৯	50
গোট ৪ ঃ প্ৰাক্ শংকৰ যুগৰ অসমীয়া সাহিত্যৰ পৰিচয়	50	>@
গোট ৫ ঃ শংকৰ যুগৰ অসমীয়া সাহিত্যৰ চমু পৰিচয়	20	\$@
গোট ৬ ঃ শংকৰোত্তৰ যুগৰ অসমীয়া সাহিত্যৰ পৰিচয়	>@	\$@

## প্রসংগ পথি ঃ

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অসমীয়া সাহিত্যৰ সমীক্ষাত্মক ইতিবৃত্ত	ঃ সত্যেন্দ্ৰনাথ শৰ্মা, সৌমাৰ প্ৰকাশ, গুৱাহাটী।
অসমীয়া সাহিত্যৰ ৰূপৰেখা	ঃ মহেশ্বৰ নেওগ, চন্দ্ৰ প্ৰকাশ,গুৱাহাটী।
অসমীয়া সাহিত্যৰ বুৰঞ্জী (প্ৰথম খণ্ড)	ঃ বি <b>শ্বেশ্ব</b> ৰ হাজৰিকা (সম্পা.), এবিলাক, গুৱাহাটী।
অসমীয়া সাহিত্যৰ বুৰঞ্জী (দ্বিতীয় খণ্ড)	ঃ শিৱনাথ বৰ্মন (সম্পা.), এবিলাক, গুৱাহাটী।
অসমীয়া লোক সাহিত্যৰ ৰূপৰেখা	ঃ লীলা গগৈ, বনলতা, ডিব্ৰুগড়।
অসমৰ লোক সাহিত্য	ঃ শশী শৰ্মা, ষ্টুডেণ্টছ্ ষ্ট'ৰছ, গুৱাহাটী।
অসমৰ সাধুকথা	ঃ শশী শৰ্মা, বুক হাইভ, গুৱাহাটী।
অসমীয়া জন সাহিত্য	ঃ প্রফুল্ল দত্ত গোস্বামী, বাণী প্রকাশ, গুৱাহাটী।
অসমীয়া কবিতাৰ প্ৰবাহ	ঃ কবীন ফুকন, ষ্টুডেণ্টছ্ ষ্ট'ৰছ, গুৱাহাটী।
চর্যাপদ	ঃ পৰীক্ষিত হাজৰিকা, ডালিমী প্ৰকাশ, গুৱাহাটী।
বাৰ মাহৰ তেৰ গীত	ঃ প্রফুল্ল দত্ত গোস্বামী
Assamese Literature	: Hem Barua, NBT, New Delhi

#### **Board of Studies BENGALI**

[held on 11.05.2016]

#### Resolutions

- (1) The BOS advised to start Bengali Honours course in J.B. College [Autonomous] and from the academic session 2016-17. They have framed a syllabus for the first to fourth Semesters of the said course.
- (2) The BOS Finalized the Syllabus for the first to fourth Semesters of Generic Elective Course in Bengali to be started from the academic session 2016-17.
- (3) The BOS finalized a panel for Examiner and Paper setter for Bengali Honours and Generic Elective Course.
- (4) The BOS advised to use Power Point in the classes for the benefit of the students.

Signature of Chairman

#### **Board of Studies, BENGALI**

#### J.B.College(Autonomous)

#### Resolutions

- (1) The Board of Studies' meeting of the department of Bengali, J.B. College (Autonomous) was convened

  On 11<sup>th</sup> May, 2016 in the presence of the following members:-
- (i) VC nominee-Dr. Sanjay Bhattacharjee, Department of Bengali, Gauhati University
- (ii)AC nominee-Dr.Binita Rani Das, Department of Bengali, Gauhati University
- (iii) )AC nominee Prof. Ratna Bhattacharjee, Department of Bengali , Mariani College
- (iv)Chairman- Prof. Debabrata Lahiri, Department of Bengali,J.B.College(Autonomous)
- (2) ) The Board of Studies finalized the Syllabus for the first two Semesters of Generic Elective Course in Bengali to be started from the academic session 2016-17.
- (3) The Board of Studies advised that a Bengali Honours course be started in J.B.College (Autonomous) from the academic session 2016-17. The Board also framed a syllabus for the first two semesters of the proposed Honours course and requested the college Authority to take necessary steps for its implementation.
- (4) The Board of Studies advised to use Power Point in the classes for the benefit of the students.
- (5) The Board of Studies finalized a panel of Paper setters and Examiners for Bengali Honours and Generic Elective Course.

Signature of Chairman

**BOS** in Bengali

J.B.College (Autonomous)

## বিদ্যাপরিষদ,বাংলা বিভাগ

## জগন্নাথ বরুয়া মহাবিদ্যালয় (স্বতন্ত্র)

## সিদ্ধান্তসমূহ

- (১)জগন্নাথ বড়ুয়া মহাবিদ্যালয় (শ্বতন্ত্র) বাংলা বিভাগের বিদ্যাপরিষদের বৈঠক গত ১১ইমে,২০১৬ তারিথে নিম্নলিখিত সদস্যগণের উপস্থিতিতে অনুষ্ঠিত হয়:-
- (ক) উপাচার্য কর্তৃক মলোনীত সদস্য-ড সঞ্জয় ভট্টাচার্য,বাংলা বিভাগ,গৌহাটি বিশ্ববিদ্যালয়।

  (থ)শক্ষিক পরিষদ কর্তৃক মলোনীত সদস্য –ড বিনীতা রাণী দাস,বাংলা বিভাগ,গৌহাটি বিশ্ববিদ্যালয়।

  (গ)শক্ষিক পরিষদ কর্তৃক মলোনীত সদস্য –অধ্যাপিকা রত্না ভট্টাচার্য,বাংলা বিভাগ মরিয়নী

  মহাবিদ্যালয়।
- (घ) সভাপতি- অধ্যাপক দেবব্রত লাহিড়ী,বাংলা বিভাগ, জগন্নাথ বড়ুয়া মহাবিদ্যালয় (স্বতন্ত্র)।
- (২) বিদ্যাপরিষদ বাংলার সাধারণ ঐচ্ছিক পাঠ্যক্রমের জন্য প্রথম দুটি ষাঝ্মাসিকের পাঠ্যক্রম প্রস্তুত করেন, এই পাঠ্যক্রম শক্ষিক বর্ষ ২০১৬-১৭ থেকে আরম্ভ করা হবে।
- (৩) বিদ্যাপরিষদ জগল্লাথ বড়ুয়া মহাবিদ্যালয় স্বতন্ত্রতে২০১৬–১৭ থেকে বাংলা সম্মান পাঠ্যক্রম আরম্ভ করার জন্য পরামর্শ দেন। প্রথম দুটি ষাগ্মাসিকের জন্য বাংলা সম্মানের পাঠ্যক্রম বিদ্যাপরিষদ প্রস্তুত করেন। মহাবিদ্যালয়ের কর্তৃপক্ষকে সম্মান পাঠ্যক্রম আরম্ভ করার জন্য যাবতীয় ব্যবস্থা নিতে অনুরোধ জানানো হয়।
- (৪) পরিবর্তিত শিক্ষাব্যবস্থায় বিদ্যাপরিষদ অনুভব করেন যে ছাত্র ছাত্রীদের সুবিধার জন্য শ্রেণী কক্ষে দৃশ্য-শ্রব্য ব্যবস্থার প্রয়োগ সমীচীন হবে।
- (৫) বিদ্যাপরিষদ বাংলা সম্মান এবং বাংলা ঐচ্ছিক বিষয়ের জন্য প্রশ্ন প্রস্তুত কর্তা এবং পরীষ্ককের একটি তালিকাতে অনুমোদন জানান।

সভাপতির স্বাক্ষর
বিদ্যাপরিষদ,বাংলাবিভাগ
জগল্লাথ বডুুুুুমা মহাবিদ্যাল্ম (স্বভন্ত্র)

## Resolutions/Procedure of the first meeting of Board of Studies, held on 9<sup>th</sup> May 2016.

## **Department of Botany**

- 1. Dr. Arunima Hazarika
- 2. Dr. Bijoy Neog.
- 3. Dr. Devajyoti Bhuyan
- 4. Dr. Tulumoni Goswami
- 5. Dr. Malaxmi Dutta
- 6. Mr. Bubul Ch. Neog
- 7. Dr. Kalayan Das
- 8. Dr. Runjun Gogoi
- 9. Dr. Anita Mazander Buragohain
- 10. Dr. Munutara Bagam

### The meeting resolved the following resolution

- 1. The syllabus published by U.G.C will be accepted with some minor changes.
- 2. As the syllabus is vast, so it would be divided into three parts part 1 for Sessional exam I, part II for Sessional exam II and part III for the final examination; but part I and part II will be considered for paper setting (Dr. Bijoy Neog).
- 3. As far as possible part I and part II would not be repeated in part III or few chapters would not be repeated.
- 4. Regarding the Generic Electives, for  $1^{st}$  semester Bio-diversity has been chosen. For  $2^{nd}$  semester it is Economic Botany and Bio-technology / Plant Ecology and Taxonomy.
- 5. Regarding the point no. 4, a student has the freedom to study any other topics, given in the syllabus of CBCS, but on one line. Faculty members will try their best to help the student.
- 6. Students are welcome to study any subjects given in the syllabus for Botany by U.G.C. under Choice Based Credit system.
- 7. It has been decided to open Master degree in Botany and diploma courses.
  - If possible, the course will start from the session 2016-2017 or 2017-2018.
- 8. As the department has been selected in the DBT-STAR scheme, so 2 new discipline specific Elective Courses (DSC) have been included in the subject. The two new courses are- (1) Green Chemistry and (2) X-ray diffraction.
- 9. Regarding the point No-1, the minor changes are-
  - (i) Introduction of Bacillariophyta in core course I.
  - (ii) Structure and function of Lysosomes, in core course I
  - (iii) Introduction of *Lycopodium* and *Ginkgo* in core course IV.
  - (iv) Study of *Pellia* is deleted in core course IV.

- 10. The syllabus for the Generic Elective (i) Bio-Diversity of Microbes, Algae, Fungi and Archegoniate and (ii) Economic Botany and Bio-technology published by U.G.C. is kept as it is. The syllabus for Plant Ecology and Taxonomy is kept as it is for theory; but for practical, the locally available plant species have been selected.
- 11. The list of paper-setters and paper-examiners and external for practical examination is finalized.
- 12. The teachers for paper-setting, paper-examiners and external examiners are basically selected from the local and nearly colleges.

Dr. Arunima Hazarika Chairperson

## Resolution / Proceedings of Second Meeting of Board of Studies held on 3<sup>rd</sup> March 2017.

## **Department of Botany**

#### **Member Present:**

- 11. Dr. Arunima Hazarika
- 12. Dr. Bijoy Neog.
- 13. Dr. Devajyoti Bhuyan
- 14. Dr. Tulumoni Goswami
- 15. Dr. Malaxmi Dutta
- 16. Mr. Bubul Ch. Neog
- 17. Dr. Kalayan Das
- 18. Dr. Runjun Gogoi
- 19. Dr. Anita Mazander Buragohain
- 20. Dr. Munutara Bagam

The meeting resolved the following resolution.

- 1. The syllabi for 3<sup>rd</sup> Semester (core), 4<sup>th</sup> Semester (core), Generic elective, Audit course and Skill Enhancement course are finalized.
- 2. The syllabi, published by UGC are adopted as it is for theoretical courses.
- 3. The syllabi for practical courses are changed for plant taxonomy and Cryptogams and Gymnosperms.
- 4. The locally available plant species are included in place of prescribed species.
- 5. If the prescribed species are available locally, then those are kept as it is.
- 6. For Generic Elective courses, Audit courses and Skill Enhancement courses, the UGC syllabi are adopted as it is. But the name of the course for B.Sc 1<sup>st</sup> semester Generic Elective is changed to "Study of Bio-diversity".
- 7. For, Audit Course, B.Sc 1<sup>st</sup> semester, the name of the course is kept as "Bio-diversity".
- 8. Regarding the opening of Master Degree Course in Botany, it is decided that the course should be opened from the session 2018-2019.
- 9. The syllabus for Master Degree is examined.
- 10. It is decided that the syllabus for Master Degree must be sent to at least three universities of India and according to their recommendations and suggestions, it should be modified.

## **PROCEEDING**

# First Meeting of the Board of Studies

# **Department of Chemistry**

# J B College (Autonomous)

## **Member Present:**

SI. No	Name
1	Gautam Kalita, H/D, Chairman
2	Dr. Balin Chetia, DU, VC nominee
3	Dr. Maitreyee S. Bezbarua, Kaziranga University,  AC nominee
4	Dr. Ashim J. Thakur, Tejpur University, AC nominee
5	Mr. Anuj Baruah, ONGC, Representative from Industry/Corporate
6	Dr. D. R. Saikia, Alumni
7	Dr. Nibedita Mahanta, Faculty Member
8	Dr. Prasanta Kr. Baruah, Faculty Member
9	Dr. Arpan Kr. Baruah, Faculty Member
10	Dr. Bhupen Baruah, Faculty Member
11	Mrs. Akhtara H. Kalita, Faculty Member
12	Dr. Bhupen Kr. Barua, Faculty Member

The first meeting of the Undergraduate board of studies of the Department of Chemistry, Jagannath Barooah College (Autonomous) was held on 14<sup>th</sup> May, 2016 under the chairmanship of Gautam Kalita, HoD of the Department in the Departmental Common Room. After introduction, the Chairman explained the objectives of the Board of Studies. Moving on to the next item in the agenda, the Chairman made a presentation on the scheme for the Choice Based Credit System (CBCS) in B. Sc. Honours (Chemistry) on the basis of UGC syllabus which is to be introduced in J B College (Autonomous) w.e.f. 2016-2017 sessions. Dr. B. Chetia suggested that it is better to have the conversion of credits to marks and for each paper credit with marks and time allotted. Dr. Ashim J. Thakur pointed out that credit determines the number of hours of instructions required per week and one credit is equivalent to one hour of teaching or two hour of practical work. The Chairman suggested that the marks in theory and practical should be in the ratio of 3:2. Dr. Maitreyee S. Bejbarua suggested that each paper with six credit (theory 4 + lab 2) be allotted 100 marks (theory 60 + practical 40). The members unanimously accepted the proposed scheme for CBCS after clearing their doubts. The Chairman informed the House that in view of limitation of resources and infrastructural facilities, the choice on the part on the students in offering courses of Generic Elective, Ability Enhancement (Skill Based) and Discipline Specific Elective courses would be restricted. Taking part in the discussion Dr. D. R. Saikia and Dr. M. S. Bejbarua suggested that it is not the right time to close the matter of choice on the part of the students specially in offering courses of Discipline Specific Elective courses since these courses will start from 5<sup>th</sup> and 6<sup>th</sup> semester only. After discussion, the Board decided that the proposed syllabi would include besides 14 mandatory papers in the category of the core courses, fourteen papers in the following wayfour papers in the category of Generic Elective Course, eight papers in the category of Discipline Specific Elective and two papers in the category of Ability Enhancement (Skill Based) courses. The Chairman then placed the Syllabi of B.Sc. (Honours) Chemistry as prepared by the UGC and informed the House that 14 Courses in the category of Core Courses as prescribed by the UGC would be mandatory in the sense that to strike uniformity throughout the country no changes in the nomenclature of such courses can be made . However, the Board reserves the

right to alter or modify the contents of each core course subject to maximum level of 20 per cent.

The Board, in principle, unanimously adopts 14 papers of the core course as prescribed by the UGC with the detail of the contents of first four papers to be studied in First and Second Semesters. It however includes the little modification made in the contents of the papers CHEMISTRY -C II with the title 'PHYSICAL CHEMISTRY-I' and CHEMISTRY-C III with the title 'ORGANIC CHEMISTRY- I' and CHEMISTRY -C IV with the title 'PHYSICAL CHEMISTRY- II' as shown in the syllabi.

The Board discusses about Generic Courses as prescribed by the UGC and adopts four courses namely: **1.** Atomic Structure, Bonding, General Organic Chemistry, Aliphatic Hydrocarbons **2.** Chemical Energetics, Equilibria and Functional Organic Chemistry - I **3.** Solutions, Phase Equilibria, Conductance, Electrochemistry, & Functional Group Organic Chemistry - I **4.** Transition Metal & Coordination Chemistry, States of Matter & Chemical Kinetics. The meeting also discusses about Discipline Specific Elective papers and adopts eight papers subject to the availability of infrastructure and faculty members namely: **1.** Analytic Methods in Chemistry, **2.** Novel Inorganic Solids, **3.** Polymer Chemistry, **4.** Research Methodology for Chemistry, **5.** Green Chemistry, **6.** Industrial Chemicals and Environment, **7.** Inorganic Materials of Industrial Importance and **8.** Dissertation. The meeting discusses about the adoption and introduction of the Ability Enhancement (Skill Based) courses. In that category, the meeting decides to adopt **1.** Pharmaceutical Chemistry and **2.** Chemistry of Cosmetics & Perfumes from the pool as prescribed by the UGC. The meeting after discussion has adopted the following resolutions.

1. The Undergraduate Board of Studies meeting of the Department of Chemistry held on 14<sup>th</sup> May, 2016 resolves that the scheme for Choice Based Credit System (CBCS) in B. Sc. Honours (Chemistry) as prescribed by the UGC be adopted which will be as under:

SEME	STER /COURSE OPTED	COURSE NAME	Credits	Marks
I	Ability Enhancement Compulsory  Course-I	English Communications/ Environmental Science	2	
	Core Course-I	Inorganic Chemistry-I	4	60
	Core Course-I Practical	Inorganic Chemistry-I Lab	2	40
	Core Course-II	Physical Chemistry-I	4	60
	Core Course-II Practical	Physical Chemistry-I Lab	2	40
	Generic Elective -1	GE-1	4	60
	Generic Elective -1 Practical		2	40
II	Ability Enhancement Compulsory	English Communications/	2	
	Course-II	Environmental Science		
	Core Course-III	Organic Chemistry-I	4	60
	Core Course-III Practical	Organic Chemistry-I Lab	2	40
	Core Course-IV	Physical Chemistry-II	4	60
	Core Course-IV Practical	Physical Chemistry-II Lab	2	40
	Generic Elective -2	GE-2	4	60
	Generic Elective -2 Practical		2	40
Ш	Core Course-V	Inorganic Chemistry-II	4	60
	Core Course-V Practical	Inorganic Chemistry-II Lab	2	40
	Core Course-VI	Organic Chemistry-II	4	60

	Core Course-VI Practical	Organic Chemistry-II Lab	2	40
	Core Course-VII	Physical Chemistry-III	4	60
	Core Course-VII Practical	Physical Chemistry-III Lab	2	40
	Skill Enhancement Course -1	SEC-1	2	
	Generic Elective -3	GE-3	4	60
	Generic Elective -3 Practical		2	40
IV	Core Course-VIII	Inorganic Chemistry-III	4	60
	Course-VIII Practical	Inorganic Chemistry-III Lab	2	40
	Core Course-IX	Organic Chemistry-III	4	60
	Course-IX Practical	Organic Chemistry-III Lab	2	40
	Core Course-X	Physical Chemistry-IV	4	60
	Course-X Practical	Physical Chemistry-IV Lab	2	40
	Skill Enhancement Course -2	SEC -2	2	
	Generic Elective -4	GE-4	4	60
	Generic Elective -4 Practical		2	40
V	Core Course-XI	Organic Chemistry-IV	4	60
	Core Course-XI Practical	Organic Chemistry-IV Lab	2	40
	Core Course-XII	Physical Chemistry-V	4	60
	Core Course-XII Practical	Physical Chemistry-V Lab	2	40
	Discipline Specific Elective -1	DSE-1	4	60

	Discipline Specific Elective -1 Practical	DSE-1 Lab	2	40
	Discipline Specific Elective -2	DSE-2	4	60
	Discipline Specific Elective- 2 Practical	DSE-2 Lab	2	40
VI	Core Course-XIII	Inorganic Chemistry-IV	4	60
	Core Course-XIII Practical	Inorganic Chemistry-IV Lab	2	40
	Core Course-XIV	Organic Chemistry-V	4	60
	Core Course-XIV Practical	Organic Chemistry-V Lab	2	40
	Discipline Specific Elective -3	DSE-3	4	60
	Discipline Specific Elective -3 Practical	DSE-3 Lab	2	40
	Discipline Specific Elective-4	DSE-4	4	60
	Discipline Specific Elective -4 Practical	DSE-4 Lab	2	40
Total Credits			140	

2. The Undergraduate Board of Studies meeting of the Department of Chemistry held on 14<sup>th</sup> May, 2016 resolves that 14 papers of in the category of core courses as prescribed by the UGC for B.Sc. (Honours ) in Chemistry be adopted and the syllabi of first four papers for first and second semesters be adopted with the little changes in the contents as shown in the respective course content of the syllabi.( **Detail of the Syllabi is attached**)

3. The Undergraduate Board of Studies meeting of the Department of Chemistry held on 14<sup>th</sup> May, 2016 resolves that the following Generic Courses be introduced in the Semesters shown against the courses.

SL NO	SEMESTER	TITLE OF THE COURSE
1	FIRST SEMESTER	Atomic Structure, Bonding, General Organic Chemistry, Aliphatic Hydrocarbons
2	SECOND SEMESTER	Chemical Energetics, Equilibria and Functional Organic Chemistry - I
3	THIRD SEMESTER	Solutions, Phase Equilibria, Conductance, Electrochemistry, & Functional Group Organic Chemistry - I
4	FOURTH SEMESTER	Transition Metal & Coordination Chemistry, States of Matter & Chemical Kinetics

4. The Undergraduate Board of Studies meeting of the Department of Chemistry held on 14<sup>th</sup> May, 2016 resolves that the following Ability Enhancement (Skill Based) Courses be introduced in the Semesters shown against the courses.

