

## **B.A. GEOGRAPHY PROGRAMME**



Syllabus for Three Years Bachelor Degree
SUBJECT CODE = 1Y3GEO\_UG

RAJAULATU, NAMKUM, RANCHI, JHARKHAND

## SCHOOL OF ARTS AND HUMANITIES

## **GEOGRAPHY HONOURS PROGRAMME**

Syllabus for Three Years Bachelor Degree
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Implemented from the Academic Year 2021 onwards

# **YBN UNIVERSITY**

Established by the Act of Government of Jharkhand Act 15, 2017

Gazette Notification No.- 505, Dated 17th July 2017

As per Section 2(f) of UGC Act 1956

GEOGRAPHY HONS. YBN UNIVERSITY

## YBN UNIVERSITY

#### Vision

YBN University envisions to be a global university for Center of Excellence with set standards in education, research, creativity, entrepreneurship and ethical values, overcoming challenges in the service of mankind encompassing equity and productivity.

#### Mission

With strong belief in the astounding future of our students, YBN University looks forward for the set goals and the actions it undertakes. The following are its key prepositions:

- To disseminate knowledge that transform students into leaders who possess the intellect, aptitude, skill and confidence to succeed in all pursuits of life.
- Develop academic programs that meet the needs of regional, state, national and global communities.
- To create a collaborative environment open to free exchange of ideas, where education, research, creativity and entrepreneurship can flourish.
- Collaborate with other educational and non-educational institutions to achieve mutual goals and expand student opportunities through internship and placements.
- Provide students/faculties with the richest possible journey of educational development in a supportive and congenial environment.

#### Values

- Excellence: We aim to achieve excellence in all our work, always being principled, considerate and respectful.
- **Diversity:** We value the opportunity to work, learn and develop in a community that embraces the diversity of individuals enhancing multicultural learning junctures.
- **Integrity:** Having a strong belief to act with honesty, courage and trustworthiness, we support an environment of respect among students/faculties/staffs.
- **Ethical:** Having commitment to ethical and responsible behavior in our own actions, we look forward to develop the same in our students.
- **Innovation:** We build strength through innovation into our curriculum, culture, workplace and campus creating an environment with opportunities for growth and change.
- Resilience: We change, adapt and transform, also are creative to meet the everchanging needs of the University and the Society.
- **Commitment:** We sustain a deep allegiance and commitment to the interests of the region and state in which we are based, alongside our national and international efforts, ensuring relevance to all.

GEOGRAPHY HONS. YBN UNIVERSITY

## School of Arts & Humanities

To provide quality education the School of Arts & Humanities of YBN University creates and disseminates knowledge of human experience, thought and expression that cultivates intellectual breadth, promotes ethical understanding, builds identity and embraces difference. Deeply engaged with the vibrant cultural life of the country and with the citizens of the state of Jharkhand and beyond, we provide unparalled opportunities for global and civic engagement. Students of this school gain specialized and interdisciplinary knowledge of people and their cultures through a diverse and vigorous curriculum, developing skills required for life in civil society and leadership in an emerging global community besides aesthetic and intellectual development.

#### Fundamental concepts

The learning associated with School of Arts & Humanities shall lead to close understanding of the fundamental concepts of the YBN University.

- <u>Holistic Learning:</u> The curriculum encourages students to establish links between subjects, cultures and other areas of experience and develop wide range of skills.
- <u>Intellectual Awareness:</u> It develops intellectual awareness by exposing students to broader and global context in their studies.
- <u>Communication:</u> School of Arts & <u>Humanities</u> provides students with opportunities to develop
  their abilities in different forms of communication. To communicate these skills effectively,
  students develop oral and <u>written</u> communication techniques simultaneously. These techniques
  include speech writing and presentation, information gathering, document production (essays,
  reports etc), representation using maps, models, diagrams, tables and graphs, and techniques
  required to work effectively in group situation.

### Strategic Goals

- Produce students whose knowledge and skills prepare them to lead their fields and equip them
  for local and global citizenship. Students will be able to employ concepts and terminology of the
  discipline in appropriate contexts.
- Illustrate how the Arts & Humanities are critical to a knowledgeable democratic citizen and problem solving in a diverse society.
- Expand and enhance both physical and virtual spaces to promote robust and collaborative intellectual communities and facilitate increased interaction between faculties, students and staff across the campus and beyond.

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| GEOGRAPHY HONS. |      | CBCS CURRICULUM   | YBN UNIVERSITY |
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### COURSE STUCTURE FOR UNDERGRADUATE 'HONOURS' PROGRAMME

Table AI-1: Distribution of 140 Credits [\*wherever there is a practical there will be no tutorial and vice –versa.]

|     | Course  | Papers        | <b>Credits</b><br>Theory + Practical | <b>Credits</b><br>Theory + Tutorial |
|-----|---|---------------|--------------------------------------|-------------------------------------|
| I.  | Core Course   | (CC 1 to 14)  |                                      |                                     |
|     | Theory  | 14 Papers     | 14X4=56                              | 14X5=70                             |
|     | Practical/Tutorial*   | 14 Papers     | 14X2=28                              | 14X1=14                             |
| II. | Elective Course (EC)  |               |                                      |                                     |
|     | A. Discipline Specific Elective   | (DSE 1 to 4)  |                                      |                                     |
|     | Theory  | 4 Papers      | 4X4=16                               | 4X5=20                              |
|     | Practical/ Tutorial*  | 4 Papers      | 4X2=8                                | 4X1=4                               |
|     | B. Generic Elective/ Interdisciplinary  | (GE 1 to 4)   |                                      |                                     |
|     | Theory  | 4 Papers      | 4X4=16                               | 4X5=20                              |
|     | Practical/ Tutorial*  | 4 papers      | 4X2=8                                | 4X1=4                               |
| III | . Ability Enhancement Compulsory (  | Courses (AECC | C)                                   |                                     |
|     | 1. English/ Hindi Communication/ NH+MB /<br>Business Communication for Commerce |               | 1X2=2                                | 1X2=2                               |
|     | 2. Environmental Science  | 1 Paper       | 1x2=2                                | 1x2=2                               |
|     | 3. Skill Enhancement Course   | (SEC 1 & 2)   | 0                                    |                                     |
|     | of the Core Course opted  | 2 Papers      | 2X2=4                                | 2X2=4                               |
|     |   | Total C       | red <mark>it = 140</mark>            | = 140                               |

Table AI-1.1: Course structure for B.Sc./ B.A./ B.Com.(Hons. Programme)

| Semester | Honours<br>(Core Courses)<br>14 Papers | Allied<br>(Elective Courses)<br>8 Papers | Ability Enhancement To<br>(Compulsory Courses)<br>4 Papers | otal Credits |
|----------|--|--|--|--------------|
| Sem-I    | C-1, C-2                               | GE-1                                     | Eng / Hindi Comm/ NH + MB                                  |              |
|          | (6+6=12 Credits)                       | (06 Credits)                             | (02 Credits)   | 20 Credits   |
| Sem-II   | C-3, C-4                               | GE-2                                     | EVS  |              |
|          | (6+6=12 Credits)                       | (06 Credits)                             | (02 Credits)   | 20 Credits   |
| Sem-III  | C-5, C-6, C-7                          | GE-3                                     | SEC-1  |              |
|          | (6+6+6=18 Credits)                     | (06 Credits)                             | (02 Credits)   | 26 Credits   |
| Sem-IV   | C-8, C-9, C-10                         | GE-4                                     | SEC-2  |              |
|          | (6+6+6=18 Credits)                     | (06 Credits)                             | (02 Credits)   | 26 Credits   |
| Sem-V    | C-11, C-12                             | DSE-1, DSE-2                             |  |              |
|          | (6+6=12 Credits)                       | (6+6=12 Credits)                         |  | 24 Credits   |
| Sem-VI   | C-13, C-14                             | DSE-3, DSE-4                             |  |              |
|          | (6+6=12 Credits)                       | (6+6=12 Credits)                         |  | 24Credits    |

## COURSES OF STUDY FOR UNDERGRADUATE 'Geography Hons' PROGRAMME

Table AI-2 Subject Combinations allowed for Geography Hons. Programme (140 Credits)

| Honours/Core Subject CC 14 Papers | Discipline Specific Elective Subject DSES 4 Papers | Skill Enhancement Course SEC 2 Papers | Compulsory Course AECC 1+1=2 Papers |
|-----------------------------------|--|---------------------------------------|-------------------------------------|
| Geography                         | Geography Specific                                 | SEC in Geography                      | Language Communication + EVS        |

Table AI-2.1 Semester wise Examination Structure for Mid Sem & End Sem Examinations:

|          | (            | Core Honours, Allied DSE, Compulsory AECC Courses   | Examination Structure                |                               |   |
|----------|--------------|---|--------------------------------------|-------------------------------|---|
| Sem      | Code         | Papers  | Mid Semester<br>Theory (F.M.)        | End Semester<br>Theory (F.M.) | End Semester<br>Practical/ Viva<br>(F.M.) |
|          | 1Y3GEO(C1)   | Geomorphology +Lab                                  | 15                                   | 60                            |   |
| <b>T</b> | 1Y3GEO (C2)  | Oceanography +Lab                                   | 15                                   | 60                            | 50  |
| Ι        | 1Y3(GE1)     | Refer Table AI-2.3 of the Syllabus of Subject opted |                                      |                               |   |
|          | 1Y3AECC(LC)  | Language Communication                              |                                      | 100                           |   |
|          | 1Y3GEO(C3)   | Human Geography +Lab                                | 15                                   | 60                            | <b>50</b>                                 |
| **       | 1Y3GEO(C4)   | Resource Geography +Lab                             | 15                                   | 60                            | 50  |
| II       | 1Y3(GE2)     | Refer Table AI-2.3 of the Syllabus of Subject opted | 7                                    |                               |   |
|          | 1Y3AECC(EVS) | EVS   |                                      | 100                           |   |
|          | 1Y3GEO(C5)   | Climatology +Lab                                    | 15                                   | 60                            |   |
|          | 1Y3GEO(C6)   | Geography of India +Lab                             | 15                                   | 60                            | 75  |
| III      | 1Y3GEO(C7)   | Geography of Jharkhand +Lab                         | 15                                   | 60                            |   |
|          | 1Y3(GE3)     | Refer Table AI-2.3 of the Syllabus of Subject opted |                                      |                               |   |
|          | 1Y3SEC1      | Elementary Computer Application Software +Lab       |                                      | 100                           |   |
|          | 1Y3GEO(C8)   | Economic Geography + Survey                         | 15                                   | 60                            |   |
|          | 1Y3GEO(C9)   | Environmental Geography + Survey                    | 15                                   | 60                            | 75  |
| IV       | 1Y3GEO(C10)  | Population Geography + Survey                       | 15                                   | 60                            |   |
|          | 1Y3(GE4)     | Refer Table AI-2.3 of the Syllabus of Subject opted |                                      |                               |   |
|          | 1Y3SEC2      | Hydrology + <b>Project</b>                          |                                      | 75                            | 25  |
|          | 1Y3GEO(C11)  | Geographical Thought + Survey                       | 15                                   | 60                            | 50  |
|          | 1Y3GEO(C12)  | Settlement Geography + Survey                       | 15                                   | 60                            | 30  |
| V        | 1Y3GEO(DSE1) | Urban Geography +Project                            | 25                                   | 75                            | 50  |
|          | 1Y3GEO(DSE2) | Social Geography +Project                           | Social Geography + <b>Project</b> 25 |                               | 30  |
|          | 1Y3GEO(C13)  | Regional Planning and Development +Dissertation     | 15                                   | 60                            | 50  |
| VI       | 1Y3GEO(C14)  | Agriculture Geography +Dissertation                 | 15                                   | 60                            |   |
|          | 1Y3GEO(DSE3) | Political Geography +Project                        | 15                                   | 60                            | 50  |
|          | 1Y3GEO(DSE4) | Bio Geography + <b>Project</b>                      | 15                                   | 60                            | 50  |

Table AI-2.2 Generic Subject Papers for B. A. Hons. Programme (140 Credits); All Four Papers of Any One Subject to be opted leaving aside the papers of Hons. Subject:

| Generic<br>Elective       |  | Generic Elective Cou<br>(GE will be other than       |   |  |  |
|---------------------------|--|--|---|--|--|
| Subject<br>GE<br>4 Papers | Semester I GE1   | Semester II<br>GE2                                   | Semester III<br>GE3                                 | Semester IV<br>GE4   |  |
| Hindi                     | कला और साहित्य <b>+T</b>                                     | अनुवाद + <b>T</b>                                    | साहित्य और पत्रकारिता +T                            | रचनात्मक लेखन की विधाएँ<br>+T                                |  |
| English                   | Academic Writing +T  | Language & Linguistics +T                            | Literature: Poems & Short<br>Stories +T             | Language, Literature & Culture +T                            |  |
| Bengali                   | History of Bengali<br>Literature + <b>T</b>                  | Bengali Poetry, Novel,<br>Short Stories + <b>T</b>   | Bengali Poetry, Drama,<br>Short Stories +T          | Bengali Poetry, Short<br>Stories, Bengali Essay + <b>T</b>   |  |
| Urdu                      | Study of Poet Nazir<br>Akbarabadi +T                         | Study of Short Story Writer<br>Prem Chand + <b>T</b> | Mass Media: Principles and Practice +T              | Study of Short Story<br>Writer + <b>T</b>                    |  |
| Sanskrit                  | संस्कृत व्याकरण एवं व्याकरण शास्त्र<br>का इतिहास +T          | भारतीय संस्कृति एवं राजनीति $+ \mathbf{T}$           | आयुर्वेद की परम्परा + <b>T</b>                      | भाषाविज्ञान <b>+T</b>  |  |
| Но                        | कला, साहित्य एवं संस्कृति + <b>T</b>                         | पारम्परिक वाद्य यंत्र + <b>T</b>                     | झारखण्डी समुदाय का<br>सांस्कृतिक केन्द्र + <b>T</b> | हो समुदाय की नृत्य शैलियाँ<br>+T                             |  |
| Kharia                    | कला, साहित्य एवं संस्कृति + <b>T</b>                         | पारम्परिक वाद्य यंत्र +T                             | झारखण्डी समुदाय का<br>सांस्कृतिक केन्द्र + <b>T</b> | खड़िया समुदाय की नृत्य<br>शैलियाँ +T                         |  |
| Khortha                   | कला, साहित्य एवं संस्कृति + <b>T</b>                         | पारम्परिक वाद्य यंत्र + <b>T</b>                     | झारखण्डी समुदाय का<br>सांस्कृतिक केन्द्र +T         | खोरठा समुदाय की नृत्य<br>शैलियाँ +T                          |  |
| Kurmali                   | कला, साहित्य एवं संस्कृति + <b>T</b>                         | पारम्परिक वाद्य यंत्र +T                             | झारखण्डी समुदाय का<br>सांस्कृतिक केन्द्र +T         | कुरमाली समुदाय की नृत्य<br>शैलियाँ +T                        |  |
| Kurux                     | कला, साहित्य एवं संस्कृति + <b>T</b>                         | पारम्परिक वाद्य यंत्र +T                             | झारखण्डी समुदाय का<br>सांस्कृतिक केन्द्र +T         | कुँडुख़ समुदाय की नृत्य<br>शैलियाँ + <b>T</b>                |  |
| Mundari                   | कला, साहित्य एवं संस्कृति + <b>T</b>                         | पारम्परिक वाद्य यंत्र +T                             | झारखण्डी समुदाय का<br>सांस्कृतिक केन्द्र +T         | मुण्डा समुदाय की नृत्य<br>शैलियाँ +T                         |  |
| Nagpuri                   | कला, साहित्य एवं संस्कृति + <b>T</b>                         | पारम्परिक वाद्य यंत्र +T                             | झारखण्डी समुदाय का<br>सांस्कृतिक केन्द्र +T         | नागपुरी समुदाय की नृत्य<br>शैलियाँ +T                        |  |
| Panch<br>Pargania         | कला, साहित्य एवं संस्कृति + <b>T</b>                         | <mark>पारम्परिक वाद्य यंत्र +T</mark>                | झारखण्डी समुदाय का<br>सांस्कृतिक केन्द्र +T         | पंचपरगनिया समुदाय की नृत्य<br>शैलियाँ + <b>T</b>             |  |
| Santhali                  | कला, साहित्य एवं संस्कृति +T                                 | पारम्परिक वाद्य यंत्र +T                             | झारखण्डी समुदाय का<br>सांस्कृतिक केन्द्र + <b>T</b> | संताल समुदाय की नृत्य<br>शैलियाँ + <b>T</b>                  |  |
| History                   | Environmental Issues in India +T                             | Making of Contemporary India +T                      | History of West Asia +T                             | India and her Neighbours +T                                  |  |
| Political<br>Science      | An Introduction to Political Theory +T                       | Indian Govt. and Politics<br>+T                      | Comparative Govt. and Politics +T                   | Public Administration +T                                     |  |
| Psychology                | Introduction of psychology +Lab                              | Social psychology +Lab                               | Psychopathology +Lab                                | Psychological Statistics<br>+Lab                             |  |
| Sociology                 | Indian Society and Culture +T                                | Social Movement in India +T                          | Sociology of Religion +T                            | Indian Sociological Theories +T                              |  |
| Economics                 | Principals of<br>Microeconomics +T                           | Principals of Macroeconomics +T                      | Indian Economy +T                                   | Money Banking, Public<br>Finance & International<br>Trade +T |  |
| Anthropology              | Economic Anthropology<br>+T                                  | Political Anthropology +T                            | Anthropology of Religion +T                         | Linguistic Anthropology<br>+T                                |  |
| Philosophy                | Indian Philosophy-I +T                                       | Indian Philosophy-II + <b>T</b>                      | Indian Ethics +T                                    | Western Ethics +T  |  |
| Home<br>Science           | Human Nutrition +Lab   | Entrepreneurship for small<br>Catering units +Lab    | Current concerns in Public<br>Health Nutrition +T   | Care and Wellbeing in<br>Human Development<br>+Lab           |  |
| Mathematics               | Object oriented<br>Programming in C <sup>++</sup> + <b>T</b> | Econometrics +T                                      | Information Security +T                             | Application of Algebra<br>+T                                 |  |