SL NO	SEMESTER	TITLE OF THE COURSE
1	THIRD SEMESTER	Pharmaceutical Chemistry
2	FOURTH SEMESTER	Chemistry of Cosmetics & Perfumes

- 5. The Undergraduate Board of Studies meeting of the Department of Chemistry held on 14<sup>th</sup> May, 2016 resolves that the following Discipline Specific Elective Courses be offered in fifth and sixth semester subject to the availability of infrastructure and competent faculty.
  - 1. Analytic Methods in Chemistry,

- 2. Novel Inorganic Solids,
- 3. Polymer Chemistry,
- 4. Research Methodology for Chemistry,
- 5. Green Chemistry,
- 6. Industrial Chemicals and Environment,
- 7. Inorganic Materials of Industrial Importance and
- 8. Dissertation.

The meeting came to an end with a brief comment from the chair wherein he expresses his deep sense of gratitude for the co-operation he received from all the members in the meeting towards fulfilling the objectives of the meeting as per the agenda.

CHOICE BASED CREDIT SYSTEM

SYLLABI AND READING LIST

B.Sc. (HONOURS) CHEMISTRY

A) CORE COURSE

**CORE COURSE (HONOURS IN CHEMISTRY)** 

Semester I

**CHEMISTRY-C I: INORGANIC CHEMISTRY-I** 

(Credits: Theory-04, Practicals-02)

**Theory: 60 Lectures** 

**Atomic Structure:** 

Bohr's theory, its limitations and atomic spectrum of hydrogen atom. Wave

mechanics: de Broglie equation, Heisenberg's Uncertainty Principle and its

significance, Schrödinger's wave equation, significance of  $\psi$  and  $\psi$ 2.

Quantum numbers and their significance. Normalized and orthogonal wave

functions. Sign of wave functions. Radial and angular wave functions for

hydrogen atom. Radial and angular distribution curves. Shapes of s, p, d and f

orbitals. Contour boundary and probability diagrams.

Pauli's Exclusion Principle, Hund's rule of maximum multiplicity, Aufbau's

principle and its limitations, Variation of orbital energy with atomic number.

(14 Lectures)

**Periodicity of Elements:** 

s, p, d, f block elements, the long form of periodic table. Detailed discussion

of the following properties of the elements, with reference to s and p-block.

(a) Effective nuclear charge, shielding or screening effect, Slater rules,

variation of effective nuclear charge in periodic table.

(b) Atomic radii (van der Waals)

(c) Ionic and crystal radii.

- (d) Covalent radii (octahedral and tetrahedral)
- (e) Ionization enthalpy, Successive ionization enthalpies and factors affecting ionization energy. Applications of ionization enthalpy.
- (f) Electron gain enthalpy, trends of electron gain enthalpy.
- (g) Electronegativity, Pauling's/ Mulliken's/ Allred Rachow's/ and Mulliken-Jaffé's

electronegativity scales. Variation of electronegativity with bond order, partial charge, hybridization, group electronegativity. Sanderson's electron density ratio.

(16 Lectures)

### **Chemical Bonding:**

- (i) *Ionic bond:* General characteristics, types of ions, size effects, radius ratio rule and its limitations. Packing of ions in crystals. Born-Landé equation with derivation and importance of Kapustinskii expression for lattice energy. Madelung constant, Born-Haber cycle and its application, Solvation energy.
- (ii) *Covalent bond:* Lewis structure, Valence Bond theory (Heitler-London approach).

Energetics of hybridization, equivalent and non-equivalent hybrid orbitals. Bent's rule, Resonance and resonance energy, Molecular orbital theory. Molecular orbital diagrams of diatomic and simple polyatomic molecules N2, O2, C2, B2, F2, CO, NO, and their ions; HCl, BeF2, CO2, (idea of s-p mixing and orbital interaction to be given). Formal charge, Valence shell electron pair repulsion theory (VSEPR), shapes of simple molecules and ions containing lone pairs and bond pairs of electrons, multiple bonding ( $\sigma$  and  $\sigma$  bond approach) and bond lengths.

Covalent character in ionic compounds, polarizing power and polarizability. Fajan's rules and consequences of polarization.

Ionic character in covalent compounds: Bond moment and dipole moment.

Percentage ionic character from dipole moment and electronegativity difference.

- (iii) *Metallic Bond:* Qualitative idea of valence bond and band theories. Semiconductors and insulators, defects in solids.
- (iv) Weak Chemical Forces: van der Waals forces, ion-dipole forces, dipoledipole

interactions, induced dipole interactions, Instantaneous dipole-induced dipole interactions. Repulsive forces, Hydrogen bonding (theories of hydrogen bonding, valence bond treatment) Effects of chemical force, melting and boiling points, solubility energetics of dissolution process.

(26 Lectures)

#### Oxidation-Reduction:

Redox equations, Standard Electrode Potential and its application to inorganic reactions.

Principles involved in volumetric analysis to be carried out in class.

(4 Lectures)

#### **Reference Books:**

Reference books.
☐Lee, J.D. Concise Inorganic Chemistry ELBS, 1991.
Douglas, B.E. and McDaniel, D.H. Concepts & Models of Inorganic Chemistry
Oxford, 1970
☐Atkins, P.W. & Paula, J. <i>Physical Chemistry</i> , 10th Ed., Oxford University Press, 2014.
Day, M.C. and Selbin, J. <i>Theoretical Inorganic Chemistry</i> , ACS Publications, 1962.
Rodger, G.E. <i>Inorganic and Solid State Chemistry</i> , Cengage Learning India Edition,

#### **CHEMISTRY LAB- C I LAB:**

2002.

#### **60 Lectures**

## (A) Titrimetric Analysis

- (i) Calibration and use of apparatus
- (ii) Preparation of solutions of different Molarity/Normality of titrants

### (B) Acid-Base Titrations

- (i) Estimation of carbonate and hydroxide present together in mixture.
- (ii) Estimation of carbonate and bicarbonate present together in a mixture.
- (iii) Estimation of free alkali present in different soaps/detergents

### (C) Oxidation-Reduction Titrimetry

- (i) Estimation of Fe(II) and oxalic acid using standardized KMnO4 solution.
- (ii) Estimation of oxalic acid and sodium oxalate in a given mixture.
- (iii) Estimation of Fe(II) with K2Cr2O7 using internal (diphenylamine, anthranilic

acid) and external indicator.

#### **Reference text:**

1. Mendham, J., A. I. Vogel's *Quantitative Chemical Analysis 6th Ed.,* Pearson, 2009.

CHEMISTRY -C II: PHYSICAL CHEMISTRY-I

(Credits: Theory-04, Practicals-02)

**Theory: 60 Lectures** 

Gaseous state:

Kinetic molecular model of a gas: postulates and derivation of the kinetic gas

equation; collision frequency; collision diameter; mean free path and

viscosity of gases, including their temperature and pressure dependence,

relation between mean free path and coefficient of viscosity, calculation of σ

from  $\eta$ ; variation of viscosity with temperature and pressure.

Maxwell distribution and its use in evaluating molecular velocities (average,

root mean square and most probable) and average kinetic energy, law of

equipartition of energy, degrees of freedom and molecular basis of heat

capacities.

Behaviour of real gases: Deviations from ideal gas behaviour, compressibility

factor, Z, and its variation with pressure for different gases. Causes of

deviation from ideal behaviour. Van der Waals equation of state, its

derivation and application in explaining real gas behaviour, mention of other

equations of state (Berthelot, Dietrici); virial equation of state; van der Waals

equation expressed in virial form and calculation of Boyle temperature.

Isotherms of real gases and their comparison with van der Waals isotherms,

continuity of states, critical state, relation between critical constants and van

der Waals constants, law of corresponding states.

(18 Lectures)

Liquid state:

Qualitative treatment of the structure of the liquid state; Radial distribution

function; physical properties of liquids; vapour pressure, surface tension and

coefficient of viscosity, and their determination. Effect of addition of various

solutes on surface tension and viscosity. Explanation of cleansing action of detergents. Temperature variation of viscosity of liquids and comparison with that of gases.

Qualitative discussion of structure of water.

(6 Lectures)

#### Solid state:

Nature of the solid state, law of constancy of interfacial angles, law of rational indices, Miller indices, elementary ideas of symmetry, symmetry elements and symmetry operations, qualitative idea of point and space groups, seven crystal systems and fourteen Bravais lattices; X-ray diffraction, Bragg's law, a simple account of rotating crystal method and powder pattern method. Analysis of powder diffraction patterns of NaCl, CsCl and KCl.

Defects in crystals. Glasses and liquid crystals.

(16 Lectures)

#### Ionic equilibria:

Strong, moderate and weak electrolytes, degree of ionization, factors affecting degree of ionization, ionization constant and ionic product of water. Ionization of weak acids and bases, pH scale, common ion effect; dissociation constants of mono-, di-and triprotic acids (exact treatment).

Salt hydrolysis-calculation of hydrolysis constant, degree of hydrolysis and pH for different salts. Buffer solutions; derivation of Henderson equation and its applications; buffer capacity, buffer range, buffer action and applications of buffers in analytical chemistry and biochemical processes in the human body.

Solubility and solubility product of sparingly soluble salts – applications of solubility product principle. Qualitative treatment of acid – base titration curves (calculation of pH at various stages). Theory of acid–base indicators; selection of indicators and their limitations. Multistage equilibria in polyelectrolyte systems; hydrolysis and hydrolysis constants.

(20 Lectures)

Reference Books:
☐Atkins, P. W. & Paula, J. de <i>Atkin's Physical Chemistry</i> 10th Ed., Oxford
University
Press (2014).
Ball, D. W. <i>Physical Chemistry</i> Thomson Press, India (2007).
Castellan, G. W. <i>Physical Chemistry</i> 4th Ed. Narosa (2004).
Mortimer, R. G. <i>Physical Chemistry</i> 3rd Ed. Elsevier: NOIDA, UP (2009).
☐Engel, T. & Reid, P. <i>Physical Chemistry</i> 3rd Ed. Pearson (2013).

## **CHEMISTRY LAB-C II LAB**

### **60 Lectures**

- 1. Surface tension measurements.
- a. Determine the surface tension by (i) drop number (ii) drop weight method.
- b. Study the variation of surface tension of detergent solutions with concentration.
- 2. Viscosity measurement using Ostwald's viscometer.
- a. Determination of viscosity of aqueous solutions of (i) polymer (ii) ethanol and
- (iii) sugar at room temperature.
- b. Study the variation of viscosity of sucrose solution with the concentration of

solute.
3. Indexing of a given powder diffraction pattern of a cubic crystalline
system.
4. pH metry
a. Study the effect on pH of addition of HCI/NaOH to solutions of acetic acid,
sodium acetate and their mixtures.
b. Preparation of buffer solutions of different pH
i. Sodium acetate-acetic acid
ii. Ammonium chloride-ammonium hydroxide
c. pH metric titration of (i) strong acid vs. strong base, (ii) weak acid vs. strong
base.
d. Determination of dissociation constant of a weak acid.
Reference Books
Khosla, B. D.; Garg, V. C. & Gulati, A. Senior Practical Physical Chemistry, R.
Chand & Co.: New Delhi (2011).
☐Garland, C. W.; Nibler, J. W. & Shoemaker, D. P. <i>Experiments in Physical</i>
Chemistry
8th Ed.; McGraw-Hill: New York (2003).
Halpern, A. M. & McBane, G. C. Experimental Physical Chemistry 3rd Ed.;
W.H.
Freeman & Co.: New York (2003).

Semester II			

(Credits: Theory-04, Practicals-02)

Theory: 60 Lectures

**Basics of Organic Chemistry** 

Organic Compounds: Classification, and Nomenclature, Hybridization, Shapes

of molecules, Influence of hybridization on bond properties.

Electronic Displacements: Inductive, electromeric, resonance and mesomeric

effects,

hyperconjugation and their applications; Dipole moment; Organic acids and

bases; their relative strength.

Homolytic and Heterolytic fission with suitable examples. Curly arrow rules,

formal charges; Electrophiles and Nucleophiles; Nucleophlicity and basicity;

Types, shape and their relative stability of Carbocations, Carbanions, Free

radicals and Carbenes.

Introduction to types of organic reactions and their mechanism: Addition,

Elimination and Substitution reactions.

(6 Lectures)

**Stereochemistry:** 

Fischer Projection, Newmann and Sawhorse Projection formulae and their

interconversions; Geometrical isomerism: cis-trans and, syn-anti isomerism

E/Z notations with C.I.P rules. Optical Isomerism: Optical Activity, Specific

Rotation, Chirality/Asymmetry, Enantiomers, Molecules with two or more

chiral-centres, Distereoisomers, meso structures, Racemic mixture and

resolution. Relative and absolute configuration: D/L and R/S designations.

(18 Lectures)

**Chemistry of Aliphatic Hydrocarbons** 

A. Carbon-Carbon sigma bonds

Chemistry of alkanes: Formation of alkanes, Wurtz Reaction, Wurtz-Fittig Reactions, Free radical substitutions: Halogenation -relative reactivity and selectivity.

#### B. Carbon-Carbon pi bonds:

Formation of alkenes and alkynes by elimination reactions, Mechanism of E1, E2, E1cb reactions. Saytzeff and Hofmann eliminations.

Reactions of alkenes: Electrophilic additions their mechanisms (Markownikoff/ Anti

Markownikoff addition), mechanism of oxymercuration-demercuration, hydroborationoxidation, ozonolysis, reduction (catalytic and chemical), syn and anti-hydroxylation (oxidation). 1,2-and 1,4-addition reactions in conjugated dienes and, Diels-Alder reaction; Allylic and benzylic bromination and mechanism, e.g. propene, 1-butene, toluene, ethyl benzene.

Reactions of alkynes: Acidity, Electrophilic and Nucleophilic additions. Hydration to form carbonyl compounds, Alkylation of terminal alkynes.

#### C. Cycloalkanes and Conformational Analysis

Types of cycloalkanes and their relative stability, Baeyer strain theory, Conformation

analysis of alkanes: Relative stability: Energy diagrams of cyclohexane: Chair, Boat and Twist boat forms; Relative stability with energy diagrams.

#### (24 Lectures)

#### **Aromatic Hydrocarbons**

Aromaticity: Hückel's rule, aromatic, antiaromatic and non-aromatic compounds, aromatic character of arenes, cyclic carbocations/carbanions and heterocyclic compounds with suitable examples. Electrophilic aromatic substitution: halogenation, nitration, sulphonation and Friedel-Craft's alkylation/acylation with their mechanism. Directing effects of the groups.

# (12 Lectures)

Reference Books:
☐Morrison, R. N. & Boyd, R. N. <i>Organic Chemistry</i> , Dorling Kindersley (India) Pvt.
Ltd. (Pearson Education).
Finar, I. L. Organic Chemistry (Volume 1), Dorling Kindersley (India) Pvt. Ltd.
(Pearson Education).
Finar, I. L. Organic Chemistry (Volume 2: Stereochemistry and the Chemistry of
Natural Products), Dorling Kindersley (India) Pvt. Ltd. (Pearson Education).
☐Eliel, E. L. & Wilen, S. H. <i>Stereochemistry of Organic Compounds</i> , Wiley: London,
1994.
☐ Kalsi, P. S. <i>Stereochemistry Conformation and Mechanism</i> , New Age International,
2005.
☐ McMurry, J.E. <i>Fundamentals of Organic Chemistry</i> , 7th Ed. Cengage Learning India
Edition, 2013.

## **CHEMISTRY LAB-C II LAB**

## **60 Lectures**

 ${\bf 1.} \ {\bf Checking} \ {\bf the} \ {\bf calibration} \ {\bf of} \ {\bf the} \ {\bf thermometer}$ 

2. Purification of organic compounds by crystallization using the following solvents:
a. Water
b. Alcohol
c. Alcohol-Water
3. Determination of the melting points of above compounds and unknown organic
compounds (Kjeldahl method and electrically heated melting point apparatus)
4. Effect of impurities on the melting point – mixed melting point of two unknown organic
compounds
5. Determination of boiling point of liquid compounds. (boiling point lower than and more
than 100 °C by distillation and capillary method)
6. Chromatography
a. Separation of a mixture of two amino acids by ascending and horizontal paper
chromatography
b. Separation of a mixture of two sugars by ascending paper chromatography
c. Separation of a mixture of o-and p-nitrophenol or o-and p-aminophenol by
thin layer chromatography (TLC)
Reference Books
Mann, F.G. & Saunders, B.C. <i>Practical Organic Chemistry,</i> Pearson Education
(2009)

\_\_furniss, B.S.; Hannaford, A.J.; Smith, P.W.G.; Tatchell, A.R. *Practical Organic* 

Chemistry, 5th Ed., Pearson (2012)

CHEMISTRY -C IV: PHYSICAL CHEMISTRY- II

(Credits: Theory-04, Practicals-02)

Theory: 60 Lectures

**Chemical Thermodynamics:** 

Intensive and extensive variables; state and path functions; isolated, closed

and open systems; zeroth law of thermodynamics.

First law: Concept of heat, q, work, w, internal energy, U, and statement of

first law;

enthalpy, H, relation between heat capacities, calculations of q, w, U and H

for reversible, irreversible and free expansion of gases (ideal and van der

Waals) under isothermal and adiabatic conditions.

Thermochemistry: Heats of reactions: standard states; enthalpy of formation

of molecules and ions and enthalpy of combustion and its applications;

calculation of bond energy, bond dissociation energy and resonance energy

from thermochemical data, effect of temperature (Kirchhoff's equations) and

pressure on enthalpy of reactions. Adiabatic flame temperature, explosion

temperature.

Second Law: statement of the second law of thermodynamics; Carnot's

theorem, Carnot cycle, efficiency of heat engines, thermodynamic scale of

temperature, Concept of entropy; molecular and statistical interpretation of

entropy. Calculation of entropy change in a cyclic, reversible and irreversible

processes. Calculation of entropy change of an ideal gas with change in P, V, T. entropy change in physical transformation, entropy of mixing

*Third Law:* Statement of third law, concept of residual entropy, calculation of absolute entropy of molecules.

Free Energy Functions: Gibbs and Helmholtz energy; variation of S, G, A with T, V, P; Free energy change and spontaneity. Relation between Joule-Thomson coefficient and other thermodynamic parameters; inversion temperature; Gibbs-Helmholtz equation; Maxwell relations; thermodynamic equation of state.

(36 Lectures)

### **Systems of Variable Composition:**

Partial molar quantities, dependence of thermodynamic parameters on composition; Gibbs-Duhem equation, chemical potential of ideal mixtures, change in thermodynamic functions in mixing of ideal gases.

(8 Lectures)

#### **Chemical Equilibrium:**

Criteria of thermodynamic equilibrium, degree of advancement of reaction, chemical

equilibria in ideal gases, concept of fugacity. Thermodynamic derivation of relation between Gibbs free energy of reaction and reaction quotient. Coupling of exoergic and endoergic reactions. Equilibrium constants and their quantitative dependence on temperature, pressure and concentration. Free energy of mixing and spontaneity; thermodynamic derivation of relations between the various equilibrium constants *Kp*, *Kc* and *Kx*. Le Chatelier

principle (quantitative treatment); equilibrium between ideal gases and a pure condensed phase.

(8 Lectures)

## **Solutions and Colligative Properties:**

Dilute solutions; lowering of vapour pressure, Raoult's and Henry's Laws and their

applications. Excess thermodynamic functions. Thermodynamic derivation using chemical potential to derive relations between the four colligative properties [(i) relative lowering of vapour pressure, (ii) elevation of boiling point, (iii) Depression of freezing point, (iv) osmotic pressure] and amount of solute. Applications in calculating molar masses of normal, dissociated and associated solutes in solution.

(8 Lectures)

#### **Reference Books**

Peter, A. & Paula, J. de. <i>Physical Chemistry</i> 10th Ed., Oxford University Press (2014).
Castellan, G. W. <i>Physical Chemistry 4th Ed.,</i> Narosa (2004).
Engel, T. & Reid, P. <i>Physical Chemistry 3rd Ed.,</i> Prentice-Hall (2012).
☐McQuarrie, D. A. & Simon, J. D. <i>Molecular Thermodynamics</i> Viva Books Pvt. Ltd.:
New Delhi (2004).
□Assael, M. J.; Goodwin, A. R. H.; Stamatoudis, M.; Wakeham, W. A. & Will, S.
Commonly Asked Questions in Thermodynamics. CRC Press: NY (2011).
Levine, I.N. <i>Physical Chemistry</i> 6th Ed., Tata Mc Graw Hill (2010).
Metz. C.R. 2000 solved problems in chemistry. Schaum Series (2006).

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#### **CHEMISTRY LAB- C IV LAB**

#### **60 Lectures**

### Thermochemistry

(a) Determination of heat capacity of a calorimeter for different volumes using change of

enthalpy data of a known system (method of back calculation of heat capacity of calorimeter

from known enthalpy of solution or enthalpy of neutralization).

(b) Determination of heat capacity of the calorimeter and enthalpy of neutralization of

hydrochloric acid with sodium hydroxide.

- (c) Calculation of the enthalpy of ionization of ethanoic acid.
- (d) Determination of heat capacity of the calorimeter and integral enthalpy (endothermic and

exothermic) solution of salts.

(e) Determination of basicity/proticity of a polyprotic acid by the thermochemical method in

terms of the changes of temperatures observed in the graph of temperature versus time for

different additions of a base. Also calculate the enthalpy of neutralization of the first step.

- (f) Determination of enthalpy of hydration of copper sulphate.
- (g) Study of the solubility of benzoic acid in water and determination of  $\Delta H$ .

Any other experiment carried out in the class.