Table AI-2.3 Semester wise Structure for End Sem Examinations of Generic Elective in Geography:

|     | Core Honours, Allied DSE, Compulsory AECC<br>Courses |                         | Examination Structure         |                               |   |
|-----|--|-------------------------|-------------------------------|-------------------------------|---|
| Sem | Code   | Papers                  | Mid Semester<br>Theory (F.M.) | End Semester<br>Theory (F.M.) | End Semester<br>Practical/ Viva<br>(F.M.) |
| I   | 1Y3(GE1)   | Geomorphology +Lab      |                               | 75                            | 25  |
| II  | 1Y3(GE2)   | Human Geography +Lab    |                               | 75                            | 25  |
| III | 1Y3(GE3)   | Climatology +Lab        |                               | 75                            | 25  |
| IV  | 1Y3(GE4)   | Economic Geography +Lab |                               | 75                            | 25  |



#### SEMESTER I

**4 Papers** 

**Total 100 x 4 = 400 Marks** 

## I. ABILITY ENHANCEMENT COMPULSORY COURSE 1Y3AECC(LC)

(Credits: Theory-02)

Any One Compulsory Language Communication Prescribed by YBN University: English Communication/ Hindi Communication / NH + MB Communication (Refer AECC Curriculum of YBN University)

## COURSES OF STUDY FOR ABILITY ENHANCEMENT COMPULSORY COURSE(AECC) IN "ENGLISH"

| SEMESTER I | <b>ENGLISH COMMUNICATION</b> | [1Y3AECC(LC)] |
|------------|------------------------------|---------------|
|            |                              |               |

#### I. ENGLISH COMMUNICATION

#### UNIT 1

Communication – Definition, stages, barriers, types: verbal and non-verbal, Listening- Meaning, Nature and importance, Principles of Good Listening.

#### UNIT 2

Class-presentation (Oral for five minutes) on any of the above-mentioned topics: Descriptive writing, expansion of an idea.

#### UNIT 3

Writing skills –, notice writing, advertisement writing, précis writing, essay writing, letter writing (applications), and Business letter formats (letters of enquiry, replies and complaints), resume writing, covering letter

#### **UNIT 4**

Vocabulary building: One word substitution, synonyms and antonyms, idioms and phrases

#### **Suggested Readings:**

- 1. Technical Communication, M.H. Rizvi, Tata McGraw hill
- 2. Effective Business Communication, Asha Kaul
- 3. Developing Communication Skills, Krishnamohan
- 4. Functional Grammar and Spoken and Written Communication in English, Bikram K. Das, Orient Blackswan
- 5. Precis, Paraphrase and Summary, P.N. Gopalkrishnan, Authors Press Communication Skills, Sanjay Kumar and Pushplata, Oxford Publication

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OR

#### MIL HINDI COMMUNICATION

#### इकाई-1

हिन्दीव्याकरण और रचना, संज्ञा, सर्वनाम, विशष्ोण, क्रिया, अव्यय, कारक, वचन, संिध,उपसर्ग, प्रत्यय तथासमास, लिंगनिर्णय, पर्यायवाची शब्द, विलोम शब्द, अनेक शब्दों के लिए एक शब्द,शब्द शुद्धि, वाक्य शुद्धि, मुहावरेऔरलोकोक्तिया,ं पल्लवन एवं संक्षेपण।

#### इकाई-2

निबंध कलातथासमसामयिक एवंराष्ट्रीय विषयांेपरनिबध्ंालेखन

#### इकाई-3

संप्रेषण (संचार) -सपं्रेषण की अवधारणऔरमहत्व, संप्रष्ेाण के लिए आवश्यक शर्तंे, संप्रष्ेाण के प्रकार, संप्रेषणकामाध्यम, संप्रेषणकला, संप्रेषण की तकनीक, वाचनकला, समाचारवाचन, साक्षात्कारकला, रचनात्मकलेखनका लक्ष्य, रचनात्मक लख्ेानकाआधार, भावऔरविचारोंकीप्रस्तुति, वाक् कला की उपयोगिता।

#### अनुशंसितपुस्तकें:-

वृहतव्याकरणभास्कर : डाँ0 वचनदेवकुमार

वृहतनिबध्ंाभास्कर डाँ0 वचनदवेकुमार

आधुनिकहिन्दीव्याकरणऔररचना ः डाँ0 वासुदेवनन्दनप्रसाद

• रचनामानस ः प्रो0 रामेश्वरनाथितवारी

● व्यवहारिकहिन्दी :: डाॅं0 जंग बहा<mark>द्रपाण्डेय</mark>

• रचनात्मकलेखन ः डाॅं रमश्ेागौतम

• राजहंसहिन्दीनिबंध ः प्रो<mark>0 आर0 एन0</mark> गौड़

• सफलहिन्दीनिबंध ः रत्नेश्वर

• निबंध सहचर ः डा**ँ**0 लक्ष्मणप्रसाद

• उपकारमुहावरेऔरलाकोक्तियाँ ः पा्रे0 राजेश्वरप्रसादचतर्व्ेदी

कहानियोंकहावतांेकी ः प्रतापअनम

ullet सम्प्रेषणपरकहिन्दीभाषाशिक्षणः डा $\check{\ }0$  वैश्नानारंग

• शैलीविज्ञान ः डा**ँ**0 सुरेशकुमार

शैलीविज्ञानप्रतिमानऔरविश्लेषणः डाॅ0 पाडं ये शशिभष्ूाण 'शीताश्ंाु'

शैलीविज्ञानकाइतिहास ः डाँ0 पाडं ेय शशिभष्ूाण 'शीताश्ंाु'

SEMESTER I

#### NH + ALTERNATE ENGLISH

1 Paper

\_\_\_\_\_

Total 50+50 = 100 Marks

#### II. NH + MB COMMUNICATION

(NON-HINDI + MATRI BHASHA COMMUNICATION) अहिन्दी + मातृभवा रनांपीए (संवार)

;क्रींडटरू सैद्धान्तिक 01 + 01 = 02

## [A] NON-HINDI COMMUNICATION

अहिन्दी संप्री ए (संचार)

:क्रीडटरू सैद्धान्तिक -01)

पश्न पत्र क' लिए निर्दाष्ठमाही परीक्ष

प्पश्नां क दां समूह हांग' **ख छ'।' अनिवार्य ह**ै जिनसमें **लघु जारीय** 5 अंक का दां प्पश्न होगा। **ख ढ छ**' मे तीन मं से किन्ही दी 20 अंका के **विषयनिछ/ व नितमक पास्ना** क जार देन हांग!

गौर : सन्द्रान्तिक परीक्षा म पा। गए पा येक पश्न म उप-विशाजन ह। सकते ह।

## हिन्दी व्याकर । एवं रनांधी ए

सैद्धान्तिक: 15 व्याख्यान इकाई-1 हिन्दी

व्याकर । और रचना,

संज्ञा, सर्वनाम, विशेष ा, क्रिया, अव्ययं, कारक, वचन, संधि,उपसर्ग, प्रत्यय तथा समास, लिंग नि ाय, पर्याचवाची शब, विलोम शब, अनेक शबी के लिए एक शब, शब शुद्धि, वाक्य शुद्धि, मुहावरे और लोकंक्तियां, पल्लवन एवं संक्षेपि।

## इकाई -2 संप्रेष । (संचार) 🔻

-र्नाणी की खावधार । और महत्व, संपेष । क लिएण आवश्यक खाँ, संपेषी क प्रकारण, संप्रेष । का माध्यक्रम, र्नाणी कला, ण संप्रेष । की तक्कनीक, वाचन कला, समाचार वाचन, साक्षात्कार कला, रचनात्मक लेखन का लक्ष्य, रचनात्मक लेखन का आधार, भाव और विचार्ष की प्रस्त्ति, वाक कला की उपयोगिता।

## अन्शस्तित प्रतिक -

वहत्त\_व्याकरः ः डां वचनदेव कमार

वहत\_निबं भस्कर डॉ। वचनदेव कमार अधिनिक हिंदी व्याकरिं ऑर रचना ण डॉ। वार्नदेव नन्दन परनाद रचना

मानस् व्यवहारिक हिंदी अं जांग बहादर पा डेय ए

व्यवहारिक हिंदी डाँ। ज्जां बहादर पा रचनामक लेखन डाँ। रमेश गातम राजहंस हिंदी निबंध पा आर० एन० गाड

सफल हिंदी निबं

निशं र−ाहचर ः तं लक्ष्म□ा परमाद

उपकार महावरे आर लोकेक्तियां पा राजांखर पारनाद चतवी

कहानिया कहावता की प्रताप अनम सम्पोगापरकणहिन्दी भाग शिक्षा ण डाँ। वंश्ना नारंग शली विज्ञान डाँ। स्वरेश कमार

शंली विज्ञान पतिमान आर विश्लो । ए । बाँ पाइय शशिषा । शीता शंली प्रज्ञान का

इतिहार्न ः डॉं पांडेय शिशा शिता शि

#### [B] MATRI BHASHA COMMUNICATION

[C] मातृभा संप्रो । (संचार) Marks : 50 (ESE 1.5 Hrs) = 50 (क्रीडिटरू सैद्धान्तिक -01)

[B 1] BENGALI COMMUNICATION OR

[B 2] SANSKRIT COMMUNICATION OR [B 3] URDU

COMMUNICATION OR

[B 4] TRL COMMUNICATION

OR

#### [B 5] ALTERNATE ENGLISH

#### **ALTERNATE ENGLISH**

Unit I: Novel

1. The English Teacher (R.K. Narayan)

#### **Unit II:** Poetry

- 1. Stopping by words on a Snowy Evening (Robert Frost)
- 2. A slumber did My Sprit Seal (William Woodworth)
- 3. My Native Land (H.L.V. Derozio)
- 4. The Night of Scorpion (Nissim Ezekiel)
- 5. Break, Break (A.L. Tennyson)
- 6. Starlit Night (G.M. Hopkins)

#### **Unit III:** Grammar

- 1. Common Errors
- 2. Fill up the blanks with prepositions.
- 3. One word substitution.

#### **Suggested Reading:**

- 1. A String of Poems (Edited by: S.M.P.N. Singh Sashi and A.B.Sharan)
- 2. The Winged Word (Edited by: David Green)

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#### SEMESTER I

4 Papers

Total  $100 \times 4 = 400 \text{ Marks}$ 

### II. GENERIC ELECTIVE - 1Y3...(GE1)

(Credits: 06)

All Four Papers (One paper to be studied in each semester) of any One Subject to be opted other than the Honours Subject. Refer Content from the Syllabus of Opted Generic Elective Subject.

#### III. <u>CORE COURSE – 1Y3GEO(C1)</u>

(Credits: Theory-04, Practicals-02)

#### Instruction to Question Setter for

Mid Semester Examination (MSE):

There will be **two** group of questions. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type** three questions of five marks each, out of which any two are to answer.

#### End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

Note: There may be subdivisions in each question asked in Theory Examinations.

#### **GEOMORPHOLOGY**

Theory: 60 Lectures

- 1. Geomorphology: Nature and Scope.
- 2. Earth: Interior Structure and Isostasy.
- 3. Earth Movements: Plate Tectonics, Types of Folds and Faults, Earthquakes and Volcanoes
- 4. Geomorphic Processes: Weathering, Cycle of Erosion (Davis).
- 5. Evolution of Landforms (Erosional and Depositional): Fluvial, Karst, Aeolian and Glacial.

- Bloom A. L., 2003: *Geomorphology: A Systematic Analysis of Late Cenozoic Landforms*, Prentice-Hall of India, New Delhi.
- □ Bridges E. M., 1990: World Geomorphology, Cambridge University Press, Cambridge.
- Christopherson, Robert W., (2011), Geosystems: *An Introduction to Physical Geography*, 8 Ed., Macmillan Publishing Company

| Kale V. S. and Gupta A., 2001: <i>Introduction to Geomorphology</i> , Orient Longman, Hyderabad. |
|--|
| Knighton A. D., 1984: Fluvial Forms and Processes, Edward Arnold Publishers, London.             |
| Richards K. S., 1982: Rivers: Form and Processes in Alluvial Channels, Methuen, London.          |
| Selby, M.J., (2005), Earth's Changing Surface, Indian Edition, OUP                               |
| Skinner, Brian J. and Stephen C. Porter (2000), The Dynamic Earth: An Introduction to physical   |
| Geology,4th Edition, John Wiley and Sons   |
| Thornbury W. D., 1968: Principles of Geomorphology, Wiley.                                       |
| Gautam, A (2010): Bhautik Bhugol, Rastogi Punlications, Meerut                                   |
| Tikkaa, R N (1989): Bhautik Bhugol ka Swaroop, Kedarnath Ram Nath, Meerut                        |
| Singh, S (2009): Bhautik Bhugol ka Swaroop, Prayag Pustak, Allahabad                             |
| Tiwary Ram Kumar, Bhautik bhugol, Rajasthan Hindi Granth Academy, Jaipur                         |
| <br>· · · · · ·  |

(Credits: Theory-04, Practicals-02)

Theory: 60 Lectures

### IV. CORE COURSE - 1Y3GEO (C2)

Instruction to Question Setter for

Mid Semester Examination (MSE):

There will be **two** group of questions. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type** three questions of five marks each, out of which any two are to answer.

End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

*Note:* There may be subdivisions in each question asked in Theory Examinations.

#### **OCEANOGRAPHY**

- 1. Ocean Floor Topography-Indian Ocean Pacific Ocean and Atlantic Ocean
- 2. Oceanic Movements Waves, Currents and Tides.
- 3. Ocean Salinity and Temperature Distribution and Determinants.