#### **Reference Books**

☐Khosla, B. D.; Garg, V. C. & Gulati, A., Senior Practical Physical Chemistry, R.Chand & Co.: New Delhi (2011).☐Athawale, V. D. & Mathur, P. Experimental Physical Chemistry New Age

### B) Generic - Elective (Interdisciplinary):

International: New Delhi (2001)

Generic Elective Papers (GE) (Minor-Chemistry) (any four) for other

Departments/ Disciplines: (Credit: 06 each)

GE - 1: ATOMIC STRUCTURE, BONDING, GENERAL ORGANIC CHEMISTRY & ALIPHATIC HYDROCARBONS

(Credits: Theory-04, Practicals-02)

Theory: 60 Lectures

Section A: Inorganic Chemistry-1 (30 Periods)

**Atomic Structure:** Review of: Bohr's theory and its limitations, dual behaviour of matter and radiation, de Broglie's relation, Heisenberg Uncertainty principle. Hydrogen atom spectra. Need of a new approach to Atomic structure. What is Quantum mechanics? Time independent Schrodinger equation and meaning of various terms in it. Significance of  $\psi$  and  $\psi$ 2, Schrödinger equation for hydrogen atom. Radial and angular parts of the hydogenic wavefunctions (atomic orbitals) and their variations for 1s, 2s, 2p, 3s, 3p and 3d orbitals (Only graphical representation). Radial and angular nodes and their significance. Radial distribution functions and the concept of the most probable distance with special reference to 1s and 2s atomic

orbitals. Significance of quantum numbers, orbital angular momentum and

quantum numbers ml and ms. Shapes of s, p and d atomic orbitals, nodal

planes. Discovery of spin, spin quantum number (s) and magnetic spin

quantum number (ms).

Rules for filling electrons in various orbitals, Electronic configurations of the

atoms. Stability of half-filled and completely filled orbitals, concept of

exchange energy. Relative energies of atomic orbitals, Anomalous electronic

configurations.

(14 Lectures)

**Chemical Bonding and Molecular Structure** 

*Ionic Bonding:* General characteristics of ionic bonding. Energy considerations

in ionic bonding, lattice energy and solvation energy and their importance in

the context of stability and solubility of ionic compounds. Statement of Born-

Landé equation for calculation of lattice energy, Born-Haber cycle and its

applications, polarizing power and polarizability. Fajan's rules, ionic character

in covalent compounds, bond moment, dipole moment and percentage ionic

character.

Covalent bonding: VB Approach: Shapes of some inorganic molecules and

ions on the basis of VSEPR and hybridization with suitable examples of linear,

trigonal planar, square planar, tetrahedral, trigonal bipyramidal and

octahedral arrangements.

Concept of resonance and resonating structures in various inorganic and

organic compounds. MO Approach: Rules for the LCAO method, bonding and

antibonding MOs and their characteristics for s-s, s-p and p-p combinations of

atomic orbitals, nonbonding combination of orbitals, MO treatment of

homonuclear diatomic molecules of 1st and 2nd periods (including idea of s-

p mixing) and heteronuclear diatomic molecules such as CO, NO and NO+.

Comparison of VB and MO approaches.

(16 Lectures)

Section B: Organic Chemistry-1 (30 Periods)

**Fundamentals of Organic Chemistry** 

Physical Effects, Electronic Displacements: Inductive Effect, Electromeric Effect, Resonance and Hyperconjugation. Cleavage of Bonds: Homolysis and Heterolysis.

Structure, shape and reactivity of organic molecules: Nucleophiles and electrophiles.

Reactive Intermediates: Carbocations, Carbanions and free radicals.

Strength of organic acids and bases: Comparative study with emphasis on factors affecting pK values. Aromaticity: Benzenoids and Hückel's rule.

(8 Lectures)

#### Stereochemistry

Conformations with respect to ethane, butane and cyclohexane. Interconversion of Wedge Formula, Newmann, Sawhorse and Fischer representations. Concept of chirality (upto two carbon atoms). Configuration: Geometrical and Optical isomerism; Enantiomerism, Diastereomerism and Meso compounds). Threo and erythro; D and L; *cis* – *trans* nomenclature; CIP Rules: R/ S (for upto 2 chiral carbon atoms) and E / Z Nomenclature (for upto two C=C systems).

(10 Lectures)

### **Aliphatic Hydrocarbons**

Functional group approach for the following reactions (preparations & reactions) to be studied in context to their structure.

**Alkanes:** (Upto 5 Carbons). *Preparation:* Catalytic hydrogenation, Wurtz reaction, Kolbe's synthesis, from Grignard reagent. *Reactions:* Free radical Substitution: Halogenation.

Alkenes: (Upto 5 Carbons) *Preparation:* Elimination reactions: Dehydration of alkenes and dehydrohalogenation of alkyl halides (Saytzeff's rule); cis alkenes (Partial catalytic hydrogenation) and trans alkenes (Birch reduction). *Reactions:* cis-addition (alk. KMnO4) and trans-addition (bromine), Addition of HX (Markownikoff's and anti-Markownikoff's addition), Hydration, Ozonolysis, oxymecuration-demercuration, Hydroboration-oxidation.

**Alkynes**: (Upto 5 Carbons) *Preparation:* Acetylene from CaC2 and conversion into higher alkynes; by dehalogenation of tetra halides and

dehydrohalogenation of vicinal-dihalides. *Reactions:* formation of metal acetylides, addition of bromine and alkaline KMnO4, ozonolysis and oxidation with hot alk. KMnO4.

(12 Lectures)

Reference Books:
Lee, J.D. Concise Inorganic Chemistry ELBS, 1991.
Cotton, F.A., Wilkinson, G. & Gaus, P.L. <i>Basic Inorganic Chemistry</i> , 3rd ed.,
Wiley.
Douglas, B.E., McDaniel, D.H. & Alexander, J.J. Concepts and Models in
norganic
Chemistry, John Wiley & Sons.
Huheey, J.E., Keiter, E.A., Keiter, R.L. & Medhi, O.K. <i>Inorganic Chemistry:</i>
Principles of Structure and Reactivity, Pearson Education India, 2006.
Graham Solomon, T.W., Fryhle, C.B. & Dnyder, S.A. <i>Organic Chemistry,</i> John
Wiley & Sons (2014).
McMurry, J.E. Fundamentals of Organic Chemistry, 7th Ed. Cengage
Learning India
Edition, 2013.
sykes, P. A Guidebook to Mechanism in Organic Chemistry, Orient Longman,
New
Delhi (1988).
Eliel, E.L. <i>Stereochemistry of Carbon Compounds,</i> Tata McGraw Hill
education,
2000.
Finar, I.L. <i>Organic Chemistry</i> (Vol. I & II), E.L.B.S.
Morrison, R.T. & Boyd, R.N. <i>Organic Chemistry</i> , Pearson, 2010.
Bahl, A. & Bahl, B.S. <i>Advanced Organic Chemistry,</i> S. Chand, 2010.

# GE - 1 LAB: ATOMIC STRUCTURE, BONDING, GENERAL ORGANIC CHEMISTRY & ALIPHATIC HYDROCARBONS

#### **60 Lectures**

#### Section A: Inorganic Chemistry - Volumetric Analysis

- 1. Estimation of sodium carbonate and sodium hydrogen carbonate present in a mixture.
- 2. Estimation of oxalic acid by titrating it with KMnO4.
- 3. Estimation of water of crystallization in Mohr's salt by titrating with KMnO4.
- 4. Estimation of Fe (II) ions by titrating it with K2Cr2O7 using internal indicator.
- 5. Estimation of Cu (II) ions iodometrically using Na2S2O3.

#### Section B: Organic Chemistry

1. Detection of extra elements (N, S, Cl, Br, I) in organic compounds (containing upto two

extra elements)

2. Separation of mixtures by Chromatography: Measure the Rf value in each case

(combination of two compounds to be given)

(a) Identify and separate the components of a given mixture of two amino acids (glycine,

aspartic acid, glutamic acid, tyrosine or any other amino acid) by paper chromatography

(b) Identify and separate the sugars present in the given mixture by paper chromatography.

#### **Reference Books:**

of Practical Organic Chemistry, Prentice-Hall, 5th edition, 1996.

JMann, F.G. & Saunders, B.C. <i>Practical Organic Chemistry</i> Orient-Longman
960.

GE - 2: CHEMICAL ENERGETICS, EQUILIBRIA & FUNCTIONAL ORGANIC

**CHEMISTRY-I** 

(Credits: Theory-04, Practicals-02)

**Theory: 60 Lectures** 

Section A: Physical Chemistry-1 (30 Lectures)

**Chemical Energetics** 

Review of thermodynamics and the Laws of Thermodynamics. Important principles and definitions of thermochemistry. Concept of standard state and standard enthalpies of formations, integral and differential enthalpies of solution and dilution. Calculation of bond energy, bond dissociation energy and resonance energy from thermochemical data. Variation of enthalpy of a reaction with temperature – Kirchhoff's equation.

Statement of Third Law of thermodynamics and calculation of absolute entropies of

substances.

(10 Lectures)

**Chemical Equilibrium:** 

Free energy change in a chemical reaction. Thermodynamic derivation of the law of chemical equilibrium. Distinction between  $\Delta G$  and  $\Delta G$ o, Le Chatelier's principle. Relationships between Kp, Kc and Kx for reactions involving ideal gases.

(8 Lectures)

Ionic Equilibria:

Strong, moderate and weak electrolytes, degree of ionization, factors affecting degree of ionization, ionization constant and ionic product of water. Ionization of weak acids and bases, pH scale, common ion effect. Salt hydrolysis-calculation of hydrolysis constant, degree of hydrolysis and pH for different salts. Buffer solutions. Solubility and solubility product of sparingly soluble salts – applications of solubility product principle.

(12 Lectures)

#### Section B: Organic Chemistry-2 (30 Lectures)

Functional group approach for the following reactions (preparations & reactions) to be studied in context to their structure.

#### **Aromatic hydrocarbons**

Preparation (Case benzene): from phenol, by decarboxylation, from acetylene, from benzene sulphonic acid. Reactions: (Case benzene): Electrophilic substitution: nitration, halogenation and sulphonation. Friedel-Craft's reaction (alkylation and acylation) (upto 4 carbons on benzene). Side chain oxidation of alkyl benzenes (upto 4 carbons on benzene).

(8 Lectures)

#### **Alkyl and Aryl Halides**

**Alkyl Halides** (Upto 5 Carbons) Types of Nucleophilic Substitution (SN1, SN2 and SNi) reactions. *Preparation:* from alkenes *and* alcohols.

Reactions: hydrolysis, nitrite & nitro formation, nitrile & isonitrile formation. Williamson's ether synthesis: Elimination vs substitution.

Aryl Halides *Preparation:* (Chloro, bromo and iodo-benzene case): from phenol, Sandmeyer & Gattermann reactions. *Reactions (Chlorobenzene):* Aromatic nucleophilic substitution (replacement by –OH group) and effect of nitro substituent. Benzyne Mechanism: KNH2/NH3 (or NaNH2/NH3). Reactivity and Relative strength of C-Halogen bond in alkyl, allyl, benzyl, vinyl and aryl halides.

#### (8 Lectures)

Alcohols, Phenols and Ethers (Upto 5 Carbons)

**Alcohols:** *Preparation:* Preparation of 10, 20 and 30 alcohols: using Grignard reagent, Ester hydrolysis, Reduction of aldehydes, ketones, carboxylic acid and esters.

Reactions: With sodium, HX (Lucas test), esterification, oxidation (with PCC, alk. KMnO4, acidic dichromate, conc. HNO3). Oppeneauer oxidation *Diols:* (Upto 6 Carbons) oxidation of diols. Pinacol-Pinacolone rearrangement.

**Phenols:** (Phenol case) *Preparation:* Cumene hydroperoxide method, from diazonium salts. *Reactions:* Electrophilic substitution: Nitration, halogenation and sulphonation. Reimer Tiemann Reaction, Gattermann-Koch Reaction, Houben–Hoesch Condensation, Schotten – Baumann Reaction.

Ethers (aliphatic and aromatic): Cleavage of ethers with HI.

Aldehydes and ketones (aliphatic and aromatic): (Formaldehye, acetaldehyde, acetone and benzaldehyde)

Preparation: from acid chlorides and from nitriles.

Reactions – Reaction with HCN, ROH, NaHSO3, NH2-G derivatives. Iodoform test. Aldol

Condensation, Cannizzaro's reaction, Wittig reaction, Benzoin condensation.

Clemensen

reduction and Wolff Kishner reduction. Meerwein-Pondorff Verley reduction.

#### (14 Lectures)

#### **Reference Books:**

Graham Solomon, T.W., Fryhle, C.B. & Dnyder, S.A. <i>Organic Chemistry,</i> John
Wiley & Sons (2014).
☐ McMurry, J.E. Fundamentals of Organic Chemistry, 7th Ed. Cengage
Learning India
Edition, 2013.
□\$ykes, P. A Guidebook to Mechanism in Organic Chemistry, Orient Longman,
New
Delhi (1988).
Finar, I.L. Organic Chemistry (Vol. I & II), E.L.B.S.
Morrison, R.T. & Boyd, R.N. <i>Organic Chemistry</i> , Pearson, 2010.
Bahl, A. & Bahl, B.S. Advanced Organic Chemistry, S. Chand, 2010.

Barrow, G.M. <i>Physical Chemistry</i> Tata McGraw-Hill (2007).
Castellan, G.W. <i>Physical Chemistry</i> 4th Ed. Narosa (2004).
☐Kotz, J.C., Treichel, P.M. & Townsend, J.R. <i>General Chemistry</i> Cengage
Learning
India Pvt. Ltd., New Delhi (2009).
☐Mahan, B.H. <i>University Chemistry</i> 3rd Ed. Narosa (1998).
☐Petrucci, R.H. <i>General Chemistry</i> 5th Ed. Macmillan Publishing Co.: New
York
(1985).

## GE - 2 LAB: CHEMICAL ENERGETICS, EQUILIBRIA & FUNCTIONAL ORGANIC

#### **CHEMISTRY-I**

**60 Lectures** 

Section A: Physical Chemistry

#### Thermochemistry

- 1. Determination of heat capacity of calorimeter for different volumes.
- 2. Determination of enthalpy of neutralization of hydrochloric acid with sodium

hydroxide.

- 3. Determination of enthalpy of ionization of acetic acid.
- 4. Determination of integral enthalpy of solution of salts (KNO3, NH4Cl).
- 5. Determination of enthalpy of hydration of copper sulphate.
- 6. Study of the solubility of benzoic acid in water and determination of  $\Delta H$ .

#### Ionic equilibria

pH measurements

Measurement of pH of different solutions like aerated drinks, fruit juices, shampoos and

soaps (use dilute solutions of soaps and shampoos to prevent damage to the glass electrode) using pH-meter. a) Preparation of buffer solutions: (i) Sodium acetate-acetic acid (ii) Ammonium chloride-ammonium hydroxide Measurement of the pH of buffer solutions and comparison of the values with theoretical values. Section B: Organic Chemistry 1. Purification of organic compounds by crystallization (from water and alcohol) and distillation. 2. Criteria of Purity: Determination of melting and boiling points. 3. Preparations: Mechanism of various reactions involved to be discussed. Recrystallisation, determination of melting point and calculation of quantitative yields to be done. (a) Bromination of Phenol/Aniline (b) Benzoylation of amines/phenols (c) Oxime and 2,4-dinitrophenylhydrazone of aldehyde/ketone **Reference Books** □Vogel, A.I., Tatchell, A.R., Furnis, B.S., Hannaford, A.J. & Smith, P.W.G., Textbook of Practical Organic Chemistry, Prentice-Hall, 5th edition, 1996. Mann, F.G. & Saunders, B.C. Practical Organic Chemistry Orient-Longman, 1960. Khosla, B. D.; Garg, V. C. & Gulati, A. Senior Practical Physical Chemistry, R. Chand & Co.: New Delhi (2011).

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C. Skill Enhancement Course (Credit: 02 each)- SEC1 to SEC4

PHARMACEUTICAL CHEMISTRY

(Credits: 02)

Theory: 30 Lectures

**Drugs & Pharmaceuticals** 

Drug discovery, design and development; Basic Retrosynthetic approach. Synthesis of the

representative drugs of the following classes: analgesics agents, antipyretic agents, anti-

inflammatory agents (Aspirin, paracetamol, Ibuprofen); antibiotics (Chloramphenicol);

antibacterial and antifungal agents (Sulphonamides; Sulphanethoxazol, Sulphacetamide,

Trimethoprim); antiviral agents (Acyclovir), Central Nervous System agents (Phenobarbital,

Diazepam), Cardiovascular (Glyceryl trinitrate), antilaprosy (Dapsone), HIV-AIDS related

drugs (AZT- Zidovudine).

**Fermentation** 

Aerobic and anaerobic fermentation. Production of (i) Ethyl alcohol and citric acid, (ii)

Antibiotics; Penicillin, Cephalosporin, Chloromycetin and Streptomycin, (iii) Lysine, Glutamic

acid, Vitamin B2, Vitamin B12 and Vitamin C.

**Practicals** 

1. Preparation of Aspirin and its analysis.

2. Preparation of magnesium bisilicate (Antacid).

**Reference Books:** 

Patrick, G. L. Introduction to Medicinal Chemistry, Oxford University Press, UK,

2013.

singh, H. & Kapoor, V.K. *Medicinal and Pharmaceutical Chemistry*, Vallabh

Prakashan, Pitampura, New Delhi, 2012.

Foye, W.O., Lemke, T.L. & William, D.A.: Principles of Medicinal Chemistry, 4th

ed., B.I. Waverly Pvt. Ltd. New Delhi.

**CHEMISTRY OF COSMETICS & PERFUMES** 

(Credits: 02)

30 Lectures

A general study including preparation and uses of the following: Hair dye, hair spray, shampoo, suntan lotions, face powder, lipsticks, talcum powder, nail enamel, creams (cold, vanishing and shaving creams), antiperspirants and artificial flavours. Essential oils and their importance in cosmetic industries with reference to Eugenol, Geraniol, sandalwood oil, eucalyptus, rose oil, 2-phenyl ethyl alcohol, Jasmone, Civetone, Muscone.

#### **Practicals**

- 1. Preparation of talcum powder.
- 2. Preparation of shampoo.
- 3. Preparation of enamels.
- 4. Preparation of hair remover.
- 5. Preparation of face cream.
- 6. Preparation of nail polish and nail polish remover.

#### **Reference Books:**

stocchi, E. <i>Industrial Chemistry</i> , Vol-I, Ellis Horwood Ltd. UK (1990).
ain, P.C. & Jain, M. Engineering Chemistry Dhanpat Rai & Sons, Delhi.
harma, B.K. & Gaur, H. <i>Industrial Chemistry</i> , Goel Publishing House, Meerut
(1996).

# Agenda for the Board of Studies Meeting on 14-05-16 of the Department of Chemistry of J. B. College, Jorhat

- 1. Explanations of the objectives of the Meeting and Briefing about the CBCS
- 2. Discussion and approval of the proposed scheme for choice based credit system in B. Sc. Honours (Chemistry).
- 3. Discussion and approval of the B. Sc. Chemistry (Honours) syllabus for the first and second semester (theory and practical) under CBCS system.
  - A. Discussion on core papers of first and second semester (theory and practical).
  - B. Discussion on generic Elective papers of first and second semester (theory and practical).
- 4. Approval of the list of examiners and question setters.
- 5. Any other matter.

## **PROCEEDING**

## 2nd Meeting of the Board of Studies

## **Department of Chemistry**

## J B College (Autonomous)

#### **Member Present:**

SI. No	Name
1	Gautam Kalita, H/D, Chairman
2	Dr. Balin Chetia, DU, VC nominee
3	Dr. Maitreyee S. Bezbarua, Kaziranga University,  AC nominee
4	Dr. Ashim J. Thakur, Tejpur University, AC nominee
5	Mr. Anuj Baruah, ONGC, Representative from Industry/Corporate
6	Dr. D. R. Saikia, Alumni
7	Dr. Nibedita Mahanta, Faculty Member
8	Dr. Prasanta Kr. Baruah, Faculty Member
9	Dr. Arpan Kr. Baruah, Faculty Member
10	Dr. Bhupen Baruah, Faculty Member
11	Mrs. Akhtara H. Kalita, Faculty Member
12	Dr. Bhupen Kr. Barua, Faculty Member

The second meeting of the Undergraduate board of studies of the Department of Chemistry, Jagannath Barooah College (Autonomous) was held on 18<sup>th</sup> February, 2017 under the chairmanship of Gautam Kalita, Head of the Department of Chemistry in the Departmental Common Room.

The meeting after discussion has adopted the following resolutions.

- 6. The Undergraduate Board of Studies meeting of the Department of Chemistry held on 18<sup>th</sup> February, 2017 resolves that the syllabi of the papers for 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, and 6th semesters in the category of core courses as prescribed by the UGC for B.Sc. (Honours ) in Chemistry be adopted with the little changes in the contents as shown in the respective course content of the syllabi . ( **Detail of the Syllabi is attached**)
- 7. The Undergraduate Board of Studies meeting of the Department of Chemistry held on 18<sup>th</sup> February, 2017 resolves that the syllabi of the papers for 3<sup>rd</sup> and 4<sup>th</sup> semesters in the category of generic elective courses as decided in the first meeting of the board of studies and as prescribed by the UGC for B.Sc. (Honours ) in Chemistry be adopted with the little changes in the contents as shown in the respective course content of the syllabi. ( **Detail of the Syllabi is attached**)
- 8. The Undergraduate Board of Studies meeting of the Department of Chemistry held on 18<sup>th</sup> February, 2017 decides that the distribution of marks against lectures for different topics in each paper (for core, generic elective and skill based course) be as shown in the syllabus. ( **Detail of the Syllabi is attached**)
- 9. The Undergraduate Board of Studies meeting of the Department of Chemistry held on 18<sup>th</sup> February, 2017 approves the list of Examiners and Question paper setters for all the six semesters.