Garrison T., 1998: Oceanography, Wordsworth Company, Belmont.

- 4. Coral Reefs- Types and Theories of Origin
- 5. Marine Deposits& Ocean Resources

| Andrew. D. ward and Stanley, Trimble (2004): Environmental Hydrology, 2nd edition, Lewis Publishers,     |
|--|
| CRC Press.   |
| Karanth, K.R., 1988: Ground Water: Exploration, Assessment and Development, Tata-McGraw Hill, New        |
| Delhi.   |
| Ramaswamy, C. (1985): Review of floods in India during the past 75 years: A Perspective. Indian National |
| Science Academy, New Delhi.  |
| Rao, K.L., 1982: India's Water Wealth 2nd edition, Orient Longman, Delhi,.                               |
| Singh, Vijay P. (1995): Environmental Hydrology. Kluwar Academic Publications, The Netherlands.          |
| Anikouchine W. A. and Sternberg R. W., 1973: The World Oceans: An Introduction to Oceanography,          |
| Prentice-Hall.   |

| Kershaw S., 2000: Oceanography: An Earth Science Perspective, Stanley Thornes, UK.                       |
|--|
| Pinet P. R., 2008: Invitation to Oceanography (Fifth Edition), Jones and Barlett Publishers, USA, UK and |
| Canada.  |
| Sharma R. C. and Vatal M., 1980: Oceanography for Geographers, Chaitanya Publishing House,               |
| Allahabad.   |
| Sverdrup K. A. and Armbrust, E. V., 2008: An Introduction to the World Ocean, McGraw Hill, Boston.       |
| Singh, M., Singh, R.B. and Hassan, M.I. (Eds.) (2014) Landscape ecology and water management.            |
| Proceedings of IGU Rohtak Conference, Volume 2.  |
| Advances in Geographical and Environmental Studies, Springer   |
| <br>   |

#### GEOGRAPHY PRACTICAL- C1 + C2 LAB

**60 Lectures** 

**Theory: 60 Lectures** 

#### Instruction to Question Setter for

#### End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 30 marks
Practical record notebook = 10 marks
Viva-voce = 10 marks

#### PRACTICAL - CARTOGRAPHIC TECHNIQUES

- 1. Scales Concept and application; Graphical Construction of Plain
- 3. Map Projections Classification, Properties and Uses; Graphical Construction of Polar Zenithal Stereographic Projection, Simple Conical Projection with One standard parallel and Two standard parallel, Bonne's Projections.
- 4. Topographical Map Concept and Interpretation of a Mountain /plateau area.
- 5. Profiles- Cross profiles

| 1. Anson R. and Ormelling F. J., 1994: International Cartographic Association: Basic Cartographic      |
|--|
| Vol. Pregmen Press.  |
| 2. Gupta K.K. and Tyagi, V. C., 1992: Working with Map, Survey of India, DST, New Delhi.               |
| 3. Mishra R.P. and Ramesh, A., 1989: Fundamentals of Cartography, Concept, New Delhi.                  |
| 4. Monkhouse F. J. and Wilkinson H. R., 1973: <i>Maps and Diagrams</i> , Methuen, London.              |
| Rhind D. W. and Taylor D. R. F., (eds.), 1989: Cartography: Past, Present and Future,                  |
| Elsevier, International Cartographic Association.  |
| Robinson A. H., 2009: Elements of Cartography, John Wiley and Sons, New York.                          |
| Sharma J. P., 2010: <i>Prayogic Bhugol</i> , Rastogi Publishers, Meerut.                               |
| Singh R. L. and Singh R. P. B., 1999: Elements of Practical Geography, Kalyani Publishers.             |
| Sarkar, A. (2015) Practical geography: A systematic approach. Orient Black Swan Private Ltd., NewDelhi |
| Singh R L & Rana P B Singh(1991) Prayogtmak Bhugol ke Mool Tatva, Kalyani Publishers, NewDelhi         |
| Sharma, J P (2010) Prayogtmak Bhugol ki Rooprekha, Rastogi Publications, Meerut                        |
| Singh, R L & Dutta, P K (2012) PrayogatmakBhugol, Central Book Depot, Allahabad                        |
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#### **SEMESTER II**

4 Papers

Total  $100 \times 4 = 400 \text{ Marks}$ 

### I. ABILITY ENHANCEMENT COMPULSORY COURSE 1Y3AECC(EVS)

(Credits: Theory-02)

Theory: 30 Lectures

Instruction to Question Setter for

End Semester Examination (ESE):

There will be **objective type test** consisting of hundred questions of 1 mark each. Examinees are required to mark their answer on **OMR Sheet** provided by the University.

#### **AECC – ENVIRONMENT STUDIES**

#### **Unit 1: Introduction to environmental studies**

Multidisciplinary nature of environmental studies; Scope and importance; Concept of sustainability and sustainable development.

(2 lectures)

#### **Unit 2 : Ecosystems**

What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem: food chains, food webs and ecological succession. Case studies of the following ecosystems:

Forest ecosystem

Grassland ecosystem

Desert ecosystem

Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)

(2 lectures)

#### **Unit 3: Natural Resources: Renewable and Non--renewable Resources**

Land resources and landuse change; Land degradation, soil erosion and desertification.

Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations.

Water: Use and over--exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter--state).

Energy resources: Renewable and non renewable energy sources, use of alternate energy sources, growing energy needs, case studies.

(5 lectures)

#### **Unit 4: Biodiversity and Conservation**

Levels of biological diversity: genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots
India as a mega--biodiversity nation; Endangered and endemic species of India

Threats to biodiversity: Habitat loss, poaching of wildlife, man--wildlife conflicts, biological invasions; Conservation of biodiversity: In--situ and Ex--situ conservation of biodiversity. Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.

(5 lectures)

#### **Unit 5: Environmental Pollution**

Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution

Nuclear hazards and human health risks

Solid waste management: Control measures of urban and industrial waste.

Pollution case studies.

(5 lectures)

#### **Unit 6: Environmental Policies & Practices**

Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture

Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution)

Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest

Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD).

Nature reserves, tribal populations and rights, and human wildlife conflicts in Indian context.

(4 lectures)

#### **Unit 7: Human Communities and the Environment**

Human population growth: Impacts on environment, human health and welfare.

Resettlement and rehabilitation of project affected persons; case studies.

Disaster management: floods, earthquake, cyclones and landslides.

Environmental movements: Chipko, Silent valley, Bishnois of Rajasthan.

Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.

Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi).

(3 lectures)

#### Unit 8: Field work

Visit to an area to document environmental assets: river/ forest/ flora/fauna, etc.

Visit to a local polluted site--Urban/Rural/Industrial/Agricultural.

Study of common plants, insects, birds and basic principles of identification.

Study of simple ecosystems--pond, river, Delhi Ridge, etc.

(Equal to 4 lectures)

#### **Suggested Readings:**

| Raziuddin, M, Mishra P.K. 2014, A Handbook of Environmental Studies, Akanaksha Publications, Ranch         |
|--|
| Mukherjee, B. 2011: Fundamentals of Environmental Biology. Silverline Publications, Allahabad.             |
| Carson, R. 2002. Silent Spring. Houghton Mifflin Harcourt.   |
| Gadgil, M., & Guha, R.1993. This Fissured Land: An Ecological History of India. Univ. of California Press. |
| Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, London, Routledge.                     |
| Gleick, P. H. 1993. Water in Crisis. Pacific Institute for Studies in Dev., Environment &                  |
| Security. Stockholm Env. Institute, Oxford Univ. Press.  |
| Groom, Martha J., Gary K. Meffe, and Carl Ronald Carroll. Principles of Conservation Biology.              |
| Sunderland: Sinauer Associates, 2006.  |
| Grumbine, R. Edward, and Pandit, M.K. 2013. Threats from India's Himalaya dams. Science, 339: 3637         |
| McCully, P. 1996. Rivers no more: the environmental effects of dams(pp. 2964). Zed Books.                  |
| McNeill, John R. 2000. Something New Under the Sun: An Environmental History of the Twentieth Century.     |
| Odum, E.P., Odum, H.T. & Andrews, J. 1971. Fundamentals of Ecology. Philadelphia: Saunders.                |
| Pepper, I.L., Gerba, C.P. & Brusseau, M.L. 2011. Environmental and Pollution Science. Academic Press.      |
| Rao, M.N. & Datta, A.K. 1987. Waste Water Treatment. Oxford and IBH Publishing Co. Pvt. Ltd.               |
| Raven, P.H., Hassenzahl, D.M. & Berg, L.R. 2012. Environment. 8th edition. John Wiley & Sons.              |
| Rosencranz, A., Divan, S., & Noble, M. L. 2001. Environmental law and policy in India. Tripathi 1992.      |
| Sengupta, R. 2003. <i>Ecology and economics</i> : An approach to sustainable development. OUP.             |
| Singh, J.S., Singh, S.P. and Gupta, S.R. 2014. <i>Ecology, Environmental Science and Conservation</i> . S. |
| Chand Publishing, New Delhi.   |
| Sodhi, N.S., Gibson, L. & Raven, P.H. (eds). 2013. Conservation Biology: Voices from the Tropics.          |
| John Wiley & Sons.   |
| Thapar, V. 1998. Land of the Tiger: A Natural History of the Indian Subcontinent.                          |
| Warren, C. E. 1971. Biology and Water Pollution Control. WB Saunders.                                      |
| Wilson, E. O. 2006. The Creation: An appeal to save life on earth. New York: Norton.                       |
| World Commission on Environment and Development. 1987. <i>Our Common Future</i> . Oxford University        |
|  |

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## II. GENERIC ELECTIVE 1Y3...(GE2)

All Four Papers (One paper to be studied in each semester) of any One Subject to be opted other than the Honours Subject. Refer Content from the Syllabus of Opted Generic Elective Subject.

(Credits: 06)

(Credits: Theory-04, Practicals-02)

Theory: 60 Lectures

### III. CORE COURSE - 1Y3GEO(C3)

#### Instruction to Question Setter for

#### Mid Semester Examination (MSE):

There will be **two** group of questions. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type** three questions of five marks each, out of which any two are to answer.

#### End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

Note: There may be subdivisions in each question asked in Theory Examinations.

#### **HUMAN GEOGRAPHY**

- 1. Introduction: Defining Human Geography; Major Themes; Contemporary Relevance
- 2. Space and Society: Cultural Regions; Race; Religion and Language
- 3. Population: Population Growth and Distribution; Population Composition; Demographic Transition Theory
- 4. Settlements: Types of Rural Settlements; Classification of Urban Settlements.
- 5. Population-Resource Relationship

| Chandna, R.C. (2010) Population Geography, Kalyani Publisher.   |
|---|
| Hassan, M.I. (2005) Population Geography, Rawat Publications, Jaipur                                    |
| Daniel, P.A. and Hopkinson, M.F. (1989) The Geography of Settlement, Oliver & Boyd, London.             |
| Johnston R; Gregory D, Pratt G. et al. (2008) The Dictionary of Human Geography, Blackwell Publication. |
| Jordan-Bychkov et al. (2006) The Human Mosaic: A Thematic Introduction to Cultural                      |
| Geography. W. H. Freeman and Company, New York.   |
| Kaushik, S.D. (2010) Manav Bhugol, Rastogi Publication, Meerut.   |
| Maurya, S.D. (2012) Manav Bhugol, Sharda Pustak Bhawan. Allahabad.                                      |
| Hussain, Majid (2012) Manav Bhugol. Rawat Publications, Jaipur  |
|   |
|   |

(Credits: Theory-04, Practicals-02)

Theory: 60 Lectures

#### IV. CORE COURSE - 1Y3GEO(C4)

#### Instruction to Question Setter for

#### Mid Semester Examination (MSE):

There will be **two** group of questions. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type** three questions of five marks each, out of which any two are to answer.

#### End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

Note: There may be subdivisions in each question asked in Theory Examinations.

#### RESOURCE GEOGRAPHY

- 1. Natural Resource: Concept and Classification
- 2. Distribution, Utilisation, Problems and Management of Land Resources and Water Resources
- 3. Distribution, Utilisation, Problems and Management of Forests and Energy Resources
- 4. Appraisal and Conservation of Natural Resources
- 5. Sustainable Resource Development

| D 11     | T | • . |   |
|----------|---|-----|---|
| The Park | • | 101 | r |
| Reading  | _ | 110 | L |