The meeting came to an end with a brief comment from the chair wherein he expresses his deep sense of gratitude for the co-operation he received from all the

members in the meeting towards fulfilling the objectives of the meeting as per the agenda.

## Minutes of the Board of Studies Meeting held on 7th May 2016

#### **Department of Commerce, JB College (Autonomous)**

Minutes of the Board of Studies Meeting held on 7<sup>th</sup> May 2016, Department of Commerce, JB College (Autonomous) at Commerce Department at 12noon. The following members were Present.

- 1. Dr. Ashok Kumar Borthakur: HOD and Chairman.
- 2. Prof. Ashit Saha, VC Nominee, HOD Department of Commerce, D.U.
- 3. Dr. Jatindran nath Saikia, AC Nominee, Principal Golaghat Commerce College.
- 4. Dr. Sanjeeb Baruah, AC Nominee, Associate Professor, CKB Commerce College, Jorhat.
- 5. CA Deepak Bhattacharyya. Alumina Member, Jorhat.
- 6. Mr. Basant Khatain, Industry Member, Kazairanga University.
- 7. Mr. Porag Sarmah. Faculty Member.
- 8. Dr. Prasana Kalita, Faculty Member.
- 9. Mr. Apurba Kumar Sarmah. Faculty Member.
- 10. Mrs. Rajlaxmi Bordoloi. Faculty Member.
- 11. Mr. Ajit Chandra Das. Faculty Member.
- 12. Mr. Biju Roy. Faculty Member.
- 13. Mrs. Mayuri Sarmah. Faculty Member.
- 14. Mr. Budhin Sarmah. Faculty Member.
- 15. Mrs. Juri Bhuyan. Faculty Member.
- 16. Dr. Monoj Bhawal. Faculty Member.
- 17. Mrs. Jyotika Madok. Faculty Member.
- 18. Mrs. Anmona Bora. Faculty Member.
- 19. Mrs. Nandini Chaudhary. Faculty Member.
- 20. Dr. Rajen Goswami. Faculty Member.

#### Resolutions

- 1. Resolved to approve the CBCS Course structure of B. Com (Honours) as provided by University Grants Commission. (Enclosed).
- 2. Resolved to approve the syllabus of first and second semester of the above programme as prescribed by University Grants Commission subject to the following modification. (First and Second Semester Syllabus enclosed)
  - a) Modification in Core Paper-1: Replacement of the Unit-1 (c) and inducted Unit-3 (B)

**Deleted Part: Unit-1 (c)** Computerized Accounting Systems 26 Practical Lab Computerised Accounting Systems: Computerized Accounts by using any popular accounting software: Creating a Company; Configure and Features settings; Creating Accounting Ledgers and Groups; Creating Stock Items and Groups; Vouchers Entry; Generating Reports - Cash Book, Ledger Accounts, Trial Balance, Profit and Loss Account, Balance Sheet, Funds Flow Statement, Cash Flow Statement Selecting and shutting a Company; Backup and Restore data of a Company

**Included Part**: Unit- 3 (B) Departmental Accounts: Concept, difference with Branch, objective of preparation of departmental accounts, apportionment of common cost; Preparation of Departmental Trading and P/L account, Consolidated Trading and P/L account; inter departmental transfer of goods at cost.

## b) Modification in Generic Elective Course, Paper: 1.04 Micro Economics in Unit-5

Original Part: Unit 5: Imperfect Competition 16 lectures Monopolistic Competition and Oligopoly: Monopolistic competition price and output decision-equilibrium. Monopolistic Competition and economic efficiency Oligopoly and Interdependence – Cournot's duopoly model, Stackelberg model, Kinked demand model. Prisoner's dilemma, collusive oligopoly – price-leadership model – dominant firm, cartels, sales maximization, Contestable markets theory. Pricing Public Utilities.

**New Part:** Unit 5: Imperfect Competition 16 lectures Monopolistic Competition and Oligopoly: Monopolistic competition price and output decision-equilibrium. Monopolistic Competition and economic efficiency Oligopoly and Interdependence – Cournot's duopoly model, Stackelberg model, Kinked demand model.

Signature of the Chairman BOS Commerce Department

## Minutes of the Board of Studies Meeting held on 15<sup>th</sup> March 2017

#### Department of Commerce, JB College (Autonomous)

Minutes of the Board of Studies Meeting held on 15<sup>th</sup> March 2017, Department of Commerce, JB College (Autonomous) at Commerce Department at 12noon. The following members was Present.

- 1. Mr. Porag Sarmah. HOD and Chairman.
- 2. Prof. Ashit Saha, VC Nominee, HOD Department of Commerce, D.U.
- 3. Dr. Sanjeeb Baruah, AC Nominee, Associate Professor, CKB Commerce College, Jorhat.
- 4. CA Deepak Bhattacharyya. Alumina Member, Jorhat.
- 5. Dr. Ashok Kumar Borthakur. Faculty Member.
- 6. Dr. Prasana Kalita, Faculty Member.
- 7. Mr. Apurba Kumar Sarmah. Faculty Member.
- 8. Mrs. Rajlaxmi Bordoloi. Faculty Member.
- 9. Mr. Ajit Chandra Das. Faculty Member.
- 10. Mr. Biju Roy. Faculty Member.
- 11. Mrs. Mayuri Sarmah. Faculty Member.
- 12. Mr. Budhin Sarmah. Faculty Member.
- 13. Mrs. Juri Bhuyan. Faculty Member.
- 14. Dr. Monoj Bhawal. Faculty Member.
- 15. Mrs. Jyotika Madok. Faculty Member.
- 16. Mrs. Anmona Bora. Faculty Member.
- 17. Mrs. Nandini Chaudhary. Faculty Member.
- 18. Dr. Rajen Goswami. Faculty Member.

#### Resolutions

- 1. Resolved to adopt the UGC CBCS syllabus of third and forth semester with certain modification in the following papers.
- a) Paper BCH 3.2, Income Tax Law and Practice: Modification made in Unit:4 and Unit:5.
- b) Paper BCH 3.4, Business Statistics: Modification made in Unit:5 and Unit:6.
- c) Paper BCH 4.1. Cost Accounting: Modification made in Unit: 3.
- d) Paper BCH 4.2. Business Mathematics: Modification made in Unit: 3, Unit: 4 and Unit: 5.
- e) Paper. BCH 4.3: Computer Application in Business: Modification made in Unit: 3, Unit: 4 and Unit: 5.
- 2. Resolved to accept Entrepreneurship and Office Management Paper as skill Based paper for third and forth semester respectively containing 2 credit each.
- 3. Resolved to modify the contents of Micro Economics Paper and Dr. Rajen Goswami, HoD, Department of Economics, is empowered to make necessary changes and get it approved in the next BoS meeting.
- 4. Resolved to constitute a committee headed by Dr. Sankar Kumar Das, HoD, Mathematics to draft a Skill Based Course based on the lab. Oriented contents of the syllabus of Business Mathematics and Business Statistics. Dr. M.K.Bhowal, HoD, Statistics, JB College would be acted as another member of the committee. They are requested to submit the draft syllabus of the course and get it approved in the next BoS meeting.

**BOS Commerce Department** 

#### RESOLUTION OF THE BOARD OF STUDIES MEETING HELD ON 09-05-2016

The first meeting of the Board of Studies (BoS) in Economics has been held on 09-05-2016 under the chairmanship of Dr. Rajen Goswami., Head of the Department of Economics. J. B College (Autonomous), Jorhat, Assam.

#### The following resolutions have been adopted

- 1. Considering the UGC eligibility criteria of having mathematics at the entry level the Board of Studies (BoS) seriously discussed the matter keeping in view the limited coverage of mathematics in the Higher Secondary level in the state and suggested the Department to enroll the students without having mathematics in the Higher Secondary level in the state and suggested the Department to enroll the students without having mathematics at entry level and suggested to go for mathematics orientation course as bridge course in the 1<sup>st</sup> and 3<sup>rd</sup> semester as required without any credit.
- 2. Resolved that the syllabi of undergraduate Economics ( Hons) ( B.A /BSc ) and Generic elective courses for  $\mathbf{1}^{st}$  and  $\mathbf{2}^{nd}$  semesters be approved with minor changes of UGC approved syllabi as per UGC guidelines
- 3. Resolved that the two orientation courses on mathematics ( without any assessment / evaluation ) prepared by the Department of Economics , J B College ( Autonomous) Jorhat be approved for  $1^{st}$  and  $3^{rd}$  semester students and suggested the Department to continue it for a total of 30 contact hours

#### Members present in the meeting

- i) Dr. Rajen Goswami., Head of the Department of Economics and Chairman
- ii) Dr D. K Chakravarty, Dibrugarh University, VC Nominee
- iii) Dr Raju Phukan, AC Nomonee
- iv) Dr Binaybrata Rajkhowa, AC Nominee
- v) Mrs Nirmala Bora Das, Faculty Member
- vi) Mrs Jury Bhuyan Baishya, Faculty Member
- vii) Dr Ashrafuzzaman Chowdhury, Faculty Member

#### RESOLUTION OF THE BOARD OF STUDIES MEETING HELD ON 17-03-2017

The second meeting of the Board of Studies (BoS) in Economics has been held on 17-03-2017 under the chairmanship of Dr. Rajen Goswami., Head of the Department of Economics. J. B College (Autonomous), Jorhat, Assam.

#### The following resolutions have been adopted

- 1. The syllabi for the third and fourth semester as recommended by the Board of Studies (BoS) in Economics in its meeting held on 17-03-2017 are forwarded to the Academic Council for acceptance.
- 2. The BSc in Economics programme be adopted under the CBCS for the candidates having core in Economics with at least two Generic Elective (GE) papers each from the Mathematics and Statistics

#### Members present in the meeting

- i) Dr. Rajen Goswami., Head of the Department of Economics and Chairman
- ii) Dr D. K Chakravarty, Dibrugarh University, VC Nominee
- iii) Dr Raju Phukan, AC Nomonee
- iv) Dr Binaybrata Rajkhowa, AC Nominee
- v) Mrs Nirmala Bora Das, Faculty Member
- vi) Mrs Jury Bhuyan Baishya , Faculty Member
- vii) Dr Ashrafuzzaman Chowdhury, Faculty Member

#### **PROCEEDING**

First Meeting of the Board of Studies

Department of Electronics

**Programme: Electronic Science** 

J. B. College (Autonomous)

The first meeting of the Undergraduate board of studies for the programme Electronic Science, Department of Electronics, Jagannath Barooah College (Autonomous) was held on 14<sup>th</sup> May, 2016 under the chairmanship of Dr Pronob Jyoti Saikia, HoD of the Department in the Conference Hall-1, started off with the Explanation of its objectives by the chairman. Moving on to the next item in the agenda, the chairman made a presentation of the basic objectives and the structure of the Choice Based Credit System (CBCS) which is to be introduced in J B College (Autonomous) w.e.f. 2016-2017 sessions.

Chairman informed the House that in view of limitation of resources and infrastructural facilities, the choice on the part on the students in offering courses of Generic Elective, Skill Enhancement and Discipline Specific Elective courses would be restricted. Hence, for the time being, the proposed syllabi would include besides 14 mandatory papers in the category of the core courses ten papers in the following way- four papers in the category of Generic Elective Course, four papers in the category of Discipline Specific Elective and two papers in the category of Skill Enhancement courses. The Chairman also informed the House that each paper of Core Course, Generic Course and Discipline Specific Course would be of 6 Credit (4 for Theory and 2 for Practical) whiles each course in the category of Skill Enhancement courses would be of 2 credits. A student will require minimum 140 credits to become an Honours Graduate. The Chairman then placed the Syllabi of B.Sc (Honours) Electronic Science as prepared by the UGC and informed the House that 28 Courses in the category of Core Courses as prescribed by the UGC would be mandatory in the sense that to maintain uniformity throughout the country no changes in the nomenclature of such courses can be made. However, the Board reserves the right to alter or modify the contents of each core course subject to maximum level of 20 per cent.

The Board unanimously adopts 28 papers of the core course as prescribed

by the UGC with the detail of the contents of first eight papers (4 Theory+ 4 Practical) to be studied in First and Second Semesters. It however, includes the little modification made in the contents of the papers as shown in the syllabi.

The Board also discusses about Generic Courses as prescribed by the UGC and adopts 4 courses namely: 1. Electronics Circuit and PCB Designing; 2. Electronics Circuit and PCB Designing Lab; 3. Digital System Design 2. Digital System Design Lab. Moving on to the next item in the Agenda the meeting discusses about the adoption and introduction of the Skill Enhancement courses and adopts 2 courses namely:1. Design and Fabrication of Printed Circuit Boards; 2. Mobile Applications and Development. The Board also approves a list of examiners and question paper setters for the said course. The meeting after considering all the pros and cons of the CBCS system and discussing the syllabi of B.Sc. (Honours) Electronic Science as prescribed by UGC has adopted the following resolutions.

1. The Undergraduate Board of Studies meeting for the programme Electronic Science held on 14<sup>th</sup> May, 2016 resolves that the structure of the CBCS as prescribed by the UGC be adopted which will be as under:

Semester	Course Opted	Course Name	Credits
	Ability		
	Enhancement	English/MIL communications/	2
	Compulsory	Environmental Science	2
	Course-I		
	Core course-I	Basic Circuit Theory and Network Analysis	4
	Core Course-I Practical/Tutorial	Basic Circuit Theory and Network Analysis Lab	2
I	Core course-II	Mathematics Foundation for Electronics	4
	Core Course-II Practical/Tutorial	Mathematics Foundation for Electronics Lab	2
	Generic Elective -1	GE-1	4/5
	Generic Elective -1		2/1

	Practical/Tutorial		
	Ability		
	Enhancement	English/MIL communications/	2
	Compulsory	Environmental Science	2
	Course-II		
	Core course-III	Semiconductor Devices	4
	Core Course-III	Semiconductor Devices Lab	2
II	Practical/Tutorial	Semiconductor Devices Lab	2
	Core course-IV	Applied Physics	4
	Core Course-IV	Applied Physics Lab	2
	Practical/Tutorial	rippined ringules Ede	2
	Generic Elective -2	GE-2	4/5
	Generic Elective -2		2/1
	Practical/Tutorial		_, _
	Core course-V	Electronic Circuits	4
	Core Course-V	Electronic Circuits Lab	2
	Practical/Tutorial		
	Core course-VI	Digital Electronics and VHDL	4
	Core Course-VI	Digital Electronics and VHDL	2
	Practical/Tutorial	Lab	
	Core course-VII	C Programming and Data	4
III		Structures	
	Core Course-VII	C Programming and Data	2
	Practical/Tutorial	Structures  Lab	2
	Skill Enhancement	Lau	
	Course-1	SEC-1	2
	Generic Elective -3	GE-3	4/5
	Generic Elective -3		17.5
	Practical/Tutorial		2/1
		Operational Amplifiers and	
	Core course-VIII	Applications	4
IV	Core Course-VIII	Operational Amplifiers and	2
	Practical/Tutorial	Applications Lab	2
		ı	

	Core course-IX	Signals and Systems	4
	Core Course-IX	a	
	Practical/Tutorial	Signals and Systems Lab	2
	Core course-X	Electronic Instrumentation	4
	Core Course-X	Electronic Instrumentation Lab	2
	Practical/Tutorial		
	Skill Enhancement	SEC-2	2
	Course-2	220 2	_
	Generic Elective -4	GE-4	4/5
	Generic Elective -4		2/1
	Practical/Tutorial		<b>2</b> / 1
	Core course-XI	Microprocessors and	4
	0010 000130 111	Microcontrollers	·
	Core Course-XI	Microprocessors and	2
	Practical/Tutorial	Microcontrollers Lab	_
	Core course-XII	Electromagnetics	4
V	Core Course-XII	Electromagnetics Lab	2
	Practical/Tutorial	Ziectionagneties Zao	_
	Discipline Specific	DSE-1	4
	Elective-1	2021	•
	Discipline Specific		
	Elective-1	DSE-1 Lab	2
	Practical/Tutorial		
	Discipline Specific	DSE-2	4
	Elective-2	_ ~ <del>_</del>	
	Discipline Specific		
	Elective-2	DSE-2 Lab	2
	Practical/Tutorial		
	Core course-XIII	Communication Electronics	4
	Core Course-XIII	Communication Electronics Lab	2
VI	Practical/Tutorial	Communication Discussines Edu	_
, •	Core course-XIV	Photonics	4
	Core Course-XIV	Photonics Lab	2
	Practical/Tutorial	I notonies Lau	<u> </u>

Discipline Specific Elective-3	DSE-3	4
Discipline Specific Elective-3 Practical/Tutorial	DSE-3 Lab	2
Discipline Specific Elective-4	DSE-4	4
Discipline Specific Elective-4 Practical/Tutorial	DSE-4 Lab	2
	Total Credits	140

- 2. The Undergraduate Board of Studies meeting for the programme Electronic Science held on 14<sup>th</sup> May, 2016 resolves that 28 (14 Theory +14 Practical) papers of in the category of core courses as prescribed by the UGC for B.Sc. (Honours) in Electronic Science be adopted and the syllabi of first eight papers for first and second semesters be adopted with the little changes in the contents as shown in the respective course content of the syllabi.( **Detail of the Syllabi is attached**)
- 3. The Undergraduate Board of Studies meeting for the programme Electronic Science held on 14<sup>th</sup> May, 2016 resolves that the following Generic Courses be introduced in the Semesters shown against the courses.

Sl No	Semester	Title of the Course
1	Ι	Electronics Circuits and PCB Designing
2	Ι	Electronics Circuits and PCB Designing Lab
3	II	Digital System Design
4	II	Digital System Design Lab

4. The Undergraduate Board of Studies meeting for the programme

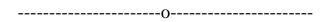
Electronic Science held on 14<sup>th</sup> May, 2016 resolves that the following

Skill Enhancement Courses be introduced in the Semesters shown against

the courses.

Sl No	Semester	Title of the Course
1	III	Design and Fabrication of Printed Circuit
		Boards
2	IV	Mobile Applications and Development

The meeting came to an end with a brief comment from the chair wherein he expresses his deep sense of gratitude for the co-operation received from all the members in the meeting towards fulfilling the objectives of the meeting as per the agenda.



### **PROCEEDING**

## **Second Meeting of the Board of Studies**

**Department of Electronics** 

**Programme: Electronic Science** 

J. B. College (Autonomous)

The second meeting of the Undergraduate board of studies for the programme Electronic Science, Department of Electronics, Jagannath Barooah College (Autonomous) was held on 23<sup>rd</sup> March, 2017 under the chairmanship of Dr Pronob Jyoti Saikia, HoD of the Department in the Department's room, started off with the explanation of its objectives by the chairman.

Chairman informed the House that the papers for  $1^{st}$  and  $2^{nd}$  semester courses were selected, modified and prepared in the  $1^{st}$  meeting held in the last year. This meeting will prepare the papers, only for  $3^{rd}$  and  $4^{th}$  semester courses.

The board discussed on the compulsory core papers prepared by UGC for  $3^{rd}$  and  $4^{th}$  semesters and modified as per the suggestions of the members (modified copy of syllabus attached).

Moving on to the next item in the Agenda the meeting discusses about the introduction of the Skill Enhancement courses and adopts 2 courses namely:1. Internet Technologies; 2. Programming with LabVIEW.

The Board also discusses about Generic Courses as prescribed by the UGC and adopts 2 courses namely: 1(a). Instrumentation; 1(b). Instrumentation Lab; 2(a). Consumer Electronic 2(b). Consumer Electronic Lab for 3<sup>rd</sup> and 4<sup>th</sup> semesters.

The meeting after considering all the pros and cons of the CBCS system and discussing the syllabi of B.Sc. (Honours) Electronic Science as prescribed by UGC has adopted the following resolutions.

- 1. The Undergraduate Board of Studies meeting of the Department of Electronics for the programme Electronic Science held on 23<sup>rd</sup> March, 2017 resolves that the structure of the CBCS as prescribed by the UGC be adopted which will be as under:
- 2. The Undergraduate Board of Studies meeting of the Department of Electronics for the programme Electronic Science held on 23<sup>rd</sup> March,2017 resolves that 12 (6 Theory+ 6 Practical) papers of in the category of core courses for 3<sup>rd</sup> and 4<sup>th</sup> semesters as prescribed by the UGC for B.Sc. (Honours ) in Electronic science be adopted with the little changes in the contents as shown in the respective course content of the syllabi.( **Detail of the Syllabi is attached**)

Semester	Course Opted	Course Name	Credits
	Core course-V	Electronic Circuits	4
	Core Course-V Practical/Tutorial	Electronic Circuits Lab	2
	Core course-VI	Digital Electronic and VHDL	4
	Core Course-VI	Digital Electronic and VHDL	2
III	Practical/Tutorial	Lab	2
	Core course-VII	C Programming and Data Structures	4
	Core Course-VII Practical/Tutorial	C Programming and Data Structures Lab	2
	Skill Enhancement	SEC-1	2

			I
	Course-1		
	Generic Elective -3	GE-3	4/5
	Generic Elective -3		2/1
	Practical/Tutorial		2/1
	Core course-VIII	Operational Amplifiers and	4
	Core course-viii	Applications	_
	Core Course-VIII	Operational Amplifiers and	2
	Practical/Tutorial	Applications Lab	
	Core course-IX	Signals and Systems	4
	Core Course-IX	Signals and Systems Lab	2
	Practical/Tutorial	Signals and Systems Lab	
IV	Core course-X	Electronic Instrumentation	4
	Core Course-X	Electronic Instrumentation Lab	2
	Practical/Tutorial	Licetonic instrumentation Lab	2
	Skill Enhancement	SEC-2	2
	Course-2	SLC-2	2
	Generic Elective -4	GE-4	4/5
	Generic Elective -4		2/1
	Practical/Tutorial		\(\alpha / 1\)
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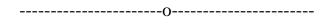
3. The Undergraduate Board of Studies meeting of the Department of Electronics for the programme Electronic Science held on 23<sup>rd</sup> March, 2017 resolves that the following Generic Courses be introduced in the Semesters shown against the courses.