| <ul> <li>Ecological History of India and Ecology and Equity, Oxford University Press. USA.</li> <li>Holechek J. L. C., Richard A., Fisher J. T. and Valdez R., 2003: Natural Resources: Ecology,</li> <li>Economics and Policy, Prentice Hall, New Jersey.</li> <li>Jones G. and Hollier G., 1997: Resources, Society and Environmental Management, Paul Chapman, London.</li> <li>Klee G., 1991: Conservation of Natural Resources, Prentice Hall, Englewood.</li> <li>Mather A. S. and Chapman K., 1995: Environmental Resources, John Wiley and Sons, New York.</li> <li>Mitchell B., 1997: Resource and Environmental Management, Longman Harlow, England.</li> </ul>   | _ |  |
|---|---|--|
| <ul> <li>Gadgil M. and Guha R., 2005: The Use and Abuse of Nature: Incorporating This Fissured Land: An Ecological History of India and Ecology and Equity, Oxford University Press. USA.</li> <li>Holechek J. L. C., Richard A., Fisher J. T. and Valdez R., 2003: Natural Resources: Ecology, Economics and Policy, Prentice Hall, New Jersey.</li> <li>Jones G. and Hollier G., 1997: Resources, Society and Environmental Management, Paul Chapman, London.</li> <li>Klee G., 1991: Conservation of Natural Resources, Prentice Hall, Englewood.</li> <li>Mather A. S. and Chapman K., 1995: Environmental Resources, John Wiley and Sons, New York.</li> <li>Mitchell B., 1997: Resource and Environmental Management, Longman Harlow, England.</li> <li>Owen S. and Owen P. L., 1991: Environment, Resources and Conservation, Cambridge University Press, New York.</li> </ul> |   | Cutter S. N., Renwich H. L. and Renwick W., 1991: Exploitation, Conservation, Preservation: A      |
| <ul> <li>Ecological History of India and Ecology and Equity, Oxford University Press. USA.</li> <li>Holechek J. L. C., Richard A., Fisher J. T. and Valdez R., 2003: Natural Resources: Ecology,</li> <li>Economics and Policy, Prentice Hall, New Jersey.</li> <li>Jones G. and Hollier G., 1997: Resources, Society and Environmental Management, Paul Chapman,</li> <li>London.</li> <li>Klee G., 1991: Conservation of Natural Resources, Prentice Hall, Englewood.</li> <li>Mather A. S. and Chapman K., 1995: Environmental Resources, John Wiley and Sons, New York.</li> <li>Mitchell B., 1997: Resource and Environmental Management, Longman Harlow, England.</li> <li>Owen S. and Owen P. L., 1991: Environment, Resources and Conservation, Cambridge University Press, New York.</li> </ul>  |   | Geographical Perspective on Natural Resources Use, John Wiley and Sons, New York.                  |
| <ul> <li>Holechek J. L. C., Richard A., Fisher J. T. and Valdez R., 2003: Natural Resources: Ecology,</li> <li>Economics and Policy, Prentice Hall, New Jersey.</li> <li>Jones G. and Hollier G., 1997: Resources, Society and Environmental Management, Paul Chapman, London.</li> <li>Klee G., 1991: Conservation of Natural Resources, Prentice Hall, Englewood.</li> <li>Mather A. S. and Chapman K., 1995: Environmental Resources, John Wiley and Sons, New York.</li> <li>Mitchell B., 1997: Resource and Environmental Management, Longman Harlow, England.</li> <li>Owen S. and Owen P. L., 1991: Environment, Resources and Conservation, Cambridge University Press, New York.</li> </ul>  |   | Gadgil M. and Guha R., 2005: The Use and Abuse of Nature: Incorporating This Fissured Land: An     |
| <ul> <li>Economics and Policy, Prentice Hall, New Jersey.</li> <li>Jones G. and Hollier G., 1997: Resources, Society and Environmental Management, Paul Chapman, London.</li> <li>Klee G., 1991: Conservation of Natural Resources, Prentice Hall, Englewood.</li> <li>Mather A. S. and Chapman K., 1995: Environmental Resources, John Wiley and Sons, New York.</li> <li>Mitchell B., 1997: Resource and Environmental Management, Longman Harlow, England.</li> <li>Owen S. and Owen P. L., 1991: Environment, Resources and Conservation, Cambridge University Press, New York.</li> </ul>  |   | Ecological History of India and Ecology and Equity, Oxford University Press. USA.                  |
| <ul> <li>Jones G. and Hollier G., 1997: Resources, Society and Environmental Management, Paul Chapman, London.</li> <li>Klee G., 1991: Conservation of Natural Resources, Prentice Hall, Englewood.</li> <li>Mather A. S. and Chapman K., 1995: Environmental Resources, John Wiley and Sons, New York.</li> <li>Mitchell B., 1997: Resource and Environmental Management, Longman Harlow, England.</li> <li>Owen S. and Owen P. L., 1991: Environment, Resources and Conservation, Cambridge University Press, New York.</li> </ul>  |   | Holechek J. L. C., Richard A., Fisher J. T. and Valdez R., 2003: Natural Resources: Ecology,       |
| London.  Klee G., 1991: Conservation of Natural Resources, Prentice Hall, Englewood.  Mather A. S. and Chapman K., 1995: Environmental Resources, John Wiley and Sons, New York.  Mitchell B., 1997: Resource and Environmental Management, Longman Harlow, England.  Owen S. and Owen P. L., 1991: Environment, Resources and Conservation, Cambridge University Press, New York.  |   | Economics and Policy, Prentice Hall, New Jersey.   |
| <ul> <li>□ Klee G., 1991: Conservation of Natural Resources, Prentice Hall, Englewood.</li> <li>□ Mather A. S. and Chapman K., 1995: Environmental Resources, John Wiley and Sons, New York.</li> <li>□ Mitchell B., 1997: Resource and Environmental Management, Longman Harlow, England.</li> <li>□ Owen S. and Owen P. L., 1991: Environment, Resources and Conservation, Cambridge University Press, New York.</li> </ul>   |   | Jones G. and Hollier G., 1997: Resources, Society and Environmental Management, Paul Chapman,      |
| <ul> <li>Mather A. S. and Chapman K., 1995: Environmental Resources, John Wiley and Sons, New York.</li> <li>Mitchell B., 1997: Resource and Environmental Management, Longman Harlow, England.</li> <li>Owen S. and Owen P. L., 1991: Environment, Resources and Conservation, Cambridge University Press, New York.</li> </ul>  |   | London.  |
| <ul> <li>Mitchell B., 1997: Resource and Environmental Management, Longman Harlow, England.</li> <li>Owen S. and Owen P. L., 1991: Environment, Resources and Conservation, Cambridge University Press, New York.</li> </ul>  |   | Klee G., 1991: Conservation of Natural Resources, Prentice Hall, Englewood.                        |
| Owen S. and Owen P. L., 1991: <i>Environment, Resources and Conservation</i> , Cambridge University Press, New York.  |   | Mather A. S. and Chapman K., 1995: Environmental Resources, John Wiley and Sons, New York.         |
| New York.   |   | Mitchell B., 1997: Resource and Environmental Management, Longman Harlow, England.                 |
|   |   | Owen S. and Owen P. L., 1991: Environment, Resources and Conservation, Cambridge University Press, |
| ☐ Rees J., 1990: <i>Natural Resources: Allocation, Economics and Policy</i> , Routledge. London.  |   | New York.  |
| ·   |   | Rees J., 1990: Natural Resources: Allocation, Economics and Policy, Routledge. London.             |
|   |   | · · · · · · · · · · · · · · · · · · ·  |

#### **GEOGRAPHY PRACTICAL- C3 + C4 LAB**

**60 Lectures** 

**Theory: 60 Lectures** 

#### Instruction to Question Setter for

#### End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 30 marks
Practical record notebook = 10 marks
Viva-voce = 10 marks

#### THEMATIC CARTOGRAPHY

- 1. Diagrammatic Data Presentation Line, Bar and Circle.
- 2. Thematic Mapping Techniques Properties, Uses and Limitations; Areal Data -- Choropleth, Dot, Proportional Circles; Point Data Isopleths.
- 3. Cartographic Overlays Point, Line and Areal Data.
- 4. Thematic Maps Preparation and Interpretation.

| <br>   |
|--|
| Cuff J. D. and Mattson M. T., 1982: Thematic Maps: Their Design and Production, Methuen Young Books    |
| Dent B. D., Torguson J. S., and Holder T. W., 2008: Cartography: Thematic Map Design (6th Edition).    |
| Mcgraw-Hill Higher Education   |
| Gupta K. K. and Tyagi V. C., 1992: Working with Maps, Survey of India, DST, New Delhi.                 |
| Kraak MJ. and Ormeling F., 2003: Cartography: Visualization of Geo-Spatial Data, Prentice-Hall.        |
| Mishra R. P. and Ramesh A., 1989: Fundamentals of Cartography, Concept, New Delhi.                     |
| Sharma J. P., 2010: Prayogic Bhugol, Rastogi Publishers, Meerut.                                       |
| Singh R. L. and Singh R. P. B., 1999: Elements of Practical Geography, Kalyani Publishers.             |
| Slocum T. A., Mcmaster R. B. and Kessler F. C., 2008: Thematic Cartography and Geovisualization(3rd    |
| Edition), Prentice Hall.   |
| Tyner J. A., 2010: Principles of Map Design, The Guilford Press.                                       |
| Sarkar, A. (2015) Practical geography: A systematic approach. Orient Black Swan Private Ltd., NewDelhi |
| Singh, L R & Singh R (1977): Manchitra or Pryaogatamek Bhugol , Central Book, Depot, Allahabad         |
| Bhopal Singh R L and Dutta P K (2012) Prayogatama Bhugol, Central Book Depot, Allahabad.               |
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#### SEMESTER III

5 Papers

Total  $100 \times 5 = 500 \text{ Marks}$ 

Theory: 30 Lectures

#### I. SKILL ENHANCEMENT COURSE 1Y3SEC1 (Credits: Theory-02)

Instruction to Question Setter for

End Semester Examination (ESE):

There will be **objective type test** consisting of hundred questions of 1 mark each. Students are required to mark their answer on **OMR Sheet** provided by the University.

#### **ELEMENTARY COMPUTER APPLICATION SOFTWARES:**

A Common Syllabus Prescribed by Ranchi University

#### Objective of the Course

The objective of the course is to generate qualified manpower in the area of Information Technology (IT) and Graphic designing which will enable such person to work seamlessly at any Offices, whether Govt. or Private or for future entrepreneurs in the field of IT.

#### A. INTRODUCTION TO COMPUTER SYSTEM

#### **Basic Computer Concept**

Computer Appreciation - Characteristics of Computers, Input, Output, Storage units, CPU, Computer System. (1 Lecture)

#### **Input and Output Devices**

Input Devices - Keyboard, Mouse, joystick, Scanner, web cam,

Output Devices- Soft copy devices, monitors, projectors, speakers, Hard copy devices, Printers – Dot matrix, inkjet, laser, Plotters. (4 lectures)

#### **Computer Memory and Processors**

Memory hierarchy, Processor registers, Cache memory, Primary memory- RAM, ROM, Secondary storage devices, Magnetic tapes, Floppy disks, hard disks, Optical Drives- CD-ROM, DVD-ROM, CD-R, CD-RW, USB Flash drive, Mass storage devices: USB thumb drive. Managing disk Partitions, File System. Basic Processor Architecture, Processor speed, Types of processor.

(5 lectures)

#### **Numbers Systems and Logic Gates**

Decimal number system, Binary number system, Octal number system, Hexadecimal number system, Inter-conversion between the number systems. Basic Logic gates-AND, OR, NOT, Universal logic gates-NAND, NOR

(3 lectures)

#### **Computer Software**

Computer Software- Relationship between Hardware and Software, System Software, Application Software, Compiler, Names of some high level languages, Free domain software.

(2 Lectures)

#### **Internet & its uses**

History of Internet, WWW and Web Browsers: Web Browsing software, Surfing the Internet, Chatting on Internet, Basic of electronic mail, Using Emails, Document handling, Network definition, Common terminologies: LAN, WAN, MAN, Node, Host, Workstation, Bandwidth, Network Components: Severs, Clients, Communication Media. Wireless network

(3 Lectures)

#### **Operating system-Windows**

Operating system and basics of Windows, The User Interface, Using Mouse and Moving Icons on the screen, The My Computer Icon, The Recycle Bin, Status Bar, Start and Menu & Menu-selection, Running an Application, Windows Explorer Viewing of File, Folders and Directories, Creating and Renaming of files and folders, Opening and closing of different Windows, Windows Setting, Control Panels, Wall paper and Screen Savers, Setting the date and Sound, Concept of menu Using Help, Advanced Windows, Using right Button of the Mouse, Creating Short cuts, Basics of Window Setup, Notepad, Window Accessories

(2 Lectures)

#### B. MICROSOFT OFFICE 2007 AND LATEST VERSIONS

#### Word Processing

Word processing concepts: saving, closing, Opening an existing document, Selecting text, Editing text, Finding and replacing text, printing documents, Creating and Printing Merged Documents, Character and Paragraph Formatting, Page Design and Layout. Editing and Checking. Correcting spellings. Handling Graphics, Creating Tables and Charts, Document Templates and Wizards, Mail merge and Macros.

(3 Lectures)

#### **Microsoft Excel (Spreadsheet)**

Spreadsheet Concepts, Creating, Saving and Editing a Workbook, Inserting, Deleting Work Sheets, entering data in a cell / formula Copying and Moving from selected cells, handling operators in Formulae, Functions: Mathematical, Logical, statistical, text, financial, Date and Time functions, Using Function Wizard. Formatting a Worksheet: Formatting Cells changing data alignment, changing date, number, character or currency format, changing font, adding borders and colors, Printing worksheets, Charts and Graphs – Creating, Previewing, Modifying Charts. Integrating word processor, spread sheets, web pages. Pivot table, goal seek, Data filter and scenario manager

(4 Lectures)

#### **Microsoft Power Point (Presentation Package)**

Creating, Opening and Saving Presentations, Creating the Look of Your Presentation, Working in Different Views, Working with Slides, Adding and Formatting Text, Formatting Paragraphs, Drawing and Working with Objects, Adding Clip Art and other pictures, Designing Slide Shows, Running and Controlling a Slide Show, Printing Presentations. Creating photo album, Rehearse timing and record narration. Master slides. (3 Lectures)

#### **Reference Books**

| Nishit Mathur, Fundamentals of Computer, Aph publishing corporation(2010)                       |
|---|
| Misty E. Vermaat,.Microsoft word 2013 1st Edition (2013).                                       |
| Satish Jain, M.Geeta, MS- Office 2010 Training Guide, BPB publication (2010)                    |
| Joan Preppernau, Microsoft PowerPoint 2016 step by step, Microsoft press(2015)                  |
| Douglas E Corner, The Internet Book 4 <sup>th</sup> Edition, prentice –Hall(2009)               |
| Faithe wempen, word 2016 in depth 1st edition, que publishing(2015)                             |
| Steven welkler, Office 2016 for beginners, Create Space Independent publishing Plateform (2016) |
|   |

#### SKILL ENHANCEMENT LAB- SEC 1 LAB

#### A. MS-WORD LAB ASSIGNMENT

1. Write down the following Paragraph OR any one provided by your teacher;

Without a doubt, the Internet is one of the most important inventions of modern times. The Internet is a global interconnected computer networks which allow each connected computer to share and exchange information with each other. The origins of the Internet can be traced to the creation of Advanced Research Projects Agency Network (ARPANET) as a network of computers under the auspices of the U.S. Department of Defense in 1969.

Apply following effects on The paragraph:

- i. Paragraph **font-size** and **font-type** must be 12 Verdana.
- ii. Paragraph **alignment** must be justified and double line spacing.
- iii. **Highlight** the "(ARPANET)" with green color.
- iv. Make the "Internet" keywords **Bold and Italic**.
- v. Insert any "WordArt" and a symbol to your document.
- vi. Insert a **clipart** to your document.
- vii. Add following lines to your document:

Internet, Intranet, Extranet, URL, WWW, Networking, Protocols, HTTP, TCP/IP

2. Create a Table of following fields:

Name, Surname, Age, Gender, Job and apply the following effects

- i. Insert 10 records
- ii. Font size should be 12
- iii. Title size should be 14
- iv. Font type should be Times new Roman
- v. Title color should be blue
- vi. Text color should be black
- vii. Table border should be 2
- 3. Write a letter on 'Road Safety' and send to 'Multiple Recipients' using mail merge.
- **4**. Type the paragraph given below:

Today, the Internet is a public, cooperative and self-sustaining facility accessible to hundreds of millions of people worldwide. Physically, the Internet uses a portion of the total resources of the currently existing public telecommunication networks. Technically, what distinguishes the Internet is its use of a set of protocols called TCP/IP (for Transmission Control Protocol/Internet Protocol). Two recent adaptations of Internet technology, the intranet and the extranet, also make use of the TCP/IP protocol. Today, the Internet is a public, cooperative and self-sustaining facility accessible to hundreds of millions of people worldwide. Physically, the Internet uses a portion of the total resources of the currently existing public telecommunication networks. Technically, what distinguishes the Internet is its use of a set of protocols called TCP/IP (for Transmission Control Protocol/ Internet Protocol). Two recent adaptations of Internet technology, the intranet and the extranet, also make use of the TCP/IP protocol.

#### Apply the following:

- i. Change Internet into Internets at a time
- ii. Heilight TCP/IP in red color
- iii. Replace protocol into protocols
- iv. Find the word "Public"

#### **B. MICROSOFT EXCEL LAB ASSIGNMENT**

#### **Basic Formatting and Spreadsheet Manipulation**

- 1. Add rows and columns to an existing spreadsheet
- 2. Reformat data (center, comma and currency styles, bold, text color)
- 3. Work with a simple formula (product) and function (sum)

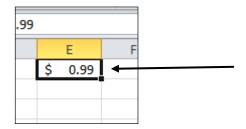
#### Assignment

- 1. Create a workbook as shown below.
- 2. To enter new rows or columns, simply click on the row or column header to select the whole row or column. Then right click with the mouse and choose insert.
- 3. Add the new row for S Spade with the data that's shown below (between the original rows 7 and 8).
- 4. Add a column for gender and the data as shown below (between the original columns A and B). Enter the appropriate gender for yourself in the last row.

| A        | В           | C           | D               |
|----------|-------------|-------------|-----------------|
| Name     | Male/Female | Genre       | Number of Songs |
| J Smith  | F           | Blues       | 50              |
| B Doe    | M           | Country     | 110             |
| S Spade  | F           | Country     | 200             |
| F Zappa  | M           | Blues       | 1400            |
| F Zappa  | M           | Alternative | 2300            |
| J Smith  | F           | Alternative | 150             |
| S Spade  | F           | Blues       | 1000            |
| B Doe    | M           | Blues       | 75              |
| yourname | M           | Blues       | 800             |

- 5. Center the data in columns B and C. Do this by selecting the whole column and click the center icon on the ribbon.
- 6. Bold the data in row 1, the column headings (ensure that the data all remains visible within the column boundaries).
- 7. Change the font color for row 1 to Blue.
- 8. Change the format of the data in column D to comma style (no decimal places showing). There is an icon on the home tab that sets it to comma style easily.
- 9. Add two new column labels to the right of the current columns; **Unit Price** and **Total Cost**. (They will be in columns E and F.) These two columns of data should be currency type so that the dollar sign is shown. There is an icon to quickly format the selected column as currency type.
- 10. All tunes are \$.99, so enter that value for all rows in Column E. You can copy quickly by using the **Auto Fill** handle and drag that amount down. When you over your mouse over the tiny square in

the bottom right hand corner of the active cell, your mouse shape will become a skinny plus sign, and you can click and drag that cell to make a copy.



- 11. Calculate Total Cost (column F) as *column D times Column E*. You will type in a formula like this into cell F2: =**D2\*E2** (Be sure to begin the formula with an equal sign)
- 12. Use the AutoFill (skinny plus sign) again to copy the formula down column F; down to F10. Double check the picture below to make sure yours has the correct values
- 13. Add a border to all of the cells (A1-f10) using the Borders tool in the Fonts group on the Home Tab.
- 14. Change the page layout to landscape. Do this by clicking the Page Layout tab on the ribbon and then to Orientation to Landscape.
- 15. Save the file.
- 16. Click in cell F11 and Use the sum function or the shortcut icon that looks like  $\Sigma$  to get the total of the Total Cost column.
- 17. Ensure that the data is all visible within the column boundaries. Make the columns wider if needed.
- 18. Save the workbook. Your final spreadsheet should look like the following when printed.

| Name     | Male/Female | Genre       | Number of Songs | Unit Price | Total Cost  |
|----------|-------------|-------------|-----------------|------------|-------------|
| J Smith  | F           | Blues       | 50              | \$ 0.99    | \$ 49.50    |
| B Doe    | M           | Country     | 110             | \$ 0.99    | \$ 108.90   |
| S Spade  | F           | Country     | 200             | \$ 0.99    | \$ 198.00   |
| F Zappa  | M           | Blues       | 1,400           | \$ 0.99    | \$ 1,386.00 |
| F Zappa  | M           | Alternative | 2,300           | \$ 0.99    | \$ 2,277.00 |
| S Spade  | F           | Blues       | 1,000           | \$ 0.99    | \$ 990.00   |
| J Smith  | F           | Alternative | 150             | \$ 0.99    | \$ 148.50   |
| B Doe    | M           | Blues       | 75              | \$ 0.99    | \$ 74.25    |
| yourname | M           | Blues       | 800             | \$ 0.99    | \$ 792.00   |

\$ 6,024.15

#### Create a sample table given below in Excel

- Using formula find Total
- Find the maximum value using MAX function from the **Units** column
- Find minimum value from **Total** column

| Order Date | Region  | Rep      | Item    | Units | Unit Cost | Total    |
|------------|---------|----------|---------|-------|-----------|----------|
| 1/6/2016   | East    | Jones    | Pencil  | 95    | 1.99      | 189.05   |
| 1/23/2016  | Central | Kivell   | Binder  | 50    | 19.99     | 999.50   |
| 2/9/2016   | Central | Jardine  | Pencil  | 36    | 4.99      | 179.64   |
| 2/26/2016  | Central | Gill     | Pen     | 27    | 19.99     | 539.73   |
| 3/15/2016  | West    | Sorvino  | Pencil  | 56    | 2.99      | 167.44   |
| 4/1/2016   | East    | Jones    | Binder  | 60    | 4.99      | 299.40   |
| 4/18/2016  | Central | Andrews  | Pencil  | 75    | 1.99      | 149.25   |
| 5/5/2016   | Central | Jardine  | Pencil  | 90    | 4.99      | 449.10   |
| 5/22/2016  | West    | Thompson | Pencil  | 32    | 1.99      | 63.68    |
| 6/8/2016   | East    | Jones    | Binder  | 60    | 8.99      | 539.40   |
| 6/25/2016  | Central | Morgan   | Pencil  | 90    | 4.99      | 449.10   |
| 7/12/2016  | East    | Howard   | Binder  | 29    | 1.99      | 57.71    |
| 7/29/2016  | East    | Parent   | Binder  | 81    | 19.99     | 1,619.19 |
| 8/15/2016  | East    | Jones    | Pencil  | 35    | 4.99      | 174.65   |
| 9/1/2016   | Central | Smith    | Desk    | 2     | 125.00    | 250.00   |
| 9/18/2016  | East    | Jones    | Pen Set | 16    | 15.99     | 255.84   |
| 10/5/2016  | Central | Morgan   | Binder  | 28    | 8.99      | 251.72   |
| 10/22/2016 | East    | Jones    | Pen     | 64    | 8.99      | 575.36   |
| 11/8/2016  | East    | Parent   | Pen     | 15    | 19.99     | 299.85   |
| 11/25/2016 | Central | Kivell   | Pen Set | 96    | 4.99      | 479.04   |
| 12/12/2016 | Central | Smith    | Pencil  | 67    | 1.29      | 86.43    |
| 12/29/2016 | East    | Parent   | Pen Set | 74    | 15.99     | 1,183.26 |

## C. MS-POWERPOINT LAB ASSIGNMENT

#### **Activity 1 : Using Text & Background/Themes**

- i. Create one new slide and insert any text.
- ii. To make your slide more attractive, use the themes or background.
- iii. Make sure it apply for every slide not only one slide.

#### **Activity 2: Apply Custom Animation On Text**

- i. Use the custom animation to add effects on your text. Set the text move after you click the mouse.
- ii. If you have more than one text, add effects for each of text.

#### **Activity 3 : Insert Image & WordArt**

- i. Insert one new blank slide.
- ii. Choose one pictures or clip art from any source and insert in your new slide.
- iii. Using the WordArt, make a note or title on your picture.
- iv. Use the custom animation again to add effects on your picture and WordArt.

#### **Activity 4 : Insert Text Box**

- i. Insert one new blank slide.
- ii. Use the text box to insert one paragraph of text and adjust your text.

#### **Activity 5 : Insert Smart Art**

- i. Insert one new blank slide.
- ii. Insert the Smart Art and put your text on the Smart Art.

#### **Activity 6 : Insert Audio**

- i. Back to your first slide and insert one audio on that slide. The audio must play automatically when you show your slide.
- ii. Make sure the speaker also not appear when you show your slide. (the icon).
- iii. The audio must play when you show alls your slide, not only one slide.

#### **Activity 7: inserting Video**

i. Insert one new slide and insert one short video

#### **Activity 8 : Save File**

i. Save your file

#### Activity 9: Create Photo Album & Hyperlink

- i. Insert one new slide and put a text ex: "My Photo Album"
- ii. Create one photo album and adjust your text and your photos
- iii. Save your photo album with a new file
- iv. Make a hyperlink to your photo using the text "My Photo Album"

#### Reference Books:

| Faithe wempen, word 2016 in depth 1st edition, que publishing(2015)                           |
|---|
| steven welkler, Office 2016 for bignners, Create Space Independent publishing plateform(2016) |
| Elaine Marmel, office 2016 simplified, 1 <sup>st</sup> Edition, John wiley and sons Inc(2016) |
| Patrice-Anne Rutledge, Easy office 2016 1st edition, Que publishing(2016)                     |
| <br>  |

## II. GENERIC ELECTIVE 1Y3...(GE3)

(Credits: 06)

All Four Papers (One paper to be studied in each semester) of any One Subject to be opted other than the Honours Subject. Refer Content from the Syllabus of Opted Generic Elective Subject.

#### III. CORE COURSE - 1Y3GEO(C5)

(Credits: Theory-04, Practicals-02)

#### Instruction to Question Setter for

#### Mid Semester Examination (MSE):

There will be **two** group of questions. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type** three questions of five marks each, out of which any two are to answer.

#### End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

*Note:* There may be subdivisions in each question asked in Theory Examinations.

CLIMATOLOGY Theory: 60 Lectures

- 1. Atmospheric Composition and Structure Variation with Altitude, Latitude and Season.
- 2. Insolation and Temperature Factors and Distribution, Heat Budget, Temperature Inversion.
- 3. Atmospheric Pressure and Winds Planetary Winds, Forces affecting Winds, General Circulation, Jet Streams.
- 4. Atmospheric Moisture Evaporation, Humidity, Condensation, Fog and Clouds, Precipitation Types, Stability and Instability; Climatic Regions (Koppen)
- 5. Cyclones Tropical Cyclones, Extra Tropical Cyclones, Monsoon Origin and Mechanism.

| Barry R. G. and Carleton A. M., 2001: Synoptic and Dynamic Climatology, Routledge, UK.                    |
|---|
| Barry R. G. and Corley R. J., 1998: Atmosphere, Weather and Climate, Routledge, New York.                 |
| Critchfield H. J., 1987: General Climatology, Prentice-Hall of India, New Delhi                           |
| Lutgens F. K., Tarbuck E. J. and Tasa D., 2009: The Atmosphere: An Introduction to Meteorology, Prentice- |
| Hall, Englewood Cliffs, New Jersey.   |
| Oliver J. E. and Hidore J. J., 2002: Climatology: An Atmospheric Science, Pearson Education, New Delhi.   |
| Trewartha G. T. and Horne L. H., 1980: An Introduction to Climate, McGraw-Hill.                           |
| Gupta L S(2000): Jalvayu Vigyan, Hindi Madhyam Karyanvay Nidishalya, Delhi Vishwa Vidhyalaya, Delhi       |
| Lal, D S (2006): Jalvayu Vigyan, Prayag Pustak Bhavan, Allahabad  |
| Vatal, M (1986): Bhautik Bhugol, Central Book Depot, Allahabad  |
| Singh, S (2009): Jalvayu Vigyan, Prayag Pustak Bhawan, Allahabad  |
|   |
|   |

#### IV. CORE COURSE - 1Y3GEO(C6)

(Credits: Theory-04, Practicals-02)

Theory: 60 Lectures

#### Instruction to Question Setter for

#### Mid Semester Examination (MSE):

There will be **two** group of questions. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type** three questions of five marks each, out of which any two are to answer.

#### End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

Note: There may be subdivisions in each question asked in Theory Examinations.

#### **GEOGRAPHY OF INDIA**

- 1. Structure and Physiographic Divisions of India
- 2. Drainage and climate
- 3. Soil and natural vegetation
- 4. Population: Distribution and growth, structure, race, sexratio, religion.
- 5. Economic: Mineral and power resources distribution and utilisation of iron ore, coal, petroleum, gas; agricultural production and distribution of rice and wheat, industrial development: iron and steel industry, cotton textile, cement

| <br>  |
|---|
| Deshpande C. D., 1992: India: A Regional Interpretation, ICSSR, New Delhi.                              |
| Johnson, B. L. C., ed. 2001. Geographical Dictionary of India. Vision Books, New Delhi.                 |
| Mandal R. B. (ed.), 1990: Patterns of Regional Geography - An Intenational Perspective. Vol. 3 - Indian |
| Perspective.  |
| Sdyasuk Galina and P Sengupta (1967): Economic Regionalisation of India, Census of India                |
| Sharma, T. C. 2003: India - Economic and Commercial Geography. Vikas Publ., New Delhi.                  |
| Singh R. L., 1971: India: A Regional Geography, National Geographical Society of India.                 |
| Singh, Jagdish 2003: India - A Comprehensive & Systematic Geography, Gyanodaya Prakashan,               |
| Gorakhpur.  |
| Spate O. H. K. and Learmonth A. T. A., 1967: India and Pakistan: A General and Regional                 |
| Geography, Methuen.   |
| Tirtha, Ranjit 2002: Geography of India, Rawat Publs., Jaipur & New Delhi.                              |
| Pathak, C. R. 2003: Spatial Structure and Processes of Development in India. Regional Science Assoc.,   |
| Kolkata.  |
| Tiwari, R.C. (2007) Geography of India. Prayag Pustak Bhawan, Allahabad                                 |
| Sharma, T.C. (2013) Economic Geography of India. Rawat Publication, Jaipur                              |
|   |
|   |

(Credits: Theory-04, Practicals-02)

Theory: 60 Lectures

#### V. <u>CORE COURSE - 1Y3GEO(C7)</u>

#### Instruction to Question Setter for

#### Mid Semester Examination (MSE):

There will be **two** group of questions. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type** three questions of five marks each, out of which any two are to answer.

#### End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

Note: There may be subdivisions in each question asked in Theory Examinations.

#### **GEOGRAPHY OF JHARKHAND**

- 1. Structure and Physiographic Divisions of Jharkhand
- 2. Drainage and climate
- 3. Soil and natural vegetation
- 4. Social features: Population and tribes (Santhal, Oraon, Munda)
- 5. Economic features: Agriculture, minerals and industry -iron and steel industry, silk, cement

| 1.Govt of India: (1965)The Gazetteer of IndiaVol I & III Publication Division, New Delhi               |
|--|
| Mandal R. B. (ed.), 1990: Patterns of Regional Geography – An Intenational Perspective. Vol. 3 –Indian |
| Perspective.   |
| 3.Tiwari Ram Kumar(2010): Jharkhand ka Bhugol, Rajesh Publication New Delhi.                           |
| Sdyasuk Galina and P Sengupta (1967): Economic Regionalisation of India, Census of India               |
| Tiwari Ram Kumar: Jharkhand ki Rooprekha, Shivangan PublicationRanchi                                  |
| Singh R. L., 1971: India: A Regional Geography, National Geographical Society of India.                |
| Singh, Jagdish 2003: India - A Comprehensive & Systematic Geography, Gyanodaya Prakashan,              |
| Gorakhpur.   |
| Spate O. H. K. and Learmonth A. T. A., 1967: India and Pakistan: A General and Regional                |
| Geography, Methuen.  |
| Tirtha, Ranjit 2002: Geography of India, Rawat Publs., Jaipur & New Delhi.                             |
| Pathak, C. R. 2003: Spatial Structure and Processes of Development in India. Regional Science Assoc.,  |
| Kolkata.   |
| Tiwari, R.C. (2007) Geography of India. Prayag Pustak Bhawan, Allahabad                                |
|  |

#### GEOGRAPHY PRACTICAL- C5 + C6 + C7 LAB

**60 Lectures** 

#### Instruction to Question Setter for

#### End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 45 marks
Practical record notebook = 15 marks
Viva-voce = 15 marks

#### PRACTICAL- STATISTICAL METHODS IN GEOGRAPHY

- 1. Use of Data in Geography: Geographical Data , Significance of Statistical Methods in Geography; Sources of Data, Scales of Measurement (Nominal, Ordinal, Interval, Ratio).
- 2. Tabulation and Descriptive Statistics: Frequencies (Deciles, Quartiles), Cross Tabulation,
- 3. Central Tendency (Mean, Median and Mode)
- 4. Dispersion (Standard Deviation, Variance and Coefficient of Variation) Scattered diagram, Histogram, Frequency Polygon & Frequency Curve
- 5. Sampling: Purposive, Random, Systematic and Stratified.
- 6. Association and Correlation: Rank Correlation and Simple Regression,

#### **Class Record:** Each student will submit a record containing five exercises:

- 1. Measures of central tendency and dispersion would be computed and interpreted for any two attributes.
- 2. Histograms and frequency curve would be prepared and interpreted for one or two variables.
- 3. Based on of the sample set and using two relevant attributes, a scatter and regression line would be plotted and mapped with a short interpretation.

| Berry B. J. L. and Marble D. F. (eds.): Spatial Analysis – A Reader in Geography.                      |
|--|
| Ebdon D., 1977: Statistics in Geography: A Practical Approach.   |
| Hammond P. and Mc Cullagh P. S., 1978: Quantitative Techniques in Geography: An Introduction, Oxford   |
| University Press.  |
| King L. S., 1969: Statistical Analysis in Geography, Prentice-Hall.                                    |
| Mahmood A., 1977: Statistical Methods in Geographical Studies, Concept.                                |
| Pal S. K., 1998: Statistics for Geoscientists, Tata McGraw Hill, New Delhi.                            |
| Sarkar, A. (2013) Quantitative geography: techniques and presentations. Orient Black Swan PrivateLtd., |
| New Delhi  |
| Silk J., 1979: Statistical Concepts in Geography, Allen and Unwin, London.                             |
| Spiegel M. R.: Statistics, Schaum's Outline Series.  |
| Yeates M., 1974: An Introduction to Quantitative Analysis in Human Geography, McGraw Hill, NewYork.    |
| Shinha, Indira (2007) Sankhyiki bhugol. Discovery Publishing House, New Delhi                          |
|  |

## \_\_\_\_\_\_

#### SEMESTER IV

5 Papers

Total  $100 \times 5 = 500 \text{ Marks}$ 

I. SKILL ENHANCEMENT COURSE 1Y3SEC2 (Credits: Theory-02))

#### Instruction to Question Setter for

End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type six questions of fifteen marks each, out of which any four are to answer.