Sl No	Semester	Title of the Course
1	III	Instrumentation
2	III	Instrumentation Lab
3	IV	Consumer Electronic
4	IV	Consumer Electronic Lab

4. The Undergraduate Board of Studies meeting of the Department of Electronics for the programme Electronic Science held on 23<sup>rd</sup> March, 2017 resolves that the following Skill Enhancement Courses be introduced in the Semesters shown against the courses.

Sl No	Semester	Title of the Course
1	III	Internet Technologies
2	IV	Programming with LabVIEW

The meeting came to an end with a brief comment from the chair wherein he expresses his deep sense of gratitude for the co-operation received from all the members in the meeting towards fulfilling the objectives of the meeting as per the agenda.



## Department of English Board of Studies Meeting

Date : 07.05.2016

Venue: Conference Hall - 1, J.B. College

Time: 11am

The first Board of Studies Meeting of the Department of English was convened on 07.05.2016. The following members were present.

Sl. No. Name	Designation
1. Nandini C. Bora	H.O.D./Chairman

2. Dr.Nasmeem Akhtar V.C. Nominee Dibrugarh University

3. Dr.PabitraPranGoswami A.C. Nominee

Former Principal, Jorhat College

4. Manish Bharali Alumni Representative

5 Anmona Bora Faculty Member

6. Surajit Sharma Faculty Member

7. Deepanjali Baruah Faculty Member

8. PranamiBania Faculty Member

9. Mushrifa Ibrahim Faculty Member

10 LalsanLevisNampui Faculty Member

11. Rinu Das Faculty Member

#### **Proceedings:**

The meeting began with the Chairman of the Board of Studies and H.O.D., Dept. of English Nandini C. Bora welcoming the esteemed members VC nominee Dr.Nasmim Akhtar, AC nominee Dr.Dr.PabitraPranGoswami and Alumni representative Manish Bharali to the meeting. She on behalf of the Dept. gave her thanks to the members firstly for their consent to the part of the Board of Studies (BOS) and also for their presence in the first sitting of the BOS. The syllabus for the forth coming session of 2016-17 prepared by the Dept. in accordance with the

CBCS structure and content was placed before the Board for approval and recommendations for any changes.

#### The following suggestions were given:

- AC nominee Dr.PabitraPranGoswami suggested that both the options of English Communication and M.I.L. Communication should be offered in the A.E.C.C. (Ability Enhancement Compulsory Course) instead of just limiting the selection to English Communication only. He said offering only English Communication would defeat the purpose of the Choice Based Credit System. Moreover, it would undermine the importance of vernacular languages. It was decided that this matter will be taken up for discussion in the Academic Council Meeting to the held on 16.05.2016.
- The BOS approved the selection of the paper 'Academic Writing and Composition' as a subject to be offered in the 1st Semester as the Generic Elective Course. The BOS recommended the paper, 'Media and communication Skills 'to the offered in the 2nd Semester in place of the paper 'Contemporary India Women and Empowerment' as designed in the syllabus prepared by the Dept. This was suggested by VC nominee Dr.Nasmeem Akhtar as they face a lot of problems in the communication skills of the students in the PG level. She felt that the study of such a course will enhance the skills of the students. The BOS also recommended the paper 'Language Literature and Culture' for the 3rd Semester and the paper 'Contemporary India: Women and Empowerment' as a Generic Elective subject in the 4th Semester.
- The BOS approved the paper 'Creative Writing' as a skill based subject' in the 3rd Semester and 'Film Studies' in the 4th Semester. It was also suggested that workshops on creative writing and film studies may be organised from time to time.
- In the discussion regarding the honours paper the suggestion was given that since the 1st paper is on Indian Classical Literature the Dept. should make provisions for guest lectures to be delivered by the Sanskrit Dept. Faculty of the college .The names of Dr. Girish Baruah and Dr.PabitraPranGoswami were also suggested as guest lecturers to assist the Dept. VC nominee also suggested that some topics may be given for self-study. It was also suggested that for the 3rd paper and 4th paper Core introductory lectures to the background should be given. Submission of a teaching plan at the beginning of a new session was also suggested.

In the discussion related to the subjects for the Discipline Centric Elective the paper titled, 'Literary Theory' was suggested in place of Research Methodology as it was felt that theory is a necessary element in reading any text. The papers selected are as follows.

5th Semester - Literary Theory
Literary Critiusm

6th Semester - Partition Literature

Science Fiction & Detective Literature

The List of Confidential works related to Examination including the names of examiners and paper setters was placed before the BOS. It was duly approved with the addition of Dr. Sudhir Das of Nitaipukhuri College as an examiner.

#### Resolutions-

- Slight modification was made in the content of the core syllabus. Background readings for the Core 3<sup>rd</sup> paper titled, 'Indian Writing in English' and the Core 4<sup>th</sup> paper titled, 'British Poetry and Drama' to be included as part of the syllabus
- Guest lectures to be invited for the benefit of the English Core students particularly for the 1<sup>st</sup>paper, 'Indian Classical Literature' considering that it is a new area.
- The Generic Elective papers to be offered are as follows:
  - 1<sup>st</sup> Semester- 'Academic Writing and Composition'
  - 2<sup>nd</sup>Semster- 'Media and Communication Skills'.
  - $3^{rd}$ Semster- ' Contemporary India : Women and Empowerment'
  - 4<sup>th</sup> Semester- Language, Literature and Culture
- The Skill based Courses to be offered are as follows
  - 3<sup>rd</sup> Semester- Creative Writing
  - 4<sup>th</sup> Semester- Film Studies/ Translation Studies
- The Discipline Centric papers to be offered are as follows
  - 5<sup>th</sup> Semester- Literary Theory, Literary Criticism
  - 6<sup>th</sup> Semester- Partition Literature, Literature and Cinema
- Keeping in mind the spirit of the Choice Based Credit System (CBCS0 both English Communication as well as MIL Communication to be kept as options in the AEC Course for BA and BSc students offering only English Communication would undermine the importance of the vernacular languages.
- A teaching plan to be submitted at the beginning of each academic session.

• Workshops on the skill based courses to be organised.

Sd/

Nandini Choudhury Bora
Associate Professor and HoD
Dept of English
J B College ( Autonomous)

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## **Department of English**

## J B College (Autonomous)

Date : 16.03.2017

Venue: Department of English, J.B. College

Time: 11am.

The 2<sup>nd</sup> Board of Studies (BOS) meeting was held on 16<sup>th</sup> March 2017 in the Department of English. The following members were present.

Sl. No. Name

**Designation** 

1. Nandini C. Bora H.O.D./Chairman

2. Dr.Nasmeem Akhtar V.C. Nominee

Dibrugarh University

3. Dr.PabitraPranGoswami A.C. Nominee

Former Principal, Jorhat College

4. Syed ZarirSubhani Hussain- Representative from Corporate Sector

Chief managing Editor, News Live

5 Anmona Bora Faculty Member

6. Surajit Sharma Faculty Member

7. Deepanjali Baruah Faculty Member

8. PranamiBania Faculty Member

9. Mushrifa Ibrahim Faculty Member

10 LalsanLevisNampui Faculty Member

11. Rinu Das Faculty Member

## **Proceedings:**

The 2<sup>nd</sup> Board of Studies meeting began with the Chairman and HoD of the Department of English Nandini Choudhury welcoming the esteemed members VC nominee Dr Nasmeem Akhtar, AC nominee Dr.PabitraPranGoswami, Corporate Representative Zarir Hussain to the meeting. She thanked them for their support and help in framing the syllabus of the previous semesters. The syllabus for the forthcoming session of 2018- 19 prepared by the Department in accordance with the CBCS structure was placed before the Board for approval and recommendation for any changes:

The discussion began with the faculty members stating the problems faced by them in implementing the new syllabus. Concerning the AEC (English Communication) paper, it was

stated that the course content was too vast for a paper of only two credits. Moreover the lack of a prescribed text book was posing problems in imparting classes. The members suggested that some components may be omitted as it was merely repetitions of the same aspect. Accordingly with the approval of the board members the following components were omitted.

- 1) Intra Personal, Interpersonal and Group Communication
- 2) Effective Communication/ Miscommunicattion
- 3) Close Reading
- 4) Documenting

The translation exercise was also omitted taking into consideration that students belong to diverse language backgrounds and it is difficult to specify the kind of translation that is to be done. Regarding textbooks the following were recommended

- 1) Business Communication- Jain and Biyani
- 2) Business Communication- Varinder Kumar

The text, *Business English*, Pearson was to be retained.

V C Nominee Nasmeem Akhtar suggested that the Department should start publishing course related subjects which would benefit the students.

Moving to the discussion of the Generic Elective papers, HoD and Chairman informed the members that after the completion of the 1<sup>st</sup> paper, Academic Writing and Composition, and the 2<sup>nd</sup> paper 'Media and Communication Skills' was in progress in the 2<sup>nd</sup> Semester. It was decided that the 3<sup>rd</sup> paper to be followed in the 3<sup>rd</sup>Semester would be, 'Contemporary India: Women and Empowerment'. Two texts were recommended by the members-

- 1) The History of Doing Radha Kumar
- Gender Studies- Sujata Sen
   Member Zarir Hussain suggested that experts may be consulted from other institutions in this regard.

The 4<sup>th</sup> paper for Generic Elective to be offered in the 4<sup>th</sup> Semester was 'Language and Linguistics'. Member Nasmeem Akhtar suggested Damodar Thakur's 'Linguistics Simplified' as the textbook to be followed.

The discussion moved to the selection of papers for the skill based courses. For the third Semester the paper selected was 'Creative Writing' and for the  $4^{th}$  Semester the paper titled 'Translation Studies' was decided upon.

Dr Bimal Barah, Principal J B College stated that evaluation of the skill based courses should be practical oriented. He suggested that the Department should devise its own mechanism to evaluate their students and end semester exams should not be theory based and instead other alternate mechanisms should be devised. The faculty members took the resolution that a volume of creative and translation writing would be published. The idea was met with approval by the Board.

The papers for Discipline Centric Course was also finalised –

5<sup>th</sup> Semester – 1) Literary Theory, 2) Literary Criticism

6<sup>th</sup> Semester- 1) Partition Literature 2) Literature and Cinema

#### **Resolutions:**

The UG syllabus for English for 3<sup>rd</sup> and 4<sup>th</sup> Semester was placed in the BOS meeting for the approval of the board members. Based on the suggestions of the board members the following resolutions were taken.

# For Core Course the following papers are to be offered

3<sup>rd</sup> Semester 1. American Literature

2. Popular Literature

3. British Poetry and Drama: 17th and 18th Centuries

4<sup>th</sup> Semester 1. British Literature: 18th Century

2. British Romantic Literature

3. British Literature: 19th Century

# The Discipline Centric papers for 5<sup>th</sup> and 6<sup>th</sup> semester were also finalised. They are as follows

5<sup>th</sup> Semester .1. Literary Theory

2. Literary Criticism

6<sup>th</sup>Semester 1. Partition Literature

2. Literature and Cinema

# For the Generic Elective course the following papers for 3<sup>rd</sup> and 4<sup>th</sup> Semester are to be offered

3<sup>rd</sup> Semester - Contemporary India: Women and Empowerment

4<sup>th</sup> Semester -. Language and Linguistics

Two texts were recommended for the paper titled 'Contemporary India: Women Empowerment' which are as follows

Radha Kumar History of Doing and Sujata Sen Gender Studies

For the paper titled Language and Linguistics Damodar Thakur's *Linguistics Simplified* was recommended in addition to the prescribed texts. Unit 2 which is Structuralism is to be omitted.

# For the Skill Enhancement Course the following papers are to be offered in the  $3^{rd}$  and  $4^{th}$  Semester -

3<sup>rd</sup> Semester -. Creative Writing

4<sup>th</sup>Semester - Translation Studies.

As suggested by the Principal of the institution Dr Bimal Barah the resolution was taken that the evaluation process for the skill based papers will be designed in such a manner which will be effective to test the skill of the learners. So instead of the theory based end semester written examination a volume of creative and translation writing was proposed to be brought out as part of the evaluation process.

# Slight modification was made in the content of the Compulsory Ability Enhancement Course (AEC) English Communication for the 1<sup>st</sup> Semester. Certain components are simply repetitions of the same basic idea, moreover the course is too vast for a paper carrying two credits only. So the following components are omitted

- 1. Intra-personal, Inter-personal and Group communication
- 2. Effective Communication/ Mis- Communication
- 3. Close Reading
- 4. Translation(from Indian language to English and vice-versa)
- 5. Documenting

Further two additional texts were recommended for this course. They are as follows

- 1. Business Communication Jain and Biyani
- 2. Business Communication Varinder Kumar

Moreover the text *Business English*, Pearson, 2008 which is one of the prescribed books is to be retained along with the above mentioned ones.

SD/

Nandini Choudhury Bora
HoD and Associate Professor
Dept of English, J B College( Autonomous)

Eint Board of Studies Meeting held an 2nd May 2016 Members Oceant Name Designation Signature M.P. Hozarika Chairman V. C. Nominee Binal Il. Kar Bhupe hotwami Mahanta AC\_\_\_ Industry Representative A.K. Bhattacharya A.P. Makanta M. Nath Rahman Borthokeve 10. Hozavika Zaman 11. Faculty Kenser 12. Saifia 13. 14. B.C. ahosh Special muitee Barah (Bincipal) 15. The meeting was storted by the Head by welcoming all members of BOS, including the bunelpal of our college. The Bringal briefed all BOS members about introduction of CBCS from the new session ie. (2016-17) August, 2016. He a the total major paper and computand EVS. He also mentioned that will has give us acadenic outeroug

4 send to the Academic council the following resolutions. 1. Vac syllabus for beography for I & II and senester has seen passed in the BOS meeting after necessary elaboration, incorporation and reading tur led 2. In the agence alective Rapores -2 papers were selected a) Disaster Menagenet in the 1st Sens have be chested and verified. The bracted laper carrying 2 oudits each in every smester syllabere was incorporated and verified by BOS I dertification of the GE Report

for II, IV, I & VIth Senestive were - Climate change: Vulnerability & Imestex Sustainable Development Renester -1) fopulation Geography
11) Agricultural Geography being of Health & Well Hydrology & Deenography

Second Braza	eld on Ind Ma	cel, 2017
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Name  Br. Birmal Barah.  1) M. P. Hazaruka  2) Birmal Kakar  3) Bhupen Groswami  4) Problima Mahanta  5) A.K Bhattacharya  6) K.K Grogai  7) A.P. Mahanta  8) Mrinal Nath  9) Sadigur Rakman  10) Grawar Borthakur	Designation Principal Chairman V. C. Nominee A.C. Nominee A.C. Nominee  Andustry Representative Faculty Member	Signature  H. Hyprika  Phone Madents.  Cilotianista  Sommonto 2019  Manual  Analuman
11) Satyenbattazavika 12) Nasimon Zaman 13) B. C. Ghosh 14) Maywakshi Baruak 15) Riki Dewi Bharali	Alumni Faculty Member.  11 11	Dorwood 12 8217
That the 2nd BO.  She wilcomed all  the Bringel, V.C.  from Darving of  College P. Make to  faculty members	Manice Dr B. K. allege, B. Gosma a Sergaa do ef the dept. Syllebus far ar Election &	started of Bos, Kare, S. Kons, William Bos The Bos

The meeting resolved to send & the graderie Coureil. The fallowing resolutione. 1. Uac eyllebre for Creagraphy for The bos meeting after necessary elaboration inexporation and reading naturals. 2. In the hencie Election Capera 2 usere selected. 3. In the SEC, 2 papers were selected. Corce Capers a) 301 302 4) 303 d) 401 e) 402 1) 403 bevoir Election lapors a) 301 6) 401 Still topherenent Course 2) 301 - Renate Sering b) 401 - GIS. a) 30/

The bringer in this content me timed in length start CBC8, 24 to papers in all out of which 14 are love papers, in G.E. Skill Enheavent 2 papers & 4 DSSE papers. the pass ! of the 1st batch where CBES - Sc 284, summittees 431. Although its voy less we have give the actual marks of scored without You the slope to maripulate 20% of the Course Content, adding or subtracting Course Contents. The course was refised and framed & parel of enemiers were also fremed & approved with signatures of all.

#### Minutes of the First Board of Studies (Geology) Meeting

The first Board of Study (BOS) meeting of the Department of Geology, J. B. College, Jorhat was held on 07-05-2016 at the Department of Geology from 11:00 AM. The meeting was presided over by the Chairperson Mr. Rajib Sharma, HOD, Department of Geology.

#### Member Present:

Mr. Rajib Sharma, HOD
 Dr Pramathesh Bhattacharya
 Dr Prabhat Katoky
 Dr Simanta Bhuyan

Chairperson
VC Nominee
A/C nominee

5. Mr. Khireswar Bora Representative from Industry

6. Dr Tapos Goswami Alumni

Mr Sushil Kumar Bhagabati
 Dr Deepa Bora
 Dr Nurul Amin
 Dr Raktim Ranjan Saikia
 Faculty Member
 Faculty Member

#### **Resolutions adopted:**

- 1. The meeting resolves to adopt the structure of the B.Sc honours Programe under the Choice Based Credit System as proposed by UGC.
- 2. The meeting resolves to adopt the paper-wise distribution of topics as suggested by UGC.
- 3. The meeting resolves to adopt the syllabi of the core papers (for Geology Honours) and Generic Elective papers-1&2 proposed by the UGC for the 1<sup>st</sup> and 2<sup>nd</sup> semesters, with minor modifications in the following.

No and name of the paper	Unit	Written as	Modified to
Core Paper – I		Study of seismic profile of a	Study of seismic profile and
Practical		specific area and its	its interpretation
		interpretation	
Core Paper – II		Observation and	Observation and
Practical		documentation of symmetry	documentation of symmetry
		of crystals	of crystals and
			crystallographic projection
Core Paper – III		Geochemical behavior of	Geochemical behavior of Si,
Elements of	05	selected elements like Si, Al,	Al, K, Na, Fe, Ca, and Mg
Geochemistry		K, Na, etc.	
Core Paper – IV	01	Effects of topography on	Effect of topography on
Structural		structural features,	outcrop pattern of planar
Geology			structural features.
Core Paper – IV	01	Importance representative	Important representative
Structural		factors of the map	factors of the map
Geology			
Core Paper – IV	02		Addition: Unconformity and
Structural			its types
Geology			
Generic Elective –	Practicals	<b>8.</b> Mineral formula calculation	(Removed from the
II	Sl. No.	9. Crystal chemical calculation	syllabus)
Rocks and Minerals	8,9,10	<b>10.</b> Introduction to analytical	
		techniques for rock and mineral study.	

- 4. The meeting resolves that counseling should be mandatory prior to the exercise of choice by the students.
- 5. The meeting resolves that the range of Choice offered by the Department should be based on the infrastructural and faculty strength of the college and recommends that the college develops its infrastructural and faculty strength to offer a wide range of choice.
- 6. The meeting resolves to approve the unit-wise distribution of classes and marks as shown in the adopted syllabus. Corollary changes required to be made in case of changes in the total marks and number of classes for the paper by the Academic council will have to be made keeping the weight age intact.

## **Proceedings of the BOS Meeting**

Date: 25/03/2017 Time of Commencement: 11:00 venue: Department of Geology

#### **Members Present:**

- 1. Rajib Sharma, Chairperson
- 2. Dr Pramathesh Bhattacharya, VC nominee
- 3. Dr Prabhat Kotoky, AC nominee
- 4. Khireswar Bora, Representative from Industry
- 5. Dr Tapos Goswami, Alumni
- 6. Shusil Bhagabati, Faculty member
- 7. Dr Deepa Borah, Faculty member
- 8. Dr Nurul Amin, Faculty member
- 9. Dr Raktim Ranjan Saikia, Faculty member

On the request of Dr Raktim Ranjan Saikia, Mr Rajib Sharma, Head of the Department of Geology, takes the chair with an appeal for whole-hearted cooperation from all the members present.

Dr Nurul Amin, faculty member, welcomed all members of the board, and outlined the objectives of the meeting. He states that the main objectives of the meeting are to decide upon the courses to be offered by the Department, the content of the courses and mark distributions of the units, for the  $3^{rd}$  and  $4^{th}$  semesters.

Dr Raktim Ranjan Saikia reads out the minutes of the last BOS meeting for approval by the Board. Dr Pramathesh Bhattacharya, V.C. nominee, states that it would be better if a proceeding of BOS meeting is recorded, rather than just the resolutions.

After thorough discussions the Board decided to adopt the following resolutions:

(1) The meeting resolves to offer the following GE courses for the 3<sup>rd</sup> and 4<sup>th</sup> Semester.

No	Name	Sems	Credit
GE-III	Physics and	3 <sup>rd</sup>	2
	Chemistry of the		
	earth		
GE-IV	Earth Resources	4 <sup>th</sup>	2

- (ii) The meeting resolves to offer all the skill enhancement courses recommended by UGC for the  $3^{rd}$  and  $4^{th}$  semester.
- (iii) The meeting resolves to adopt the syllabi of the core papers-5, 6, 7, 8, 9, and 10 (for Geology Honours), Generic Elective papers-3&4 and skill enhancement courses as proposed by the UGC for the 3<sup>rd</sup> and 4<sup>th</sup> semesters, with minor modifications shown below in tabular form.