Note: There may be subdivisions in each question asked in Theory Examinations.

HYDROLOGY Theory: 15 Lectures

- 1. Hydrological Cycle: Systems approach in hydrology, human impact on the hydrological cycle;
- 2. Precipitation, interception, evaporation, evaporation, infiltration, ground-water, run off and over land flow;
- 3 Hydrological input and output.
- 4. River Basin and Problems of Regional Hydrology: Characteristics of river basins, basin surface runoff, measurement of river discharge
- 5. Floods and droughts.

### SKILL ENHANCEMENT PROJECT- SEC 1

30 Lectures

Marks : 25 (Pr 3Hrs) = 25 Pass Marks: Pr ESE = 10

#### Guidelines to Examiners for

End Semester Examination (ESE):

Evaluation of project work may be as per the following guidelines:

Project model (if any) and the Project record notebook = 15 marks
Project presentation and viva-voce = 10 marks

Overall project dissertation may be evaluated under the following heads:

- *Motivation for the choice of topic*
- Project dissertation design
- Methodology and Content depth
- Results and Discussion
- Future Scope & References
- Presentation style
- Viva-voce

#### PROJECT WORK

Student alone or in a group of not more than five, shall undertake one Project approved by the Subject Teacher/H.O.D. of the Department/College concerned. The progress of the Project shall be monitored by the faculty members at regular intervals.

## II. GENERIC ELECTIVE 1Y3...(GE4)

All Four Papers (One paper to be studied in each semester) of any One Subject to be opted other than the Honours Subject. Refer Content from the Syllabus of Opted Generic Elective Subject.

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III. CORE COURSE - 1Y3GEO(C8) (Credits: Theory-04, Practicals-02)

#### Instruction to Question Setter for

#### Mid Semester Examination (MSE):

There will be **two** group of questions. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type** three questions of five marks each, out of which any two are to answer.

#### End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

**Note:** There may be subdivisions in each question asked in Theory Examinations.

## **ECONOMIC GEOGRAPHY**

Theory: 60 Lectures

(Credits: 06)

- 1. Introduction: Concept and classification of economic activity
- 2. Factors Affecting location of Economic Activity with special reference to Agriculture (Von Thunen theory), Industry (Weber's theory).
- 3. Primary Activities: Subsistence and Commercial agriculture, forestry, fishing and mining.
- 4. Secondary Activities: Manufacturing (Cotton Textile, Iron and Steel- with reference to world), Concept of Manufacturing Regions, Special Economic Zones
- 5. Tertiary Activities: Transport, Trade and Services.

| Alexander J. W., 1963: <i>Economic Geography</i> , Prentice-Hall Inc., Englewood Cliffs, New Jersey. |
|--|
| Coe N. M., Kelly P. F. and Yeung H. W., 2007: Economic Geography: A Contemporary Introduction,       |
| Wiley-Blackwell.   |
| Hodder B. W. and Lee Roger, 1974: Economic Geography, Taylor and Francis.                            |
| Combes P., Mayer T. and Thisse J. F., 2008: Economic Geography: The Integration of Regions           |
| andNations, Princeton University Press.  |
| Wheeler J. O., 1998: Economic Geography, Wiley.  |
| Durand L., 1961: Economic Geography, Crowell.  |
| Bagchi-Sen S. and Smith H. L., 2006: Economic Geography: Past, Present and Future, Taylor and        |
| Francis.   |
| Willington D. E., 2008: Economic Geography, Husband Press.   |
| Clark, Gordon L.; Feldman, M.P. and Gertler, M.S., eds. 2000: The Oxford                             |
|  |

(Credits: Theory-04, Practicals-02)

Theory: 60 Lectures

## IV. CORE COURSE - 1Y3GEO(C9)

#### Instruction to Question Setter for

#### Mid Semester Examination (MSE):

There will be **two** group of questions. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type** three questions of five marks each, out of which any two are to answer.

#### End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer. Note: There may be subdivisions in each question asked in Theory Examinations.

#### ENVIRONMENTAL GEOGRAPHY

- 1. Environmental Geography Concept and Scope
- 2. Human-Environment Relationships Historical Progression, Adaptation in different Biomes.
- 3. Ecosystem Concept, Structure and Functions
- 4. Environmental Problems in Tropical, Temperate and Polar Ecosystems
- 5. Environmental Programmes and Policies Global, National and Local levels

| Chandna R. C., 2002: <i>Environmental Geography</i> , Kalyani, Ludhiana.                            |
|---|
| Cunninghum W. P. and Cunninghum M. A., 2004: Principals of Environmental Science: Inquiry           |
| andApplications, Tata Macgraw Hill, New Delhi.  |
| Goudie A., 2001: The Nature of the Environment, Blackwell, Oxford.                                  |
| Singh, R.B. (Eds.) (2009) Biogeography and Biodiversity. Rawat Publication, Jaipur                  |
| Miller G. T., 2004: Environmental Science: Working with the Earth, Thomson Brooks Cole, Singapore.  |
| MoEF, 2006: National Environmental Policy-2006, Ministry of Environment and Forests, Government of  |
| India.  |
| Singh, R.B. and Hietala, R. (Eds.) (2014) Livelihood security in Northwestern Himalaya: Case        |
| studies from changing socio-economic environments in Himachal Pradesh, India. Advances in           |
| Geographical and Environmental Studies, Springer  |
| Odum, E. P. et al, 2005: Fundamentals of Ecology, Ceneage Learning India.                           |
| Singh S., 1997: Environmental Geography, Prayag Pustak Bhawan. Allahabad.                           |
| UNEP, 2007: Global Environment Outlook: GEO4: Environment For Development, United Nations           |
| Environment Programme.  |
| Singh, M., Singh, R.B. and Hassan, M.I. (Eds.) (2014) Climate change and biodiversity:              |
| Proceedings of IGU Rohtak Conference, Volume 1. Advances in Geographical and Environmental Studies, |
| Springer  |
| Singh, R.B. (1998) Ecological Techniques and Approaches to Vulnerable Environment, New              |
| Delhi, Oxford & IBH Pub   |
| Singh, Savindra (2001) Paryavaran Bhugol, Prayag Pustak Bhawan, Allahabad. (in Hindi)               |
| Tiwari Ram Kumar(2006) Paryavaran Addhyayan, Lakshmi Publication, Delhi                             |
|   |

## V. CORE COURSE - 1Y3GEO(C10)

(Credits: Theory-04, Practicals-02)

Theory: 60 Lectures

#### Instruction to Question Setter for

#### Mid Semester Examination (MSE):

There will be **two** group of questions. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type** three questions of five marks each, out of which any two are to answer.

#### End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

Note: There may be subdivisions in each question asked in Theory Examinations.

### POPULATION GEOGRAPHY

- 1. Defining the Field Nature and Scope; Sources of Data with special reference to India (Census, Vital Statistics and NSS).
- 2. Population Size, Distribution and Growth Determinants and Patterns; Theories of Growth Malthusian Theory and Demographic Transition Theory.
- 3. Population Dynamics: Fertility, Mortality and Migration Measures, Determinants and Implications.
- 4. Population Composition and Characteristics Age-Sex Composition; Rural and Urban Composition; Literacy.
- 5. Contemporary Issues Ageing of Population; Declining Sex Ratio; HIV/AIDS.

| Barrett H. R., 1995: <i>Population Geography</i> , Oliver and Boyd.                                    |
|--|
| Bhende A. and Kanitkar T., 2000: Principles of Population Studies, Himalaya Publishing House.          |
| Chandna R. C. and Sidhu M. S., 1980: An Introduction to Population Geography, Kalyani Publishers.      |
| Clarke J. I., 1965: Population Geography, Pergamon Press, Oxford.                                      |
| Jones, H. R., 2000: Population Geography, 3rd ed. Paul Chapman, London.                                |
| Lutz W., Warren C. S. and Scherbov S., 2004: The End of the World Population Growth in the 21stCentury |
| Earthscan  |
| Newbold K. B., 2009: Population Geography: Tools and Issues, Rowman and Littlefield Publishers.        |
| Pacione M., 1986: Population Geography: Progress and Prospect, Taylor and Francis.                     |
| Wilson M. G. A., 1968: Population Geography, Nelson.   |
| Panda B P (1988): Janasankya Bhugol, M P Hindi Granth Academy, Bhopal                                  |
| Maurya S D (2009) Jansankya Bhugol, Sharda Putak Bhawan, Allahabad                                     |
| Chandna, R C (2006), Jansankhya Bhugol, Kalyani Publishers, Delhi                                      |
| Tiwari Ram Kumar (2015) Jansankhya Bhugol Pravalika Publication, Allahabad                             |
| Roy.D.(2015) Population Geography, Books & Allied Publication, Kolkata                                 |
|  |
|  |

## GEOGRAPHY PRACTICAL- C8 + C9 + C10 LAB

**60 Lectures** 

#### Instruction to Question Setter for

#### End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 45 marks
Practical record notebook = 15 marks
Viva-voce = 15 marks

## INSTRUMENTAL SURVEY

- 1. Plane Table: Radiation, Intersection Method.
- 2. Plane Table: Resection: Trial & Error, Tracing Paper Method.
- 3. Prismatic Compass: Open & Closed Traverse.
- 4. Dumpy Level & Abny level
- 5. Indian Clinometer.
- 6. Concept of GPS

| Misra, R.P & Ramesh A: (1986): Fundamentals of Cartography, McMillan Co.New Delhi        |
|--|
| Robinson A.H (1995) Elements of Cartography John Wiley &Sons USA                         |
| Sarkar A.K.(1997): Practical Geography: A Systematic Approach, Oriental Longman Calcutta |
| Sharma J.P.(2010): Prayogatmak Bhugol, Sahitya Bhawan                                    |
| <br>Panol  |

#### SEMESTER V

4 Papers

Total  $100 \times 4 = 400 \text{ Marks}$ 

#### I. **GEOGRAPHY SPECIFIC** 1Y3GEO(DSE1) (Credits: Theory-05, Tutorials-01)

## Instruction to Question Setter for

Mid Semester Examination (MSE):

There will be two group of questions. Group A is compulsory and will contain five questions of very short answer type consisting of 1 mark each. Group B will contain descriptive type three questions of five marks each, out of which any two are to answer.

#### End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

*Note:* There may be subdivisions in each question asked in Theory Examinations.

#### URBAN GEOGRAPHY

- Theory: 60 Lectures
- 1. Urban geography: Introduction, nature and scope
- 2. Patterns of Urbanisation in developed and developing countries
- 3. Functional classification of cities: Quantitative and Qualitative Methods
- 4. Urban Issues: problems of housing, slums, civic amenities (water and transport)
- 5. Case studies of Delhi, Mumbai, Kolkata, Chennai and Chandigarh with reference to Land use and Urban Issues

| Fyfe N. R. and Kenny J. T., 2005: The Urban Geography Reader, Routledge.                                  |
|---|
| Graham S. and Marvin S., 2001: Splintering Urbanism: Networked Infrastructures, Technological Mobilities  |
| and the Urban Condition, Routledge.   |
| Hall T., 2006: Urban Geography, Taylor and Francis.   |
| Kaplan D. H., Wheeler J. O. and Holloway S. R., 2008: Urban Geography, John Wiley.                        |
| Knox P. L. and McCarthy L., 2005: Urbanization: An Introduction to Urban Geography, PearsonPrentice       |
| Hall New York.  |
| Knox P. L. and Pinch S., 2006: Urban Social Geography: An Introduction, Prentice-Hall.                    |
| Pacione M., 2009: Urban Geography: A Global Perspective, Taylor and Francis.                              |
| Sassen S., 2001: The Global City: New York, London and Tokyo, Princeton University Press.                 |
| Ramachandran R (1989): Urbanisation and Urban Systems of India, Oxford University Press, NewDelhi         |
| Ramachandran, R., 1992: The Study of Urbanisation, Oxford University Press, Delhi                         |
| Singh, R.B. (Eds.) (2001) Urban Sustainability in the Context of Global Change, Science Pub Inc., Enfield |
| (NH), USA and Oxford & IBH Pub., New Delhi.   |
| Singh, R.B. (Ed.) (2015) Urban development, challenges, risks andresilience in Asian megacities. Advances |
| in Geographical and Environmental Studies, Springer   |
|   |
|   |

## II. <u>GEOGRAPHY SPECIFIC</u> 1Y3GEO(DSE2) (Credits: Theory-05, Tutorials-01)

#### Instruction to Question Setter for

#### Mid Semester Examination (MSE):

There will be **two** group of questions. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type** three questions of five marks each, out of which any two are to answer.

#### End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

Theory: 60 Lectures

Note: There may be subdivisions in each question asked in Theory Examinations.

## **SOCIAL GEOGRAPHY**

- 1. Social Geography: Concept, Origin, Nature and Scope.
- 2. Peopling Process of India: Technology and Occupational Change; Migration.
- 3. Social Categories: Caste, Class, Religion, Race and Gender and their Spatial distribution
- 4. Geographies of Welfare and Well being: Concept and Components Healthcare, Housing and Education.
- 5. Social Geographies of Inclusion and Exclusion, Slums, Gated Communities, Communal Conflicts and Crime.

| K | eading List   |
|---|---|
|   | Ahmed A., 1999: Social Geography, Rawat Publications.   |
|   | Casino V. J. D., Jr., 2009) Social Geography: A Critical Introduction, Wiley Blackwell.               |
|   | Cater J. and Jones T., 2000: Social Geography: An Introduction to Contemporary Issues, Hodder Arnold. |
|   | Holt L., 2011: Geographies of Children, Youth and Families: An International Perspective, Taylor      |
|   | &Francis.   |
|   | Panelli R., 2004: Social Geographies: From Difference to Action, Sage.                                |
|   | Rachel P., Burke M., Fuller D., Gough J., Macfarlane R. and Mowl G., 2001: Introducing                |
|   | SocialGeographies, Oxford University Press.   |
|   | Smith D. M., 1977: Human geography: A Welfare Approach, Edward Arnold, London.                        |
|   | Smith D. M., 1994: Geography and Social Justice, Blackwell, Oxford.                                   |
|   | Smith S. J., Pain R., Marston S. A., Jones J. P., 2009: The SAGE Handbook of Social Geographies, Sage |
|   | Publications.   |
|   | Sopher, David (1980): An Exploration of India, Cornell University Press, Ithasa                       |
|   | Valentine G., 2001: Social Geographies: Space and Society, Prentice Hall.                             |
|   |   |
|   |   |

#### GEOGRAPHY PROJECT- DSE 1 + DSE 2

#### Instruction to Question Setter for

End Semester Examination (ESE):

Evaluation of project work may be as per the following guidelines:

Project model (if any) and the Project record notebook = 25 marks
Project presentation and viva-voce = 25 marks

Overall project dissertation may be evaluated under the following heads:

- Motivation for the choice of topic
- Project dissertation design
- Methodology and Content depth
- Results and Discussion
- Future Scope & References
- Presentation style
- Viva-voce

## **PROJECT WORK**

Student alone or in a group of not more than five, shall undertake one Project approved by the Subject Teacher/H.O.D. of the Department/College concerned. The progress of the Project shall be monitored by the faculty members at regular intervals.

## III. CORE COURSE - 1Y3GEO(C11)

(Credits: Theory-04, Practicals-02)

#### Instruction to Question Setter for

#### Mid Semester Examination (MSE):

There will be **two** group of questions. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type** three questions of five marks each, out of which any two are to answer.