No	and	Unit	Written as	Modified as
name	of the			
paper	,			
Core V	Paper	1	Concept of Igneous petrology	Introduction
			origin and nature of magma	General idea about the composition constitution and nature of magmas and lavas. Generation of magmas.
		2	Forms	Igneous Rocks
		3	Magma generation in crust and mantle, their emplacement and evolution	Reaction principles and the crystallization of magmas. Evolution of magmas. Primary and derivative magmas. Role of voletiles in magma. Concept of conganuity and variation diagrams.
		5		Addition: Sylhet Traps and Abor
		3		Volcanics Volcanics
Core VI	Paper	1		Addition: Provenance and Heavy minerals
		5	Compaction and cementation	Compaction, Cementation, lithification and authigenesis
		Practical	Exercise on sedimentary structures, Particle size distribution and statistical treatment, Paleocurrent analysis, Petrograpgy of clastic and non clastic rocks through hand specimens and thin sections.	Study of sedimentary rocks in hand specimens, Study of sedimentary rocks in thin sections, study of texture in thin sections and hand specimens, General overview on depositional conditions and provenance from the study of framework, cement and matrix of given sedimentary rock in thin section.
Core	Paper	1		Addition: Definition, Branches,
		1	1	, , , , , , , , , , , , , , , , , , ,

VII			scope and application of
V 11			palaeontology.
Core Paper	1		Addition: Regional
VIII	1		_
V 111			metamorphism of argillaceous,
	2		calcareous and basic rocks
	2		Addition: General idea about the
			thermodynamic consideration in
			metamorphic rock, Equilibrium in
			metamorphism.
			Univarient and bivarient reaction
			and their significance
	5		Addition: Khasi greenstone, Slate,
			phyllite, schist, quartzite, marble
			amphibolites, granulite, hornfels.
	Practicals	Megascopic and microscopic	Study of metamorphic rocks in hand
		study (textural and	specimens, Study of metamorphic
		mineralogical) of the following	rocks in thin sections, Study of
		metamorphic rocks:	texture in thin section and hand
		Low grade metamorphic rocks:	specimens, study of metamorphic
		Serpentinites, albite-epidote-	phase diagrams.
		choritequartz schist, slate, talc-	
		tremolite-calcite-quartz schist.  Medium to high grade	
		metamorphic rocks: Gneisses,	
		amphibolites, hornfels,	
		garnetiferous schists, sillimanite-	
		kyanite bearing rocks.	
		Granulites, eclogite, diopside-	
		forsterite marble.	
		Laboratory exercises in graphic	
		plots for petro chemistry and	
		interpretation of assemblages.	
Core Paper X	4	Ground water Chemistry (Entire	Ground water management (Entire
		content of the unit)	content of the original unit-5)
	5	Ground water management	Fundamentals of Oceanography:
		(Entire content of the unit)	• General idea of
			oceanography. Theories on
			origin of ocean basins.
			Branches of oceanography:
			Biological oceanography,
			chemical oceanography,
			Geological oceanography
			and physical oceanography.
			Palaeo-oceanography
			Physical properties of
			oceans:
			Temperature-salinity
			structure, mixing of waters, surface waves, internal
			waves, surface tides, internal
			tides and currents.
			<ul><li>Pleomorphic aspects of</li></ul>
			oceans.
			occurs.
	l .	<u> </u>	

The meeting concluded with a brief address by the chairperson and a vote of thanks proposed by Dr Raktim Ranjan Saikia.

# Choice Based Credit System (CBCS) JAGANNATH BAROOAH COLLEGE, JORHAT

# DEPARTMENT OF GEOLOGY

**UNDERGRADUATE PROGRAMME** (Courses effective from Academic Year 2016-17)

# SYLLABUS OF COURSES TO BE OFFERED

#### Details of courses under B.Sc. (Honors)

Course	Total no of papers		Credits per paper Theory+ Practical)	Total Credit
I. Core Course	(14 Papers)	X	(4+2=6)	84
<ul><li>II. Elective Course (8 Papers)</li><li>1. Discipline Specific Elective</li></ul>	(4 Papers)	X	(4+2=6)	24
2. Generic Elective Interdisciplinary	(4 Papers)	X	(4+2=6)	24
III. Ability Enhancement Courses  1. Ability Enhancement Compulsory Environmental Science English/MIL Communication  2. Ability Enhancement Elective (Skill Based) (Minimum 2)	(2 Papers) (2 Papers)		2	04 04

Total credit 140

\* wherever there is a practical there will be no tutorial and vice-versa

## **Proceedings of the BOS Meeting**

Date: 25/03/2017 Time of Commencement: 11:00 venue: Department of Geology

#### **Members Present:**

- 1. Rajib Sharma, Chairperson
- 2. Dr Pramathesh Bhattacharya, VC nominee
- 3. Dr Prabhat Kotoky, AC nominee
- 4. Khireswar Bora, Representative from Industry
- 5. Dr Tapos Goswami, Alumni
- 6. Shusil Bhagabati, Faculty member
- 7. Dr Deepa Borah, Faculty member
- 8. Dr Nurul Amin, Faculty member
- 9. Dr Raktim Ranjan Saikia, Faculty member

On the request of Dr Raktim Ranjan Saikia, Mr Rajib Sharma, Head of the Department of Geology, takes the chair with an appeal for whole-hearted cooperation from all the members present.

Dr Nurul Amin, faculty member, welcomed all members of the board, and outlined the objectives of the meeting. He states that the main objectives of the meeting are to decide upon the courses to be offered by the Department, the content of the courses and mark distributions of the units, for the  $3^{rd}$  and  $4^{th}$  semesters.

Dr Raktim Ranjan Saikia reads out the minutes of the last BOS meeting for approval by the Board. Dr Pramathesh Bhattacharya, V.C. nominee, states that it would be better if a proceeding of BOS meeting is recorded, rather than just the resolutions.

After thorough discussions the Board decided to adopt the following resolutions:

(1) The meeting resolves to offer the following GE courses for the 3<sup>rd</sup> and 4<sup>th</sup> Semester.

No	Name	Sems	Credit
GE-III	Physics and	3 <sup>rd</sup>	2
	Chemistry of the		
	earth		
GE-IV	Earth Resources	4 <sup>th</sup>	2

- (ii) The meeting resolves to offer all the skill enhancement courses recommended by UGC for the  $3^{rd}$  and  $4^{th}$  semester.
- (iii) The meeting resolves to adopt the syllabi of the core papers-5, 6, 7, 8, 9, and 10 (for Geology Honours), Generic Elective papers-3&4 and skill enhancement courses as proposed by the UGC for the 3<sup>rd</sup> and 4<sup>th</sup> semesters, with minor modifications shown below in tabular form.

No	and	Unit	Written as	Modified as
name paper	of the			
	Paper	1	Concept of Igneous petrology	Introduction
			origin and nature of magma	General idea about the composition constitution and nature of magmas and lavas. Generation of magmas.
		2	Forms	Igneous Rocks
		3	Magma generation in crust and mantle, their emplacement and evolution	Reaction principles and the crystallization of magmas. Evolution of magmas. Primary and derivative magmas. Role of voletiles in magma. Concept of conganuity and variation diagrams.  Addition: Sylhet Traps and Abor
Core VI	Paper	1		Volcanics Addition: Provenance and Heavy minerals
VI		5	Compaction and cementation	Compaction, Cementation, lithification and authigenesis
		Practical	Exercise on sedimentary structures, Particle size distribution and statistical treatment, Paleocurrent	1

Core Paper	1	analysis, Petrograpgy of clastic and non clastic rocks through hand specimens and thin sections.	sections and hand specimens, General overview on depositional conditions and provenance from the study of framework, cement and matrix of given sedimentary rock in thin section.
Core Paper VII	1		Addition: Definition, Branches, scope and application of palaeontology.
Core Paper VIII	1		Addition: Regional metamorphism of argillaceous, calcareous and basic rocks
	2		Addition: General idea about the thermodynamic consideration in metamorphic rock, Equilibrium in metamorphism. Univarient and bivarient reaction and their significance
	5		Addition: Khasi greenstone, Slate, phyllite, schist, quartzite, marble amphibolites, granulite, hornfels.
	Practicals	Megascopic and microscopic study (textural and mineralogical) of the following metamorphic rocks:  Low grade metamorphic rocks:  Serpentinites, albite-epidote-choritequartz schist, slate, talc-tremolite-calcite-quartz schist.  Medium to high grade metamorphic rocks: Gneisses, amphibolites, hornfels, garnetiferous schists, sillimanite-kyanite bearing rocks.  Granulites, eclogite, diopside-forsterite marble.  Laboratory exercises in graphic plots for petro chemistry and interpretation of assemblages.	Study of metamorphic rocks in hand specimens, Study of metamorphic rocks in thin sections, Study of texture in thin section and hand specimens, study of metamorphic phase diagrams.
Core Paper X	4	Ground water Chemistry (Entire content of the unit)	Ground water management (Entire content of the original unit-5)
	5	Ground water management (Entire content of the unit)	Fundamentals of Oceanography:      General idea of oceanography. Theories on origin of ocean basins.      Branches of oceanography:     Biological oceanography, chemical oceanography, Geological oceanography and physical oceanography and physical oceanography     Physical properties of oceans:     Temperature-salinity structure, mixing of waters, surface waves, internal waves, surface tides, internal

	•	tides and curre Pleomorphic oceans.		of
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The meeting concluded with a brief address by the chairperson and a vote of thanks proposed by Dr Raktim Ranjan Saikia.

Session 2016-17

# Office Bearers of Board of Studies

1. Dr. V. K. Verma, H/D, -Chairman

2. Dr. S. K. Tripathi, Tezpur University, Tezpur, -VC nominee

3. Dr. Dimbeswar Borah, CKB Com. College, -AC nominee

4. Mr. N. K. Ma) viv Representative from industry/Corporate

5. Ruptum Bardolin Alumni

Term: The term of the nominated members shall be two years.

Meeting: The principal of the college shall draw the schedule for meeting of the Board of Studies for different departments. The meeting may be scheduled as and when necessary, but at least once a year.

# Functions

The Board of Studies of a department in the college shall:

- (g) Prepare syllabi for various courses keeping in view the objectives of the college, interest of the stakeholders and national requirement for consideration and approval of the Academic Council;
- (b) Suggest methodologies for innovative teaching and evaluation techniques;
- (c) Suggest panel of names to the Academic Council for appointment of examiners; and
- (d) Coordinate research, teaching, extension and other academic activities in the department/college.
- (e) Maintain the proceedings of BoS meetings.

Note: The HOD and faculty members are requested to maintain all sorts of records such as IA Marks Register, Results of the students, Performance of the students in extracurricular activities, stock register, List of the books and Journals of departmental library, Records of Gust Lecture, Seminar and workshop, Research projects, Individual teacher profile and publication etc.

म. सहस्यों के नाम - हस्ताम्बर 1. डॉ. विजय कुमार वर्मा - विस्तामी कि 2. डॉ. प्रमान जाला सिंह - अतम पहेंची। 4. डॉ. प्रमान जाला सिंह - महामामा खिंह 5. नीमती महामामा खिंह - महामामा खिंह 6. श्रीमती कुमलीम करवली - क्यानाक्ष्मी का का कि

लाण दिनो डे ने र र र र ह समय दा बर्जे क्रपरान्ट रिन्ही विभाग के जांह्य मन बोर्ड की पर भी विद्या कि का मार्ग पर कुई। का बेहर में अध्यक्ष में सुक हुई। इस बेहर में अध्यक्ष सभी सहस्वों में महाबियात्वय के स्वायक में सुक हुई। इस बेहर में अधिक सम्बद्धी जाहिर की। साथ ही विश्व पर विश्व विश्व पर विश्व विश्व पर विश्व विश्व पर विश्व विश्व विश्व विश्व पर विश्व विश

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हिंदी विभाग के अध्ययन बोर्ड की युम्मी बेंद्र किना गींच परित्र अध्या के अध्ययन बोर्ड की युम्मी बेंद्र किना गींच परित्र अध्या के अध्य के अ

क्रिम मिट्यास्त्रय अनुदान त्यायीय दाटा निर्धादित मानहण्डे के जात्या ( पर स्तारी स्ते हिट्टों पर कड-एक विभाषिक किट रखते दुर्व क्यायों के दितों की क्यान में रशक्त जो मिणीय सिय गए वे इस्त्रिश्चर हैं—

कीर वाम्बन्धित पाएय्कम या क्षितम नर्जी करते दुरु कर्ट कोतीस्टर कर्जिन निर्धारण रभ्वे सम्पूर्ण पाढ्यक्रम की विकारी

साजाला रहेटिका निम्यों कर के पाढ्यक्रमी की किर्म

छन्दी विषय जाजादित सेटिक्क पार्ट्यूकम पट विश्वाद -पन्ती है आहि क्षोतिम निर्मीय लिया लिया लिया

कीशस संवर्धन पाल्यका पर न्यापी करते हुक कोतिम निर्माण किया अला, वर्धान्यां में स्वर्गिन निकास को - दमान में स्वर्ग हुए स्म्मूणी चाढ्यकां का काला अस्म जाम रहेली निर्माण की अने

इक्के छाढ़ गामनीय तकाहपरम महोदन को उसकी काद्यां का जाना ए प्रक्रिया प्रकर करते हुए उनके बहुयोग की कापकालींक गाम प्राच्या का दिसा कार्र यागा-की स्त्रापि कारिका न्यार खड़ी-शाम को दुन

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#### MINUTES OF BOS OF THE DEPARTMENT OF HISTORY

#### 05/05/16

The Board of Studies (History) meeting is held on 05/05/16 under the Chairmanship of Prof. Indreswar Das, H O D, History . the following members are present in the meeting.

- 1. Prof. Indreswa Das. Chairperson.
- 2. Prof. Chandan Kr. Sharma. V C Nominee.
- 3. Prof. Tassaduk amanul Hussain. AC Nominee.
- 4. Prof. Anita Sharma . Member
- 5. Prof. Pankaj Goswami. Member
- 6. Prof. Kishor Goswami. Member

After indepth discussion on CBCS course structure the following resolutions are adopted-

Resolution No 1- Resolved that for the entire BA (Honors) course there is no need to change the foundation course.

Resolution No 2- Resolved that for the First Semester Generic Elective course Students can chose one paper out of two papers.the alters of the papers are-

- 1. Early and Medieval Assam upto 1826.
- 2. History of Assam (1826-1947)

Resolution No 3- The meeting further resolved that for the Second Generic Elective course Students can chose one paper out of two papers.the alters of the papers are-

- 1. History of Ecology and Environment in India.
- 2. Women in Indian History.

Resolution No 4- Resolved that the following papers may be taught as Generic Elective Course for  $3^{rd}$  and  $4^{th}$  Semester respectively.-

- 1. History of India (From Earliest times to 1526AD) 3<sup>rd</sup> sem
- 2. History of India. (1526 -1947) 4<sup>th</sup> sem

Resolution No 5- The meeting also resolved that except Core Course, each paper should not be more than of Five (5) Units and Twelve (12) classes may be allotted to each unit.

Resolution No 6- For Discipline Specific elective Course, Yhe BOS meeting resolved the following Course Structure-

- 1. Paper-I- Early and Medieval Assam up to 1826 Ad
- 2. Paper II- History of Assam 1826-1947 AD
- 3. Paper. III- Social and Economic History of Asam.
- 4. Paper IV- Introduction to History and Its Sources.

The meeting further resolved that Paper IV will be consisted of two parts. The first part consisting of 70% of the total paper will be theory and the second part consisting of 30% will be in the form of a project work

Resolution No 7- Yhe BOS meeting has also prepared a detailed course structure and resolved to recommended it to yhe Academic Council Of J B College.

Resolution No 8- The BOs meeting also resolved to suggest the panel of names to The Academic Council for appointment as Examiners and Paper setters.

Signature of the Chairperson

#### MINUTES OF BOS OF THE DEPARTMENT OF HISTORY

#### 28/02/17

The Board of Studies (History) meeting is held on 28/02/17 under the Chairmanship of Prof. Indreswar Das, H O D, History. The following members are present in the meeting.

- 1. Prof. Indreswa Das. Chairperson.
- 2. Prof. Chandan Kr. Sharma. V C Nominee.
- 3. Prof. Tassaduk amanul Hussain. AC Nominee.
- 4. Prof. Anita Sharma . Member
- 5. Prof. Pankaj Goswami. Member
- 6. Prof. Kishor Goswami. Member

The following resolutions are adopted in the meeting-

Resolution No 1- It is resolved that for the entire B A (Honors ) History course U G C recommended 1q4 Core papers will remain intact.

Resolution No 2- It resolved that for the 3<sup>rd</sup> and 4<sup>th</sup> Semester Generic Elective Course two Papers will be implemented. They are-

- 1. History of India (From Earliest times to 1526AD) 3<sup>rd</sup> sem
- 2. History of India. (1526 -1947) 4<sup>th</sup> sem.

Resolution No- 3- For  $3^{rd}$  and 4th Semester skill Enhancment Courses ( SEC), the meeting resolved to implement two papers.

- 1. Study on Archives and Museum. SEM-III
- 2. Tourism in North East India . SEM -IV

Resolution No-4- The meeting further resolved to adopt four papers for the Discipline Specific course.-

- 1. Paper-I- Early and Medieval Assam up to 1826 Ad
- 2. Paper II- History of Assam 1826-1947 AD
- 3. Paper. III- Social and Economic History of Asam.
- 4. Paper IV- Introduction to History and Its Sources.

Signature of the Chairperson.

#### Minutes of the Board of Study meeting

The first Board of Study (BOS) meeting of the department of *Mathematics*, *J.B.College*, *Jorhat* was held on *13.05.2016* at the department of *Mathematics* from *12.00 noon*. The meeting was presided over by chairperson *Mrs. Jyoti Kotoky*, *HOD*, *Deptt. of Mathematics*.

#### Resolution Adopted

- 1. The meeting resolves to adopt the Structure of the **B.Sc**. honours programme under the **Choice Based Credit System**.
- 2. The meeting resolves to adopt paper-wise distribution of the topics as suggested by *UGC* in the *Core Courses*.
- **3.** The meeting resolves to introduce the following *Generic Elective* papers and adopt their syllabi as:

**GE-1**: Trigonometry & Analysis I,

GE-2: Analysis II,

**GE-3**: Computational Methods,

**GE-4**: Coordinate Geometry & Abstract Algebra

- 4. The meeting resolves to introduce a course "Latex & HTML" in SEC 1 in place of Logic and Sets. Also, the meeting resolves to retain the papers as suggested by UGC in SEC 2 for choices.
- 5. The meeting resolves to adopt the syllabi of *Core* papers of Mathematics honours proposed by UGC for  $1^{st}$  and  $2^{nd}$  semester.
- 6. The meeting resolves to introduce two papers namely C++ Programming, Mathematical Finance in DSE 1 for choices in place of Portfolio Optimization and Analytic Geometry as suggested by UGC. Also, the meeting resolves to introduce a paper Cryptography& Network security in DSE 2 for choices in place of Probability & Statistic.

  Whereas the meeting resolves to retain the papers as suggested by UGC in DSE 3 &

Whereas the meeting resolves to retain the papers as suggested by *UGC* in *DSE 3 & DSE 4* for choices.

- 7. The meeting resolves that the range of choice offered by the department should be based on the infrastructure and faculty strength of the College and recommend that the college should develop its infrastructure as well as faculty strength for a wide range of choices.
- 8. The meeting resolves to offer unit wise distribution of classes and marks as shown in the adopted syllabus.

Date :	(Mrs. Jyoti Kotoki )
	Chairman

HOD, Mathematics

#### Minutes of the Board of Study meeting

The second Board of Study (BOS) meeting of the department of *Mathematics*, *J.B.College*, *Jorhat* was held on *11.03.2017* at the department of *Mathematics* from *12.00 noon*. The meeting was presided over by chairperson *Dr. Sankar Kr. Das*, *HOD*, *Deptt. of Mathematics*.

#### Resolution Adopted

- 1. The meeting resolves to adopt the syllabi of core papers of mathematics honours proposed By U.G.C for 3<sup>rd</sup> & 4<sup>th</sup> semester with some minor modifications. Marks, classes are distributed unit wise accordingly.
- 2. In the core paper C5, the meeting decided to added *Weierstrass Approximation* theorem on *Polynomial* which is necessary for the article mentioned in Unit II. Also a topic is introduced in Unit III, namely *Convex functions*.
- 3. In the core paper C6 the distribution of the topics prescribed by U.G.C are slightly rearranged for systematic approach for better understanding of the students.
- **4.** In the core paper **C7** the Units prescribed by **UGC** are rearranged for better understanding.
- 5. In the core paper C8 a content namely Flow Chart is introduced in Unit I.
- 6. In the core paper C9 the following topics are introduced/removed/shifted as prescribed by the UGC.

SL.NO.	Content	Unit	Introduced/Removed/Shifted
i	Darboux Theorem	I	Introduced
ii	Improper Integrals of all kind & its convergence	II	Introduced
iii	Beta & Gamma functions & its applications	II	Introduced
iv	Series of functions upto M-test	III	Removed
v	LimSup & LimInf	IV	Shifted to Unit I

7. The meeting resolves to approve the draft syllabi of *Computational Methods (GE 3)* & *Coordinate geometry* & *Abstract Algebra (GE 4)* prepared by the department in accordance with the decision of the 1<sup>st</sup> BOS meeting on 13.05.2016.

- 8. (a) The meeting resolves to approve the draft syllabi for the *Skill Enhancement Course* papers *Latex & HTML (SEC1) & Graph Theoretic Modeling (SEC2)* of 3<sup>rd</sup> & 4<sup>th</sup> Semester which are adopted in the first Board of Study (*BOS*) meeting.
  - (b) The meeting resolves to submit the proposal to concern authority that the SEC should be continuously evaluated without End of term examination.
- **9.** The meeting resolves that the range of choice offered by the department should be based on the infrastructure and faculty strength of the College and recommend that the college should develop its infrastructure as well as faculty strength for a wide range of choices.
- 10. The meeting resolves to offer unit wise distribution of classes and marks as shown in the adopted syllabus.
- 11. The BOS has approved a panel of Question setters and Examiners & Moderators for Sem II & Sem III.

Date: (Dr. Sankar Kr. Das)

Chairman

HOD, Mathematics

# First meeting of UG Board of Studies, Dept of Philosophy, J B College(Autonomous)

Subject: Board of studies, B A Philosophy

Venue: Dept. of Philosophy ,J.B College

**Date**: 07.05.2016, Time:11-30 AM

Agenda: i) Approval of CBCS course structure

ii) Approval of syllabi

#### **Board Members:**

SI No	Name	
1.	NibeditaBezboruah,	HoD, Philosophy J.B
	Chairman, BOS.	College
2.	Dr. Shakuntala Bora,	Associate professor,
	External member, VC	Gauhati University.
	nominee	
3.	Dr. SauravpranGoswami,	Professor, Gauhati
	External member, alumni.	University.
4.	Dr. AnjanaChaliha, AC	Retired principal and
	nominee.	HoDPhilosohy,JB
		college.
5.	Dr. Jyotirmoyee Devi, AC	Associate professor,
	nominee.	DCB Girls' College.
6.	Deepak Bhattacharjee,	Chartered Accountant.
	Representative from Co-	
	operate sector.	
7.	AroteeNeog, Faculty	Associate professor, JB
	Member.	college.
8.	Dr.PanchamiB.BorahFaculty	Associate professor, JB

	Member.	college
9.	Dr. SumitraPurkayastha	Assistant professor, JB
	Faculty Member.	college.

#### **Proceedings of the Meeting:**

A meeting of the Board of studies, Philosophy held on 07.05.2016 at 11.30 hours to discuss CBCS syllabus of BA Philosophy. The chairman welcomed the members and as per agenda the proposed BA Philosophy syllabus was placed before the members. The course structure of CBCS was discussed in detail and gave their valuable suggestion. The member after careful scrutiny approved the BA Philosophy syllabus with modification wherever necessary. Suggestion of the Board members for BA Philosophy course are-

Proposed syllabus –University of Delhi, Dept. of Philosophy (2015-16)

#### **Suggestions for First Semester**

core course :PHIC-101: Indian Philosophy

No modification is suggested in course PHIC- I01

Core course:PHIC-102: LOGIC

*Unit II: Logic and language point no 4- Agreement and Disagreement in belief and attitude is removed from the syllabus.* 

**Suggestions for Second Semester** 

**Core course PHIC-201: GREEK PHILOSOPHY** 

There is no change in course PHIC 201

#### **Core course PHIC -202: ETHICS**

**Unit 1, point no 1***Conventional and Reflective Morality* is removing and in its place adding – Normative and Meta ethics: Definition and kinds.

**Unit III ,Point 1:**Theories of Punishment- capital punishment shifted from point 1 to point 2.

In point 1 adding – Natural evil, error, moral evil, vice and sin.

**Unit III**, **point 2**: *Euthanasia* is removed from **PHIC-202** as this topic also included in Third semester core course – PHIC-303.

#### **Suggestions for Third Semester**

There is no change ormodification suggested in course PHIC-301, course PHIC-302, course PHIC-303.

#### **Generic Elective course for First, Second and Third semester:**

PHIG- 101: Introduction to Moral Philosophy

PHIG-201: Formal Logic

PHIG-301: Contemporary Indian Philosophy

#### **Ability Enhancement Elective course (Skill based)**

AEEC 1: Critical thinking and decision making

AEEC 2: Critical appreciation of text

BOS members with all present members gave their sanction for the all above discussed points.

Chairperson thanked all the members and conclude the meeting.

### Second meeting of UG Board of Studies,

### **Dept of Philosophy, J BCollege**(Autonomous)

Subject: Board of studies, B A Philosophy

Venue: Dept. of Philosophy ,J.B College

**Date**: 12-06-17 Time:11 AM

**Agenda:** Approval of CBCS course structure

(4<sup>th</sup>,5<sup>th</sup>& 6<sup>th</sup> Semester Syllabus)

#### **Board Members:**

SI	Name	
No		
1.	NibeditaBezboruah, Chairman, BOS.	HoD, Philosophy J.B
		College
2.	Dr. Shakuntala Bora, External	Associate professor,
	member, VC nominee	Gauhati University.
3.	Dr. SauravpranGoswami, External	Professor, Gauhati
	member,alumni.	University.
4.	Dr. AnjanaChaliha, AC nominee.	Retired principal
		and
		HoDPhilosohy,JB
		college.
5.	Dr. Jyotirmoyee Devi, AC nominee.	Associate professor,
		DCB Girls' College.
6.	Deepak Bhattacharjee,	Chartered
	Representative from Co-operate	Accountant.
	sector.	
7.	AroteeNeog, Faculty Member.	Associate professor,
		JB college.

8.	Dr.PanchamiB.BorahFacultyMember.	Associate professor,
		JB college
9.	Dr. SumitraPurkayastha Faculty	Assistant professor,
	Member.	JB college.

#### **Proceedings of the Meeting:**

A meeting of the Board of studies, Philosophy held on 12-06-17 at 11 hours to discuss CBCS syllabus of BA Philosophy. The chairman welcomed the members and as per agenda the proposed BA Philosophy syllabus was placed before the members. The course structure of 4<sup>th</sup>,5<sup>th</sup>& 6<sup>th</sup> Semester Syllabus, CBCS was discussed in detail and gave their valuable suggestion. The member after careful scrutiny approved the BA Philosophy syllabus with modification wherever necessary. Suggestion of the Board members for BA Philosophy course are-

Proposed syllabus –University of Delhi, Dept. of Philosophy (2015-16)

#### SUGGESTIONS FOR FOURTH SEMESTER

core course :PHIC-401: TEXT OF INDIAN PHILOSOPHY

No modification is suggested in course PHIC-401

Core course: PHIC-402: TEXT OF WESTERN PHILOSOPHY,

Unit III- Richard Rorty-"Philosophy and the Mirror of Nature" is removing and its place adding Russell- Science and Ethics.

Core course:PHIC-403: TRUTH FUNCTIONAL LOGIC

**Unit-1 point.5-Symbol and Translation** 

Unit-II point.5, Truth Trees removed from syllabus

PHIG-401 :Generic Elective : Western Epistemology and

Metaphysics

**SUGGESTIONS FOR FIFTH SEMESTER** 

Core course PHIC-501: ANALYTIC PHILOSOPHY

Unit III- Elimination of Metaphysics (Ayer) is removed from syllabus and in its place adding **Russell-Refutation of Idealism.** 

**Unit 4-adding Neo-Realism** 

Core course PHIC-502: CONTINENTAL PHILOSOPHY

Unit II- Heidegger is removed and in its place added

**Husserl-Intentationality and Method of Reduction.** 

For 5<sup>th</sup>Semester Discipline specific Elective course is designed by members of the Board of Studies, Philosophy, J B College.

The title of the papers are:

DSE-1: Philosophy of Mind.

**DSE 2: Contemporary Indian Philosophy.** 

**DSE 3: Comparative Religion** 

Student can choose any two of these papers

**SUGGESTION FOR SIXTH SEMESTER** 

Core course:-PHIC-601 -PHILOSOPHY OF RELIGION

From Unit 1 -some portion are removed as members found these portion are not appropriate for under graduate level.

Unit1, point.3 Shifted to Unit -II, point .1 (Religious Experience)

In Unit III, point.1 addedRamanuja, Sankardeva and Sri Caitanya

In Unit IV, point .2 is removed and adding Sankardeva in point .1

Core course:PHIC -602: PHILOSOPHY OF LANGUAGE

No modification is suggested.

**DISCIPLINE SPECIFIC ELECTIVE:** 

DSE-4; ANALYTIC PHILOSOSOPHY AND LOGICAL POSITIVISM

**DSE-5: PHILOSOPHY OF UPANISADS** 

**DSE-6: PHILOSOPHY OF BHAGAVADGITA** 

Student can choose any two of these papers.

A project/ Dissertation work may be given in lieu of a <u>Discipline</u> specific Elective course in sixth semester.

BOS members with all present members gave their sanction for the all above discussed points.

Chairperson thanked all the members and conclude the meeting.



# DEPARTMENT OF PHYSICS

#### JAGANNATH BAROOAH COLLEGE

BARPATRA ALI JORHAT: 785001 ASSAM

Date: 7<sup>TH</sup> MAY, 2016

Ph:

Fax:

(0376) 2320060

(0376) 2300605

Ref. No.:

# **RESOLUTIONS OF THE BOARD OF STUDIES**

# OF THE MEETING HELD ON 7<sup>TH</sup> MAY, 2016

A departmental meeting of Board of Studies was held at the Department of Physics on 07/05/2016 to discuss the relevant issues, rules, guidelines and the syllabus of CBCS system which will be effective from the next session, 2016, under the autonomy of Jagannath Barooah College, Jorhat.

The Board of Studies, led and presided over by the H.O.D., Physics, Jagannath Barooah College, in the presence of the following members of the Board of Studies, discussed various issues related to the implementation of the UGC model syllabus based on CBCS and to modify the same, with a constraint of maximum of 20%.

- 1. Dr Ranjit Sarma, HoD-Chaitman
- 2. Dr Kalyan Bhuyan, DU-VC Nominee
- 3. Dr Ranjan Bordoloi, D.K.D. College-AC Nominee
- 4. Dr Gazi A Ahmed, Tezpur University, Assam-AC Nominee
- 5. Dr Debasish Sarmah, Biswanath College, Sunitpur, Assam
- 6. Mr Manuranjan Kakoti.Faculty Member
- 7. Mr Akashdipta Thakur, Faculty Member
- 8. Dr Pranab J.Saikia Faculty Member
- 9. Dr Jibon Saikia, Faculty Member
- 10. Mr Pranjal Bora, Faculty Member

#### 11. Dr Ankur Gogoi, Faculty Member

The board resolved the following points in the meeting.

# Resolution No. 1. The board discussed the syllabus of core papers of first and second semester under CBCS and resolved and approved with following corrections.

- 1. The Board of Studies removed the last part of the unit 'Gravitation and Central Force Motion' of the paper 'PHYSICS-C II: Mechanics' of 1<sup>st</sup> semester core.
- 2. The Board of Studies further resolved to remove the parts 'Relativistic Doppler Effect' and 'Relativistic Kinematics' from unit 'Special Theory of Relativity' of the same paper 'PHYSICS-C II: Mechanics' of 1<sup>st</sup> semester core.
- 3.On the suggestion of Dr. Kalyan Bhuyan, H.O.D, Department of Physics, Dibrugarh University, the Board of Studies resolved to introduce an additional reference book entitled 'Classical Mechanics (Author: R. Douglas Gregory, Publisher: Cambridge)' for the paper 'PHYSICS-C II: Mechanics' of 1<sup>st</sup> semester core.
- 4.The Board of Studies resolved that there may be a change of 20% of the syllabus of the practical paper 'PHYSICS LAB-C I' of 1<sup>st</sup> semester core and the committee handed over that duty to the department.
- 5.The Board of Studies resolved to remove the unit 'Network Theorem' and introduce another unit 'Electric Multipole Expansion' in the paper 'PHYSICS-C III: Electricity and Magnetism' of 2<sup>nd</sup> semester core. An additional book has been enlisted named 'Electrodynamics' by J. D. Jackson in the reference section of the same paper.
- 6.In the paper of 'PHYSICS-C IV: Waves and Optics' of 2<sup>nd</sup> semester core, the part 'Water Waves' from the unit 'Wave Motion'

and the unit 'Holography' has been removed and an additional unit comprising of 'Aberration in Lenses' has been introduced as per the decision of the Board of Studies.

Resolution No. 2. The board discussed the syllabus of Generic Electrive papers of the first and second semester of CBCS and resolved and approved with the following corrections.

1.In 1<sup>st</sup> semester Generic Elective paper 'GE: Mechanics', the unit 'Special theory of relativity' has been removed.

2.In the Generic Elective LAB paper (PHYSICS LAB: GE LAB: MECHANICS), the Board of Studies resolved to change three experiments (Nos. 4, 9 and 10).

**Resolution No. 3.** The Board of Studies approved the list of Examiners and Question setters.

**Resolution No. 4.** The Board of Studies approved the decision of opening up of Post Graduate courses in Physics and suggested to initiate the process.

**Resolution No. 5.** The Board of Studies approved the two skill-based courses

#### Signature

(Dr Ranjit Sarma)
Chairperson & HoD
Board of Studies, Department of Physics



## DEPARTMENT OF PHYSICS

#### JAGANNATH BAROOAH COLLEGE

BARPATRA ALI JORHAT: 785001 ASSAM

Date:17/04/2017

Ph:

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Ref. No.:JBC/PHY/BOS/2017/01

## MINUTES OF THE BOARD OF STUDIES

### OF THE MEETING HELD ON 17<sup>th</sup> FEBRUARY, 2017

A departmental meeting of Board of Studies took place in the Department of Physics on 17/02/2017 to discuss the relevant issues and the syllabus for the 3<sup>rd</sup> and 4<sup>th</sup> semester under CBCS system from the next session, 2017, under the autonomy of Jagannath Barooah College, Jorhat.

The Board of Studies led and presided over by the H.O.D., Physics, Jagannath Barooah College, in the presence of the following members of the Board of Studies, discussed various issues related to the implementation of the syllabus based on CBCS and to modify the same, with a constraint of a maximum of 20%.

- 12. Dr Ranjit Sarma, HoD-Chaitman
- 13. Dr Kalyan Bhuyan, DU-VC Nominee
- 14. Dr Ranjan Bordoloi, D.K.D. College-AC Nominee
- 15. Dr Gazi A Ahmed, Tezpur University, Assam-AC Nominee
- 16. Dr Debasish Sarmah, Biswanath College, Sunitpur, Assam
- 17. Mr Manuranjan Kakoti.Faculty Member
- 18. Mr Akashdipta Thakur, Faculty Member
- 19. Dr Pranab J.Saikia Faculty Member
- 20. Dr Jibon Saikia, Faculty Member
- 21. Mr Pranjal Bora, Faculty Member
- 22. Dr Ankur Gogoi, Faculty Member

The board resolved the following points in the meeting.

Resolution No. 6. The board discussed the syllabus of core papers of the third and fourth semester under CBCS and resolved and approved.

- 1. PHYSICS Core V, Mathematical Physics II
- 2. PHYSICS LAB C
- 3. PHYSICS Core VI, Thermal Physics
- 4. PHYSICS LAB -Core VI, LAB
- 5. PHYSICS Core VII: **DIGITAL SYSTEMS AND APPLICATIONS**,
- **6.** PHYSICS C VII LAB
- 7. PHYSICS C VIII: Mathematical Physics III
- **8.** PHYSICS C VIII LAB:
- 9. PHYSICS C IX: MODERN PHYSICS
- 10. PHYSICS C IX LAB
- 11. PHYSICS C X: ANALOG SYSTEMS AND APPLICATIONS
- 12. PHYSICS CX: LAB
- **Resolution No. 7.** The board discussed the syllabus of Generic Electrive papers of the third and fourth semester of CBCS and resolved and approved.
  - 1. PHYSICS GE: WAVES AND OPTICS
  - 2. PHYSICS GE LAB
  - 3. PHYSICS GE: ELEMENTS OF MODERN PHYSICS
- **Resolution No. 8.** The Board of Studies approved the list of Examiners and Question setters.
- **Resolution No. 9.** The Board of Studies approved the decision for opening up of **Post Graduate** course in Physics and suggested to initiate the process.
- **Resolution No. 10.** The Board of Studies approved the two skill-based courses
  - 1. Instrumentation skill of Physics
  - 2. Renewable energy studies and harvesting

Signature

(Dr. Ranjit Sarma)

Chairperson & HoD

Board of Studies, Department of Physics

## **AGENDA**

# First Meeting of Undergraduate Board of Studies Department of Political Science J B College (Autonomous) 08.05.2016

- 1. Explanations of the objectives of the Meeting
- 2. Briefing about the CBCS
- 3. Discussion about the Core Courses of Political Science
- 4. Adoption of the core courses as prescribed by the UGC with necessary changes in the contents.
- 5. Discussion about the generic courses as prescribed by the UGC.
- 6. Preparation and adoption of the generic courses.
- 7. Discussion about and preparation of the ability Enhancement (skill based) courses.
- 8. Any Other
- 9. Comment from the chair and vote of thanks.

\*\*\*\*

## **PROCEEDING**

# First Meeting of the Board of Studies Department of Political Science J B College (Autonomous)

The first meeting of the Undergraduate board of studies of the Department of Political Science, Jagannath Barooah College (Autonomous) held on 8<sup>th</sup> May, 2016under the chairmanship of Subhasish Sarmah, HOD of the Department, in the Departmental Room started off with the Explanation of its objectives by the Chairman .Moving on to the next item in the agenda, the Chairman made a presentation of the basic objectives and the structure of the Choice Based Credit System (CBCS) which is to be introduced in J B College (Autonomous) w.e.f. 2016-2017 session. While Briefing about various aspects of CBCS, the chairman made an appeal to the honourable members of the Board of Studies to look in to the needs and realities of the CBCS in the light of the mandate awarded by the UGC in this regard in making exercise for preparing the Syllabi of BA (Honours) Political Science Programme.

Taking part in the discussion Dr. Adil-ul-Yasin and Dr. Dhiren Tamuly sought certain clarifications regarding the CBCS system and the Chairman clarified their doubts. Besides these Dr. Adil-ul-Yasin raised the issue of choice of different courses on the part of the students Vis-a-Vis the work load of the teachers. In response to it the Chairman informed the House that in view of limitation of resources and infrastructural facilities, the choice on the part on the students in offering courses of Generic Elective, Ability Enhancement (Skill Based) and Discipline Specific Elective courses would be restricted. Hence, for the time being, the proposed syllabi would include besides 14 mandatory papers in the category of the core course ten papers in the following way: four papers in the category of Generic Elective Course, four papers in the category of Discipline Specific Elective and two papers in the category of Ability Enhancement (Skill Based) courses. The Chairman also informed the House that each paper of Core Course, Generic Course and Discipline Specific Course would be of 6 Credit (5 for Theory and 1 for Tutorial Classes) while each course in the category of Ability Enhancement (Skill Based) course would be of 2 credit. A student will require earning minimum 140 credits to become an Honours Graduate. The Chairman then placed the Syllabi of B.A. (Honours) Political Science as prepared and prescribed by the UGC and informed the House that 14 papers in the category of Core Courses as prescribed by the UGC would be mandatory in the sense that to strike uniformity throughout the country no changes in the nomenclature of such courses can be made . However, the Board reserves the right to alter or modify the contents of each paper of the core course subject to maximum level of 20 per cent.

The Board, in principle, unanimously adopts 14 papers of the core course as prescribed by the UGC with the detail of the contents of first four papers to be studied in First and Second Semesters. It however includes the little modification made in the contents of the paper 2.2 with the title 'Political process in India' as shown in the syllabi.

The Board also discusses about Generic Courses as prescribed by the UGC and adopts 3 courses namely: 1. Nationalism in India; 2. Women, Power and Politics; 3.Governance: Issues and Challenges from the pool given by the UGC to be studied in the first, third and fourth Semesters respectively while introduces a new one with the title 'Working of the Indian Constitution' to be studied in the Second Semester. Moving on to the next item in the Agenda the meeting discusses about the adoption and introduction of the Ability Enhancement (Skill Based) courses. In that category, the meeting decides to adopt the one-Public Opinion and Survey Research from the pool as prescribed by the UGC while introduces a new one Organizational and Leadership skill. The meeting also discusses about the issue of non-availability of standard text and reference books in vernacular language and, therefore, puts its opinion for making English as the medium of instruction. The meeting after considering all the pros and cons of the CBCS system and discussing the syllabi of B.A. (Honours) Political Science as prescribed by UGC has adopted the following resolutions.

1. The Undergraduate Board of Studies meeting of the Department of Political Science held on 8<sup>th</sup> May, 2016 resolves that the structure of the CBCS as prescribed by the UGC be adopted which will be as under:

SEMESTER	COURSES	CREDIT		
		THEORY	TUTORIAL	TOTAL
FIRST	CORE COURSE:1	5	1	6
SEMESTER				
	CORE COURSE:2	5	1	6
	GENERIC ELECTIVE-1	5	1	6
	ABILITY ENHANCEMENT			2

	COMPOULSORY			
SECOND SEMESTER	CORE COURSE:3	5	1	6
	CORE COURSE:4	5	1	6
	GENERIC ELECTIVE-2	5	1	6
	ABILITY ENHANCEMENT COMPOULSORY			2
THIRD SEMESTER	CORE COURSE:5	5	1	6
	CORE COURSE:6	5	1	6
	CORE COURSE:7	5	1	6
	GENERIC ELECTIVE-3	5	1	6
	ABILITY ENHANCEMENT (SKILL BASED)			2
FOURTH SEMESTER	CORE COURSE:8	5	1	6
	CORE COURSE:9	5	1	6
	CORE COURSE:10	5	1	6
	GENERIC ELECTIVE-4	5	1	6
	ABILITY ENHANCEMENT (SKILL BASED)			2
FIFTH SEMESTER	CORE COURSE:11	5	1	6
	CORE COURSE:12	5	1	6
	DISCIPLINE SPECIFIC ELECTIVE- 1	5	1	6
	DISCIPLINE SPECIFIC ELECTIVE- 2	5	1	6
SIXTH SEMESTER	CORE COURSE:13	5	1	6
	CORE COURSE:14	5	1	6
	DISCIPLINE SPECIFIC ELECTIVE-3	5	1	6
	DISCIPLINE SPECIFIC ELECTIVE-	5	1	6

2. The Undergraduate Board of Studies meeting of the Department of Political Science held on 8<sup>th</sup> May, 2016 resolves that 14 papers of in the category of core course as prescribed by the UGC for B.A. (Honours ) in Political science be adopted and the syllabi of first four papers namely 1.1 Paper-I Understanding Political Theory; and 1.2 Paper-II Constitutional Government and Democracy in India to be studied in the First Semester and 2.1 Paper-III Political Theory-Concepts and Debates; and 2.2 Paper-IV Political Process in India to be studied

in the Second Semester be adopted with the little changes in the contents as shown in the respective course content of the syllabi.( **Detail of the Syllabi is attached**)

3. The Undergraduate Board of Studies meeting of the Department of Political Science held on 8<sup>th</sup> May, 2016 resolves that the following Generic Courses be introduced in the Semesters shown against the courses.