#### End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

Note: There may be subdivisions in each question asked in Theory Examinations.

## **GEOGRAPHICAL THOUGHT**

Theory: 60 Lectures

- 1. Nature, objective and relevance of Geographical Thought, Its place in classification of Sciences
- 2. Pre-Modern Early Origins of Geographical Thinking with reference to the Classical and Medieval Philosophies.
- 3. Modern Evolution of Geographical Thinking and Disciplinary Trends in Germany, France, Britain, United States of America.
- 4. Debates Environmental Determinism and Possibilism, Systematic and Regional, Ideographic and Nomeothetic.
- 5. Trends Quantitative Revolution and its Impact, Behaviouralism, Systems Approach, Radicalism, Feminism; Towards Post Modernism Changing Concept of Space in Geography, Future of Geography.

| Arentsen M., Stam R. and Thuijis R., 2000: Post-modern Approaches to Space, ebook.                  |
|---|
| Bhat, L.S. (2009) Geography in India (Selected Themes). Pearson                                     |
| Bonnett A., 2008: What is Geography? Sage.  |
| Dikshit R. D., 1997: Geographical Thought: A Contextual History of Ideas, Prentice-Hall India.      |
| Hartshone R., 1959: Perspectives of Nature of Geography, Rand MacNally and Co.                      |
| Holt-Jensen A., 2011: Geography: History and Its Concepts: A Students Guide, SAGE.                  |
| Johnston R. J., (Ed.): Dictionary of Human Geography, Routledge.                                    |
| Johnston R. J., 1997: Geography and Geographers, Anglo-American Human Geography since 1945, Arnold, |
| London.   |
| Kapur A., 2001: Indian Geography Voice of Concern, Concept Publications.                            |
| Martin Geoffrey J., 2005: All Possible Worlds: A History of Geographical Ideas, Oxford.             |
| Soja, Edward 1989. Post-modern Geographies, Verso, London. Reprinted 1997: Rawat Publ., Jaipur and  |
| New Delhi.  |
|   |

## IV. CORE COURSE - 1Y3GEO(C12)

(Credits: Theory-04, Practicals-02)

Theory: 60 Lectures

#### Instruction to Question Setter for

#### Mid Semester Examination (MSE):

There will be **two** group of questions. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type** three questions of five marks each, out of which any two are to answer.

#### End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

Note: There may be subdivisions in each question asked in Theory Examinations.

## SETTLEMENT GEOGRAPHY

- 1. Nature scope & contents of Settlement Geography.
- 2. Definition of Urban &Rural Settlement: Salient features of human settlements in India
- 3. Settlement site & structure: Internal morphology, external forms, field patterns, functions, rural housetypes with reference to India
- 4. Spatial organization: size, spacing, hierarchy of settlements.
- 5. Functional classification of towns and cities, rural –urban fringe, slums.

#### **Readings:**

| Chisholm,M: (1970) Rural Settlements and Landuse, Hutchinson,London Clout, R.D (1970) Rural Geography, Pergamon Press, London Dickenson, R.E (1947) City, Region and Regionalism, Kegan Paul Trench Trubner & Co.London Krishnan,G.: Nagar Bhugol, Punjab State University text Book Board, Chandigarh(Punjab) Misra,H.N (ed) (1987) Rural Geography, Heritage Publishers, New Delhi Mukherji,R.K (1968)Man and his habitation, Popular Books, Bombay Singh R.L (1972) Readings in Rural Settlement Geography, Banaras Hindu University, department of geography, Varanasi Turner Roy(ed) (1962): India's urban future, Oxford University press, Bombay | Bose A. India's Urbanization 1947-2000 Tata Mcgraw Hill, New Delhi.                              |
|---|--|
| Dickenson, R.E (1947) City, Region and Regionalism, Kegan Paul Trench Trubner & Co.London Krishnan,G.: Nagar Bhugol, Punjab State University text Book Board, Chandigarh(Punjab) Misra,H.N (ed) (1987) Rural Geography, Heritage Publishers, New Delhi Mukherji,R.K (1968)Man and his habitation, Popular Books, Bombay Singh R.L (1972) Readings in Rural Settlement Geography, Banaras Hindu University, department of geography, Varanasi  | Chisholm, M: (1970) Rural Settlements and Landuse, Hutchinson, London                            |
| Krishnan,G.: Nagar Bhugol, Punjab State University text Book Board, Chandigarh(Punjab)  Misra,H.N (ed) (1987) Rural Geography, Heritage Publishers, New Delhi  Mukherji,R.K (1968)Man and his habitation, Popular Books, Bombay  Singh R.L (1972) Readings in Rural Settlement Geography, Banaras Hindu University, department of geography, Varanasi   | Clout, R.D (1970) Rural Geography, Pergamon Press, London  |
| Misra,H.N (ed) (1987) Rural Geography, Heritage Publishers, New Delhi Mukherji,R.K (1968)Man and his habitation, Popular Books, Bombay Singh R.L (1972) Readings in Rural Settlement Geography, Banaras Hindu University, department o geography, Varanasi  | Dickenson, R.E (1947) City, Region and Regionalism, Kegan Paul Trench Trubner & Co.London        |
| Mukherji,R.K (1968)Man and his habitation, Popular Books, Bombay  Singh R.L (1972) Readings in Rural Settlement Geography, Banaras Hindu University, department o geography, Varanasi   | Krishnan,G.: Nagar Bhugol, Punjab State University text Book Board, Chandigarh(Punjab)           |
| Singh R.L (1972) Readings in Rural Settlement Geography, Banaras Hindu University, department of geography, Varanasi  | Misra, H.N (ed) (1987) Rural Geography, Heritage Publishers, New Delhi                           |
| geography, Varanasi   | Mukherji, R.K (1968) Man and his habitation, Popular Books, Bombay                               |
|   | Singh R.L (1972) Readings in Rural Settlement Geography, Banaras Hindu University, department of |
| Turner Roy(ed) (1962): India's urban future, Oxford University press, Bombay  | geography, Varanasi  |
|   | Turner Roy(ed) (1962): India's urban future, Oxford University press, Bombay                     |
|   | <br>   |

## **GEOGRAPHY PRACTICAL- C11 + C12 LAB**

**60 Lectures** 

#### Instruction to Question Setter for

#### End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment= 30 marksPractical record notebook= 10 marksViva-voce= 10 marks

# PHYSICAL SURVEY

Excursion Report for Environmental studies in any part of India. The report should be completed/prepared as per the applicability under the following broad themes.

- 1) Landforms and settlement
- 2) Landforms and landuse
- 3) Social and Cultural Aspects
- 4) Urban and rural environment
- 5) Environmental Degradation



I. <u>GEOGRAPHY SPECIFIC</u> 1Y3GEO(DSE3) (Credits: Theory-06)

## Instruction to Question Setter for

Mid Semester Examination (MSE):

There will be **two** group of questions. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type** three questions of five marks each, out of which any two are to answer.

#### End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

Theory: 60 Lectures

*Note:* There may be subdivisions in each question asked in Theory Examinations.

#### POLITICAL GEOGRAPHY

- 1. Introduction: Concepts, Nature and Scope.
- 2. State, Nation and Nation State Concept of Nation and State, Attributes of State Frontiers, Boundaries, Shape, Size, Territory and Sovereignty, Concept of Nation State; Geopolitics; Theories(Heartland and Rimland)
- 3. Electoral Geography Geography of Voting, Geographic Influences on Voting pattern, Geography of Representation, Gerrymandering.
- 4. Political Geography of Resource Conflicts Water Sharing Disputes, Disputes and Conflicts Related to Forest Rights and Minerals.
- 5. Politics of Displacement: Issues of relief, compensation and rehabilitation: with reference to Dams and Special Economic Zones

| Agnew J., 2002: Making Political Geography, Arnold.   |
|---|
| Agnew J., Mitchell K. and Toal G., 2003: A Companion to Political Geography, Blackwell.               |
| Cox K. R., Low M. and Robinson J., 2008: The Sage Handbook of Political Geography, Sage               |
| Publications.   |
| Cox K., 2002: Political Geography: Territory, State and Society, Wiley-Blackwell                      |
| Gallaher C., et al, 2009: Key Concepts in Political Geography, Sage Publications.                     |
| Glassner M., 1993: Political Geography, Wiley.  |
| Jones M., 2004: An Introduction to Political Geography: Space, Place and Politics, Routledg.          |
| Mathur H M and M M Cernea (eds.) Development, Displacement and Resettlement – Focus on Asian          |
| Experience, Vikas, Delhi  |
| Painter J. and Jeffrey A., 2009: Political Geography, Sage Publications.                              |
| Taylor P. and Flint C., 2000: Political Geography, Pearson Education.                                 |
| Verma M K (2004): Development, Displacement and Resettlement, Rawat Publications, Delhi               |
| Hodder Dick, Sarah J Llyod and Keith S McLachlan (1998), Land Locked States of Africa and Asia (vo.2) |
| Frank Cass  |
|   |

#### II. **GEOGRAPHY SPECIFIC 1Y3GEO(DSE4)**

(Credits: Theory-06)

#### Instruction to Question Setter for

Mid Semester Examination (MSE):

There will be two group of questions. Group A is compulsory and will contain five questions of very short answer type consisting of 1 mark each. Group B will contain descriptive type three questions of five marks each, out of which any two are to answer.

#### End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

*Note:* There may be subdivisions in each question asked in Theory Examinations.

## **BIOGEOGRAPHY**

Theory: 60 Lectures

- 1. Defining the Field Concept, And Relevance
- 2. Evolution of Plants and Animals Adaptation, Dispersal, Colonization and Extinction.
- 3. Factors Affecting the Community Plant Succession, Arresting Factors, Vegetation Climax
- 4. Biomes Forest, Grassland, Desert and Mountain.
- 5. Biodiversity Preservation and Conservation.

## GEOGRAPHY PROJECT-DSE 3 + DSE 4

Marks: Pr (ESE: 3Hrs) =50 Pass Marks: Pr(ESE) = 20

#### Guidelines to Examiners for

#### End Semester Examination (ESE):

Evaluation of project work may be as per the following guidelines:

Project model (if any) and the Project record notebook = 25 *marks* Project presentation and viva-voce = 25 *marks* 

Overall project dissertation may be evaluated under the following heads:

- Motivation for the choice of topic
- Project dissertation design
- Methodology and Content depth
- Results and Discussion
- Future Scope & References
- Presentation style
- Viva-voce

## **PROJECT WORK**

Student alone or in a group of not more than five, shall undertake one Project approved by the Subject Teacher/H.O.D. of the Department/College concerned. The progress of the Project shall be monitored by the faculty members at regular intervals.

## III. <u>CORE COURSE - 1Y3GEO(C13)</u>

(Credits: Theory-04, Practicals-02)

Theory: 60 Lectures

#### Instruction to Question Setter for

#### Mid Semester Examination (MSE):

There will be **two** group of questions. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type** three questions of five marks each, out of which any two are to answer.

## End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

Note: There may be subdivisions in each question asked in Theory Examinations.

### REGIONAL PLANNING & DEVELOPMENT

- 1. Definition of Region, Evolution and Types of Regional planning: Formal, Functional, and Planning Regions and Regional Planning; Need for Regional Planning; Types of regional Planning.
- 2. Choice of a Region for Planning: Characteristics of an Ideal Planning Region; Delineation of Planning Region; Regionalization of India for Planning (Agro Ecological Zones)
- 3. Theories and Models for Regional Planning: Growth Pole Model of Perroux; Growth Centre Model in Indian Context; Myrdal, Hirschman, Rostow and Friedmann; Village Cluster
- 4. Changing Concept of Development, Concept of underdevelopment; Efficiency-Equity Debate
- 5. Measuring development: Indicators (Economic, Social and Environmental); Human development.

| Blij H. J. De, 1971: Geography: Regions and Concepts, John Wiley and Sons.                             |
|--|
| Claval P.I, 1998: An Introduction to Regional Geography, Blackwell Publishers, Oxford and              |
| Massachusetts.   |
| Friedmann J. and Alonso W. (1975): Regional Policy - Readings in Theory and Applications, MIT Press    |
| Massachusetts.   |
| Gore C. G., 1984: Regions in Question: Space, Development Theory and Regional Policy, Methuen, London  |
| Gore C. G., Köhler G., Reich U-P. and Ziesemer T., 1996: Questioning Development; Essays on the Theory |
| Policies and Practice of Development Intervention, Metropolis- Verlag, Marburg.                        |
| Haynes J., 2008: Development Studies, Polity Short Introduction Series.                                |
| Johnson E. A. J., 1970: The Organization of Space in Developing Countries, MIT Press,                  |
| Massachusetts.   |
| Peet R., 1999: Theories of Development, The Guilford Press, New York.                                  |
| UNDP 2001-04: Human Development Report, Oxford University Press.                                       |
| World Bank 2001-05: World Development Report, Oxford University Press, New Delhi                       |
| Puri V.K & Chand.M (1998) Regional Planning in India, Allied Publication                               |
| Chand R.C (2010) Pradeshik Niyijan tatha Vikash, Kalyani Publishers Ludhiana.                          |
|  |
|  |

## IV. CORE COURSE - 1Y3GEO(C14)

(Credits: Theory-04, Practicals-02)

Theory: 60 Lectures

## Instruction to Question Setter for

#### Mid Semester Examination (MSE):

There will be **two** group of questions. **Group A is compulsory** and will contain five questions of **very short answer type** consisting of 1 mark each. **Group B will contain descriptive type** three questions of five marks each, out of which any two are to answer.

#### End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type five questions of fifteen marks each, out of which any three are to answer.

*Note:* There may be subdivisions in each question asked in Theory Examinations.

### AGRICULTURAL GEOGRAPHY

- 1. Defining the Field: Introduction, nature and scope; Land use/land cover definition and classification.
- 2. Determinants of Agriculture: Physical, Technological and Institutional
- 3. Agricultural Regions of India: Agro-climatic, Agro-ecological & Crop Combination Regions.
- 4. Agricultural Systems of the World (Whittlesey's classification) and Agricultural Land use model (Von Thuenen, modification and relevance).
- 5. Agricultural Revolutions in India: Green, White, Blue, Pink

| Basu, D.N., and Guha, G.S., 1996: Agro-Climatic Regional Planning in India, Vol.I & II, Concept      |
|--|
| Publication, New Delhi.  |
| Bryant, C.R., Johnston, T.R, 1992: Agriculture in the City Countryside, Belhaven Press, London.      |
| Burger, A., 1994: Agriculture of the World, Aldershot, Avebury.                                      |
| Grigg, D.B., 1984: Introduction to Agricultural Geography, Hutchinson, London.                       |
| Ilbery B. W., 1985: Agricultural Geography: A Social and Economic Analysis, Oxford University Press. |
| Mohammad, N., 1992: New Dimension in Agriculture Geography, Vol. I to VIII, Concept Pub., NewDelhi   |
| Roling, N.G., and Wageruters, M.A.E.,(ed.) 1998: Facilitating Sustainable Agriculture,               |
| CambridgeUniversity Press, Cambridge.  |
| Shafi, M., 2006: Agricultural Geography, Doring Kindersley India Pvt. Ltd., New Delhi                |
| Singh, J., and Dhillon, S.S., 1984: Agricultural Geography, Tata McGraw Hill, New Delhi.             |
| Tarrant J. R., 1973: Agricultural Geography, David and Charles, Devon.                               |
|  |
|  |

# **GEOGRAPHY PRACTICAL- C13 + C14 LAB**

#### Guidelines to Examiners for

End Semester Examination (ESE):

Evaluation of project dissertation work may be as per the following guidelines:

Project model (if any) and the Project record notebook = 25 marks
Project presentation and viva-voce = 25 marks

Overall project dissertation may be evaluated under the following heads:

- Motivation for the choice of topic
- Project dissertation design
- Methodology and Content depth
- Results and Discussion
- Future Scope & References
- Presentation style
- Viva-voce

## DISSERTATION

Student alone or in a group of not more than five, shall undertake one Project Dissertation approved by the Subject Teacher/H.O.D. of the Department/College concerned. The progress of the Project Dissertation shall be monitored by the faculty members at regular intervals.