SL NO	SEMESTER	TITLE OF THE COURSE
1	FIRST SEMESTER	NATIONALISIM IN INDIA
2	SECOND SEMESTER	WORKING OF THE INDIAN CONSTITUTION
3	THIRD SEMESTER	WOMEN POWER AND POLITICS
4	FOURTH SEMESTER	GOVERNANCE :ISSUES AND CHALLENGES

4. The Undergraduate Board of Studies meeting of the Department of Political Science held on 8<sup>th</sup> May, 2016 resolves that the following Ability Enhancement (Skill Based) Courses be introduced in the Semesters shown against the courses.

SL	SEMESTER	TITLE OF THE COURSE
NO		
1	THIRD	ORGANISATIONAL AND LEADERSHIP SKILL
	SEMESTER	
2	FOURTH SEMESTER	PUBLIC OPINION AND SURVEY RESEARCH

5. Feeling the magnanimity of the problem of medium of instructions from the perspective of higher studies and also considering the dearth of proper standard learning materials in vernacular language, the Undergraduate Board of Studies meeting of the Department of Political Science held on 8<sup>th</sup> May, 2016 unanimously resolves that the Academic Council and the authority of J.B.College ( Autonomous) be suggested to take appropriate steps towards making English as the Medium of instruction at least for the students offering honours in the discipline.

The meeting came to an end with a brief comment from the chair wherein he expresses his deep sense of gratitude for the co-operation he received from all

the members in the meeting towards fulfilling the objectives of the meeting as per the agenda.

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# DEPARTMENT OF POLITICAL SCIENCE BOARD OF STUDIES 2<sup>ND</sup> MEETING;20<sup>TH</sup> APRIL,2017

#### **RESOLOUTION NO 6**

The meeting of the Board Studies of the Department of Political Science, J.B.College (Autonomous) held on the  $20^{th}$  day of April,2017 unanimously resolves that the details of the fourteen papers of Core Course in political science with some revisions in the first four papers to be studied in the first and second semesters be adopted .

#### **RESOLOUTION NO 7**

The meeting of the Board Studies of the Department of Political Science, J.B.College (Autonomous) held on the 20<sup>th</sup> day of April, 2017 unanimously resolves that the following eight papers of Generic Elective Course in political science be adopted and the Departmental Committee be authorized to take the final decision to make one of them available to the students in the respective semester to their convenience.

- 1. Nationalism in India
- 2. Working of the Indian Constitution
- 3. Contemporary Political Economy
- 4. Feminism: Theory and Practice
- 5. Gandhi and Contemporary World
- 6. Understanding Ambedkar
- 7. Governance : Issues and Challenges
- 8. Women ,Power and Politics

#### **RESOLOUTION NO 8**

The meeting of the Board Studies of the Department of Political Science, J.B.College (Autonomous) held on the 20<sup>th</sup> day of April, 2017 unanimously resolves that the following six papers of Discipline Specific Elective Course in political science be adopted and the Departmental Committee be authorized to take the final decision to make two of them available to the students in the 5th and another two of them in the 6<sup>th</sup> semester to their convenience.

- 1. Contemporary Politics in Assam
- 2. Human Rights In Comparative Perspectives
- 3. Developmental Process and Social Movements In Contemporary India
- 4. Public Policy In India
- 5. India's Foreign Policy in a Globalizing World
- 6. Understanding South Asia

#### **RESOLOUTION NO 9**

The meeting of the Board Studies of the Department of Political Science, J.B.College (Autonomous) held on the 20<sup>th</sup> day of April, 2017 unanimously resolves that the following four papers of Ability Enhancement (Skill Based) Course in political science be adopted and the Departmental Committee

be authorized to take the final decision to make one of them available to the students in the  $3^{rd}$  and another one of them  $\,$  in the  $6^{th}$  semester to their convenience.

- 1. Democratic Awareness with Legal Literacy
- 2. Organization and Leadership Skill
- 3. Public Opinion and Survey Research
- 4. Legislative Practices and Procedures

#### **RESOLOUTION NO 10**

The meeting of the Board Studies of the Department of Political Science, J.B.College (Autonomous) held on the 20<sup>th</sup> day of April, 2017 unanimously resolves that ten papers of core course and six papers of optional course of the PG Programme as being run by the Department of Political Science of the College in affiliating mode under Dibrugarh University be adopted for PG Programme under Autonomous status.

#### Department of Sanskrit J.B. College (Autonomous) Session 2016-17

#### Office Bearers of Board of Studies

- 1. Dr. Kalyani Goswami, H/D, -Chairman
- 2. Dr. Naba K Handique, Dept. of Assamese, DU, -VC nominee
- 3. Dr. Deepa Goswami, DCB Girls' College, -AC nominee
- 4. Dr. Robin Sharma, DKD College, Dergaon, -AC nominee
- 5. Dr. Dipti Sarma Acharya, -Faculty Member
- 6. Ms. Pronati Borthakur, Advocate, Representative from industry/Corporate
- 7. Dr. Sujata Purkayastha, GU, Alumni &AC nominee

**Term:** The term of the nominated members shall be two years.

**Meeting:** The principal of the college shall draw the schedule for meeting of the Board of Studies for different departments. The meeting may be scheduled as and when necessary, but at least once a year.

#### **Functions**

The Board of Studies of a department in the college shall:

- (j) Prepare syllabi for various courses keeping in view the objectives of the college, interest of the stakeholders and national requirement for consideration and approval of the Academic Council;
- (b) Suggest methodologies for innovative teaching and evaluation techniques;
- (c) Suggest panel of names to the Academic Council for appointment of examiners; and
- (d) Coordinate research, teaching, extension and other academic activities in the department/college.
- (e) Maintain the proceedings of BoS meetings.

Note: The HOD and faculty members are requested to maintain all sorts of records such as IA Marks Register, Results of the students, Performance of the students in extracurricular activities, stock register, List of the books and Journals of departmental library, Records of Gust Lecture, Seminar and workshop, Research projects, Individual teacher profile and publication etc.

D	EPARTO	MENT	05 5	INSKRI	τ	
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1. Dr. Kalyani Goswani _ Chairman -	En-7/5/16
2. Dr. Nata Xr. Handigue V. C. Nominee	- Manyegy5/16
3. Dr. Seijata Purkayartha - A. C. Nominee	
4. Dr. Deeparani Gornani _ A.C. Nomini	el.
- 0 2011 0(12 0) C:	
b. Nr. Kaleindra North Keva Sarma - A.C	Nominee & TS/16
5. Dr. Raleindra Noth Deva Sarma - A. C 6.5/Promote Borthakur (Advocate) - Repres	sentative from industry/corporat
6.5/Pronote Borthakur (Advocate) - Repres	
6.5/Pronote Borthakur (Advocate) - Repres	sentative from industry/corporat
6.5/Pranoti Borthatur (Advocate) - Repres 7. Fracelly members- 1) Dr. Kalyani Eomani.	sentative from industry/corporat  P. Aronfredam  Gymmini 15/16
6.5/Pranote Borthakur (Advocate) - Reprin	sentaline from industry/carporas

### DEPARTMENT OF SANSKRIT

Proceedings of the meeting of the board of studies, department of Sanskrit, J.B. College, Jorhat held on 07-05-2016.

At the very outset, the chairman Dr. Kalyani Goswami, Head of the department of Sanskrit extended her heartiest welcome to the members of the board of studies. In the meeting, the following decisions have been accepted after threadbare discussion.

#### Members Present:

- 1. Dr. Kalyani Goswami.
- 2. Dr. Nava Kr. Handique.
- 3. Dr. Sujata Purkayastha.
- 4. Dr. Diparani Goswami.
- 5. Dr. Robindra Nath Deva Sarma.
- 6. Sita. Pronati Borthakur.
- 7. Dr. Dipti Sarmah Acharyya.
- 8. Sjt. Tapan Dutta.
- 9. Sit. Pranjal Protim Sarma.

Agenda: Under graduate courses for Sanskrit Honours and Generic Elective for 1<sup>st</sup> & 2<sup>nd</sup> semester according to CBCS of UGC syllabus.

- a) The house accepted the Core I, Core II, Core III & Core IV as intact as given by UGC with addition of more books in the list of suggested readings.
- b) Keeping in view of the suitability of students in case of Generic Elective paper I, the house changed the subject matter of the said paper and unanimously approved new one.
- c) As per decision of the house the Generic Elective paper-I altered to Generic Elective paper II.
- d) In case of Ability Enhancement Elective Skill Based Courses, the house accepted AEEC-I (Acting & Script Writing) and AEEC-III (Machine Translation: Tools & Techniques).
- e) The house approved the proposed panel of examiners given by the department.

It was discussed by the house about the whole syllabi and the meeting was ended with vote of thanks from the chair.

Chairman Board of Studies

#### Department of Sanskrit

Proceeding of the meeting of the Board of Studies, department of Sanskrit, J.B. College, (autonomous ) Jorhat held on 06.03.17

At the very outset, the Chairman Dr. Binapani Katoki extended her heartiest welcome to the members of the Board of Studies. In the meeting the following decisions have been accepted after threadbare discussion.

#### Members Present

- 1. Dr. Binapani Katoki.
- 2. Dr. Nava Kr. Handique.
- 3. Dr. Deeparani Goswami
- 4. Dr. Robindra Nath Deva Sarma.
- 5. Sita Pronati Borthakur.
- Dr. Dipti Sarma Acharyya.
- 7. Dr. Kalyani Goswami.
- 8. Sjt Tapan Dutta.

Core Paper

- 1. Core Papers 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> as intact as given by UGC syllabus. In core paper 8<sup>th</sup> the Unit IV has been changed.
- In paper 9<sup>th</sup> in section C Jaymati Kavya (1<sup>st</sup> & 2<sup>nd</sup> Pravaha) is introduced instead of Gitikavya & other genres. In this paper section D has been omitted.
- 3. Paper 10<sup>th</sup>, 11<sup>th</sup>,13<sup>th</sup> & 14<sup>th</sup> as intact as given by UGC syllabus. Paper 12<sup>th</sup> is not available in UGC syllabus. Therefore the Board has decided to create a new paper.

GE

- 1. GE 3rd paper, Basic Principle of Indian Medicine System (Ayrveda) has been accepted.
- 2. GE 4th Paper -Fundamental of Indian Philosophy has been accepted.

**AEEC** 

Paper 1st and 5th as intact as given in UGC syllabus

DSC

- 1. In DSC 1st -Art of Balance Living has been accepted.
- 2. In DSC 2<sup>nd</sup> Theatre & Dramaturgy in Sanskrit has been accepted.
- In DSC 3<sup>rd</sup> –Sanskrit Linguistics has been accepted.
- 4. In DSC 4<sup>TH</sup> Fundamentals of Ayurveda has been accepted.

In was discussed by the house about the whole syllabi and the meeting was ended with vote of thanks from the chair.

Bire fani fevi

Board of Studies

Chairman

Dept. of Sanskrit.

Notes & tay	and of Sansthit (Date: 06.
Jagannath Baro	ent of Sanstrit. (Date: 06.
1. Dr. Binapani Devi -	-Chairman - Pz 613119
	ul -V.C. Nomines - Mange
3. Dr. Rabindranath Deva	Sarman-A.C. Nomine - Barr 6/3/17
	tha-A. C. Nominee- Phylogostha Golft
5. Dr. Deepatrani Gosna	mi- A.C. Nominee- offdy 6/3/17
6. Sjeta Prandi Bosthaku	ir, Advocate-Representative from industry/corporate-
7. Faculty members- 1) Dr. Dipti Sarman Acho	Ryja Dsarmah 6/3/17
2) Dr. Kalyani Goswami	· - \$ 6/3/17
3) Mr. Tapan Dutta.	aut 6 3 17
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# Minutes of the 1<sup>st</sup> meeting of the Board of Studies (BoS), Department of Statistics, J.B. College (Autonomous), held on 06/05/2016

#### **Members present:**

1.	Dr. Manoj Kumar Bhowal	Chairman
	Head, Dept. of Statistics, J.B. College	
2.	Prof. Jiten Hazarika	Vice-Chancellor's Nominee
	Dept. of Statistics, Dibrugarh University	
3.	Dr. (Ms.) Ranjana Gogoi	Academic Council's Nominee
	Dept. of Statistics, Gargaon College	
4.	Dr. (Ms. ) Deepika Das Borah	Academic Council's Nominee
	Assam Agricultural University, Jorhat	
5.	Dr. P.K. Bordoloi	Representative from Industry/Corporate
	Tea Research Association, Tocklai, Jorhat	
6.	Dr. Diganta Kolita	Alumni
	North Lakhimpur College, Lakhimpur	
7.	Mr. Nabin Ch. Dutta	Faculty Member
8.	Ms. Munmun Bora Borgohain	Do—
9.	Dr. Pranab Barua	Do—
10.	Mr. Rituraj Baruah	Do

The Chairman welcomed all the Hon'ble Members of the committee and took up the agenda of the meeting.

**Agenda 1 :** Finalization of U.G. Syllabus in Statistics under CBCS to be implemented from the academic session 2016-17.

The chairman placed before the BoS the draft syllabus of the U.G. programme in Statistics prepared by the members of the teaching staff of the Department of Statistics, J.B. College (Autonomous), Jorhat as per the proposed syllabus for B.Sc. (Honours) Statistics of UGC, New Delhi, under Choice Based Credit System (CBCS). The committee finalized the syllabus after minor modifications from the members of the BoS. However, the committee felt that to finalize the detail content of the syllabus from 3<sup>rd</sup> Semester onwards another sitting will be required. After a prolong discussion the BoS decided to recommend the syllabus to the competent authority for necessary action and resolved as follows:

**Resolution No. 01:** The BoS meeting of the Dept. of Statistics, J.B. College (Autonomous) held in 06/05/2016 resolved that the syllabus as enclosed have been prepared after prolong discussion by the members wherein necessary modification and revision as suggested by the committee have been included, and decided to forward the same to the U.G. board / Academic Council for necessary action.

**Agenda 2 :** Panel of Examiners

The BoS prepared the panel of examiners for the U.G. programme under CBCS mode

as per the proposed syllabus and scheme of examinations of UGC, New Delhi under CBCS

and the following resolution was adopted:

**Resolution No. 02:** The BoS meeting of the Dept. of Statistics, J.B. College (Autonomous)

held in 06/05/2016 resolved that the panel of examiners as enclosed in a sealed envelope has

been prepared by the members as per guidelines of UGC's scheme of examination and

decided to forward the same to the U.G. board / Academic Council for necessary action.

As no other matters, the meeting ended with vote of thanks from the chair.

( M.K. Bhowal )
Chairman, BoS
Dept. of Statistics
J.B. College (Autonomous)
Jorhat, Assam

# Minutes of the 2nd meeting of the Board of Studies (BoS), Department of Statistics, J.B. College (Autonomous), held on 04/03/2017

#### **Members:**

1.	Dr. Manoj Kumar Bhowal Head, Dept. of Statistics, J.B. College	Chairman
2.	Prof. Jiten Hazarika Dept. of Statistics, Dibrugarh University	Vice-Chancellor's Nominee
3.	Dr. (Ms.) Ranjana Gogoi Dept. of Statistics, Gargaon College	Academic Council's Nominee
4.	Dr. (Ms. ) Deepika Das Borah Assam Agricultural University, Jorhat	Academic Council's Nominee
5.	Dr. P.K. Bordoloi Tea Research Association, Tocklai, Jorhat	Representative from Industry/Corporate
6.	Dr. Diganta Kolita North Lakhimpur College, Lakhimpur	Alumni
7.	Mr. Nabin Ch. Dutta	Faculty Member
8.	Ms. Munmun Bora Borgohain	Do—
9.	Dr. Pranab Barua	Do—
10.	Mr. Rituraj Baruah	Do

The Chairman welcomed all the Hon'ble Members of the committee and took up the agenda of the meeting.

Agenda 1: Confirmation of the minutes of the BOS meeting held on 06/05/2016

**Agenda 2:** Finalization of U.G. Syllabus for the 3<sup>rd</sup> and 4<sup>th</sup> semester in Statistics under CBCS to be implemented from the academic session 2017-18 and discussion on panel of examiners etc.

The chairman placed before the BoS the draft syllabus of the U.G. programme in Statistics prepared by the members of the teaching staff of the Department of Statistics, J.B. College (Autonomous), Jorhat as per the proposed syllabus for B.Sc. (Honours) Statistics of UGC, New Delhi, under Choice Based Credit System (CBCS). The committee finalized the

syllabus after minor modifications from the members of the BoS. However, the committee felt that to finalize the detail content of the syllabus from 5<sup>th</sup> Semester onwards another sitting will be required. After a prolong discussion the BoS decided to recommend the syllabus to the competent authority for necessary action and resolved as follows:

**Resolution No. 01:** The BoS meeting of the Dept. of Statistics, J.B. College (Autonomous) held in 04/03/2017 resolved that the syllabus as enclosed have been prepared after prolong discussion by the members wherein necessary modification and revision as suggested by the committee have been included, and decided to forward the same to the U.G. board / Academic Council for necessary action.

**Resolution No. 02:** The BoS meeting of the Dept. of Statistics, J.B. College (Autonomous) held in 04/03/2017 resolved that the panel of examiners prepared in the earlier sitting of BoS would remain the same.

**Resolution No. 03:** The BoS meeting of the Dept. of Statistics, J.B. College (Autonomous) held in 04/03/2017 resolved that in the SEE-1, SPSS will be incorporated.

As no other matters, the meeting ended with vote of thanks from the chair.

( M.K. Bhowal )
Chairman, BoS
Dept. of Statistics
J.B. College (Autonomous)
Jorhat, Assam

#### **DEPARTMENT OF ZOOLOGY**

#### PROCEEDINGS OF THE BOARD OF STUDIES MEETING

The meeting of the Board of Studies in Zoology was held in the Department on 7/ 05/ 2016. The meeting was started at 11.30 am. Delegates of the meeting were Dr. David Kardong, DU-VC nominee, Sri Jugal Kr. Nath, DKD College, Dergaon – AC nominee, Sri Debajit Barman, representative from industry, Sri UdayanBorthakur- alumni. All the members of the department were present in the meeting. After the introduction session, the Head of the department delivered her welcome speech. The welcome speech is followed by departmental presentation by Sri NilaveBhuyan. He presented the whole Syllabus in detail. After the discussion and suggestion on the Core papers, DSE, GE, SEC with the delegates, final syllabus was adopted as follows:

Sem	Core Course ( 14 )	Ability Enhancement	Skill Enhancement	Discilpine Specific	Generic Elective
		Compulsory	Course	Elective	GE ( 4 )
		Couse (2)	SEC (2)	DSE (4)	G2 (4)
ı	Non-chordate I :	English	, ,	, ,	Animal
	Protista to	Communication			diversity
	Pseudocoelomate				
	Principles of Ecology				
II	Non-chordates II:	EVS			Human
	Coelomates				Physiology
	Cell Biology				
III	Diversity of Chordates		Research		Environment
			methodology		&
					public health
	Physiology:				
	Controlling &				
	Coordinating system				
	Fundamentals of				
	Biochemistry				
IV	Comparative anatomy		Aquarium fish		Food,
	of Vertebrates		keeping		nutrition &
					health
	Physiology: Life				
	sustaining system				
	Biochemistry of				
	metabolic processes				
V	Molecular Biology			Animal	
				behaviour &	
	Duin simles of Comption			chronobiology	
	Principles of Genetics			Wild life	
				conservation	
				& management	
1/1	Dovolonmental			management Animal	
VI	Developmental				
	Biology Evolutionary Biology			biotechnology	
	Evolutionary Biology			Biology of Insecta	
				insecta	

There are some suggestions from the delegates and faculty members of the department –

- 1. The core paper XIV "Evolutionary Biology" should be there in the 3<sup>rd</sup> semester.
- 2. In the SEC "Aquarium Fish Keeping", along with the exotic fishes some important local ornamental fishes should also be included. Some of the existing exotic fishes can be deleted from the syllabus.
- 3. A topic on prioritization of conservation strategies should have been included in Unit 1 of the DSE "Wild life conservation & management". Some part can be deleted from the same paper like the faecal analysis of ungulates & carnivores, faecal samples, slide preparation, hair identification, pug mark etc. Unit 7 of the same paper should be Unit 6 and the topic name should be changed. Practical 4 should be deleted from the paper.
- 5. In the DSE "Animal Biotechnology "some parts from the computational biology should be included. In practical also some modifications based on the infrastructure will be necessary. Project report in the paper should be based on the theory paper and isolation of genomic DNA should be from E. Coli or any other animal cell.

The meeting was ended with the vote of thanks offered by Dr.Reema Sharma Baruah at 3.30 pm.