#### COURSES OF STUDY FOR GENERIC ELECTIVE 'B. A. Hons' PROGRAMME IN

#### "GEOGRAPHY"

## SEMESTER I

#### **GENERIC ELECTIVE**

1 Paper

Total  $100 \times 1 = 100 \text{ Marks}$ 

(Credits: Theory-04, Practicals-02)

## I. GENERIC ELECTIVE (GE 1)

- All Four Generic Papers (One paper to be studied in each semester) of Geography to be studied by the Students of **Other than Geography Honours.**
- > Students of Geography Honours must Refer Content from the Syllabus of Opted Generic Elective Subject.

Instruction to Question Setter for

End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type six questions of fifteen marks each, out of which any four are to answer.

Note: There may be subdivisions in each question asked in Theory Examinations.

#### GEOMORPHOLOGY

Theory: 60 Lectures

- 1. Geomorphology: Nature and Scope.
- 2. Earth: Interior Structure and Isostasy.
- 3. Earth Movements: Plate Tectonics, Types of Folds and Faults, Earthquakes and Volcanoes
- 4. Geomorphic Processes: Weathering, Cycle of Erosion (Davis).
- 5. Evolution of Landforms (Erosional and Depositional): Fluvial, Karst, Aeolian and Glacial.

| Bloom A. L., 2003: Geomorphology: A Systematic Analysis of Late Cenozoic Landforms, Prentice-Hall of   |
|--|
| India, New Delhi.  |
| Bridges E. M., 1990: World Geomorphology, Cambridge University Press, Cambridge.                       |
| Christopherson, Robert W., (2011), Geosystems: An Introduction to Physical Geography, 8 Ed., Macmillan |
| Publishing Company   |
| Kale V. S. and Gupta A., 2001: Introduction to Geomorphology, Orient Longman, Hyderabad.               |
| Knighton A. D., 1984: Fluvial Forms and Processes, Edward Arnold Publishers, London.                   |
| Richards K. S., 1982: Rivers: Form and Processes in Alluvial Channels, Methuen, London.                |
| Selby, M.J., (2005), Earth's Changing Surface, Indian Edition, OUP                                     |
| Skinner, Brian J. and Stephen C. Porter (2000), The Dynamic Earth: An Introduction to physical         |
| Geology,4th Edition, John Wiley and Sons   |
| Thornbury W. D., 1968: Principles of Geomorphology, Wiley.   |
| Gautam, A (2010): Bhautik Bhugol, Rastogi Punlications, Meerut   |
| Tikkaa, R N (1989): Bhautik Bhugol ka Swaroop, Kedarnath Ram Nath, Meerut                              |
| Singh, S (2009): Bhautik Bhugol ka Swaroop, Prayag Pustak, Allahabad                                   |
| Tiwary Ram Kumar, Bhautik bhugol, Rajasthan Hindi Granth Academy, Jaipur                               |
|  |

## **GEOGRAPHY PRACTICAL- GE 1 LAB**

**60 Lectures** 

#### Instruction to Question Setter for

End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks
Practical record notebook = 5 marks
Viva-voce = 5 marks

## **CARTOGRAPHIC TECHNIQUES**

- 1. Scales Concept and application; Graphical Construction of Plain
- 2. Map Projections Classification, Properties and Uses; Graphical Construction of Polar Zenithal Stereographic Projection, Simple Conical Projection with One standard parallel and Two standard parallel, Bonne's Projections.

N N V E P

| 1. Anson R. and Ormelling F. J., 1994: International Cartographic Association: Basic Cartographic      |
|--|
| Vol. Pregmen Press.  |
| 2. Gupta K.K. and Tyagi, V. C., 1992: Working with Map, Survey of India, DST, New Delhi.               |
| 3. Mishra R.P. and Ramesh, A., 1989: Fundamentals of Cartography, Concept, New Delhi.                  |
| 4. Monkhouse F. J. and Wilkinson H. R., 1973: Maps and Diagrams, Methuen, London.                      |
| Rhind D. W. and Taylor D. R. F., (eds.), 1989: Cartography: Past, Present and Future, Elsevier,        |
| International Cartographic Association.  |
| Robinson A. H., 2009: Elements of Cartography, John Wiley and Sons, New York.                          |
| Sharma J. P., 2010: Prayogic Bhugol, Rastogi Publishers, Meerut.                                       |
| Singh R. L. and Singh R. P. B., 1999: Elements of Practical Geography, Kalyani Publishers.             |
| Sarkar, A. (2015) Practical geography: A systematic approach. Orient Black Swan Private Ltd., NewDelhi |
| Singh R L & Rana P B Singh(1991) Prayogtmak Bhugol ke Mool Tatva, Kalyani Publishers, NewDelhi         |
| Sharma, J P (2010) Prayogtmak Bhugol ki Rooprekha, Rastogi Publications, Meerut                        |
| Singh, R L & Dutta, P K (2012) Prayogatmak Bhugol, Central Book Depot, Allahabad                       |
| <br>   |

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## SEMESTER II GENERIC ELECTIVE

1 Paper

Theory: 60 Lectures

Total  $100 \times 1 = 100 \text{ Marks}$ 

# II. GENERIC ELECTIVE (GE 2)

(Credits: Theory-04, Practicals-02)

#### Instruction to Question Setter for

End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type six questions of fifteen marks each, out of which any four are to answer.

*Note:* There may be subdivisions in each question asked in Theory Examinations.

## **HUMAN GEOGRAPHY**

- 2. Space and Society: Cultural Regions; Race; Religion and Language
- 3. Population: Population Growth and Distribution; Population Composition; Demographic Transition Theory

1. Introduction: Defining Human Geography; Major Themes; Contemporary Relevance

- 4. Settlements: Types of Rural Settlements; Classification of Urban Settlements.
- 5. Population-Resource Relationship

| Chandna, R.C. (2010) Population Geography, Kalyani Publisher.                       |
|---|
| Hassan, M.I. (2005) Population Geography, Rawat Publications, Jaipur                |
| Daniel, P.A. and Hopkinson, M.F. (1989) The Geography of Settlement, Oliver & Boyd, |
| London.   |
| Johnston R; Gregory D, Pratt G. et al. (2008) The Dictionary of Human Geography,    |
| Blackwell Publication.  |
| Jordan-Bychkov et al. (2006) The Human Mosaic: A Thematic Introduction to Cultural  |
| Geography. W. H. Freeman and Company, New York.                                     |
| Kaushik, S.D. (2010) Manav Bhugol, Rastogi Publication, Meerut.                     |
| Maurya, S.D. (2012) Manav Bhugol, Sharda Pustak Bhawan. Allahabad.                  |
| Hussain, Majid (2012) Manav Bhugol. Rawat Publications, Jaipur                      |
|   |

## **GEOGRAPHY PRACTICAL- GE2 LAB**

**60 Lectures** 

#### Instruction to Question Setter for

End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks
Practical record notebook = 5 marks
Viva-voce = 5 marks

## PRACTICAL- THEMATIC CARTOGRAPHY

- 1. Diagrammatic Data Presentation Line, Bar and Circle.
- 2. Thematic Mapping Techniques Properties, Uses and Limitations; Areal Data -- Choropleth, Dot, Proportional Circles; Point Data Isopleths.

| Cuff J. D. and Mattson M. T., 1982: <i>Thematic Maps: Their Design and Production</i> , Methuen Young Books |
|---|
| Dent B. D., Torguson J. S., and Holder T. W., 2008: Cartography: Thematic Map Design (6th                   |
| Edition), Mcgraw-Hill Higher Education  |
| Gupta K. K. and Tyagi V. C., 1992: Working with Maps, Survey of India, DST, New Delhi.                      |
| Kraak MJ. and Ormeling F., 2003: Cartography: Visualization of Geo-Spatial Data, Prentice-Hall.             |
| Mishra R. P. and Ramesh A., 1989: Fundamentals of Cartography, Concept, New Delhi.                          |
| Sharma J. P., 2010: Prayogic Bhugol, Rastogi Publishers, Meerut.  |
| Singh R. L. and Singh R. P. B., 1999: <i>Elements of Practical Geography</i> , Kalyani Publishers.          |
| Slocum T. A., Mcmaster R. B. and Kessler F. C., 2008: Thematic Cartography and Geovisualization(3rd         |
| Edition), Prentice Hall.  |
| Tyner J. A., 2010: Principles of Map Design, The Guilford Press.  |
| Sarkar, A. (2015) Practical geography: A systematic approach. Orient Black Swan Private Ltd., NewDelhi      |
| Singh, L R & Singh R (1977): Manchitra or Pryaogatamek Bhugol , Central Book, Depot, Allahabad              |
| Bhopal Singh R L and Dutta P K (2012) Prayogatama Bhugol, Central Book Depot, Allahabad.                    |
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## SEMESTER III GENERIC ELECTIVE

1 Paper

**Total 100 x 1 = 100 Marks** 

# III. GENERIC ELECTIVE (GE 3)

(Credits: Theory-04, Practicals-02)

#### Instruction to Question Setter for

End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 & 3 will be short answer type of 5 marks. Group B will contain descriptive type six questions of twenty marks each, out of which any four are to answer.

*Note:* There may be subdivisions in each question asked in Theory Examinations.

CLIMATOLOGY Theory: 60 Lectures

- 1. Atmospheric Composition and Structure Variation with Altitude, Latitude and Season.
- 2. Insolation and Temperature Factors and Distribution, Heat Budget, Temperature Inversion.
- 3. Atmospheric Pressure and Winds Planetary Winds, Forces affecting Winds, General Circulation, Jet Streams.
- 4. Atmospheric Moisture Evaporation, Humidity, Condensation, Fog and Clouds, Precipitation Types, Stability and Instability; Climatic Regions (Koppen)

PANICH

5. Cyclones – Tropical Cyclones, Extra Tropical Cyclones, Monsoon - Origin and Mechanism.

| Hall, Englewood Cliffs, New Jersey.  Oliver J. E. and Hidore J. J., 2002: <i>Climatology: An Atmospheric Science</i> , Pearson Education, New Delhi.  Trewartha G. T. and Horne L. H., 1980: <i>An Introduction to Climate</i> , McGraw-Hill.  |  |
|--|--|
| Critchfield H. J., 1987: <i>General Climatology</i> , Prentice-Hall of India, New Delhi Lutgens F. K., Tarbuck E. J. and Tasa D., 2009: <i>The Atmosphere: An Introduction to Meteorology</i> , Prentice Hall, Englewood Cliffs, New Jersey.  Oliver J. E. and Hidore J. J., 2002: <i>Climatology: An Atmospheric Science</i> , Pearson Education, New Delhi.  Trewartha G. T. and Horne L. H., 1980: <i>An Introduction to Climate</i> , McGraw-Hill.  Gupta L S(2000): Jalvayu Vigyan, Hindi Madhyam Karyanvay Nidishalya, Delhi Vishwa Vidhyalaya, Delhi Lal, D S (2006): Jalvayu Vigyan, Prayag Pustak Bhavan, Allahabad  Vatal, M (1986): Bhautik Bhugol, Central Book Depot, Allahabad | Barry R. G. and Carleton A. M., 2001: Synoptic and Dynamic Climatology, Routledge, UK.                   |
| Lutgens F. K., Tarbuck E. J. and Tasa D., 2009: <i>The Atmosphere: An Introduction to Meteorology</i> , Prentice Hall, Englewood Cliffs, New Jersey.  Oliver J. E. and Hidore J. J., 2002: <i>Climatology: An Atmospheric Science</i> , Pearson Education, New Delhi. Trewartha G. T. and Horne L. H., 1980: <i>An Introduction to Climate</i> , McGraw-Hill.  Gupta L S(2000): Jalvayu Vigyan, Hindi Madhyam Karyanvay Nidishalya, Delhi Vishwa Vidhyalaya, Delhi Lal, D S (2006): Jalvayu Vigyan, Prayag Pustak Bhavan, Allahabad  Vatal, M (1986): Bhautik Bhugol, Central Book Depot, Allahabad  | Barry R. G. and Corley R. J., 1998: Atmosphere, Weather and Climate, Routledge, New York.                |
| Hall, Englewood Cliffs, New Jersey.  Oliver J. E. and Hidore J. J., 2002: <i>Climatology: An Atmospheric Science</i> , Pearson Education, New Delhi.  Trewartha G. T. and Horne L. H., 1980: <i>An Introduction to Climate</i> , McGraw-Hill.  Gupta L S(2000): Jalvayu Vigyan, Hindi Madhyam Karyanvay Nidishalya, Delhi Vishwa Vidhyalaya, Delhi Lal, D S (2006): Jalvayu Vigyan, Prayag Pustak Bhavan, Allahabad  Vatal, M (1986): Bhautik Bhugol, Central Book Depot, Allahabad  | Critchfield H. J., 1987: General Climatology, Prentice-Hall of India, New Delhi                          |
| Oliver J. E. and Hidore J. J., 2002: <i>Climatology: An Atmospheric Science</i> , Pearson Education, New Delhi.  Trewartha G. T. and Horne L. H., 1980: <i>An Introduction to Climate</i> , McGraw-Hill.  Gupta L S(2000): Jalvayu Vigyan, Hindi Madhyam Karyanvay Nidishalya, Delhi Vishwa Vidhyalaya, Delhi Lal, D S (2006): Jalvayu Vigyan, Prayag Pustak Bhavan, Allahabad  Vatal, M (1986): Bhautik Bhugol, Central Book Depot, Allahabad   | Lutgens F. K., Tarbuck E. J. and Tasa D., 2009: The Atmosphere: An Introduction to Meteorology, Prentice |
| Trewartha G. T. and Horne L. H., 1980: <i>An Introduction to Climate</i> , McGraw-Hill.  Gupta L S(2000): Jalvayu Vigyan, Hindi Madhyam Karyanvay Nidishalya, Delhi Vishwa Vidhyalaya, Delhi Lal, D S (2006): Jalvayu Vigyan, Prayag Pustak Bhavan, Allahabad  Vatal, M (1986): Bhautik Bhugol, Central Book Depot, Allahabad  | Hall, Englewood Cliffs, New Jersey.  |
| Gupta L S(2000): Jalvayu Vigyan, Hindi Madhyam Karyanvay Nidishalya, Delhi Vishwa Vidhyalaya, Delhi Lal, D S (2006): Jalvayu Vigyan, Prayag Pustak Bhavan, Allahabad Vatal, M (1986): Bhautik Bhugol, Central Book Depot, Allahabad  | Oliver J. E. and Hidore J. J., 2002: Climatology: An Atmospheric Science, Pearson Education, New Delhi.  |
| Lal, D S (2006): Jalvayu Vigyan, Prayag Pustak Bhavan, Allahabad  Vatal, M (1986): Bhautik Bhugol, Central Book Depot, Allahabad   | Trewartha G. T. and Horne L. H., 1980: An Introduction to Climate, McGraw-Hill.                          |
| Vatal, M (1986): Bhautik Bhugol, Central Book Depot, Allahabad   | Gupta L S(2000): Jalvayu Vigyan, Hindi Madhyam Karyanvay Nidishalya, Delhi Vishwa Vidhyalaya, Delhi      |
|  | Lal, D S (2006): Jalvayu Vigyan, Prayag Pustak Bhavan, Allahabad   |
| Singh, S (2009): Jalvayu Vigyan, Prayag Pustak Bhawan, Allahabad   | Vatal, M (1986): Bhautik Bhugol, Central Book Depot, Allahabad   |
|  | Singh, S (2009): Jalvayu Vigyan, Prayag Pustak Bhawan, Allahabad   |
|  | <br>   |

#### GEOGRAPHY PRACTICAL- GE3 LAB

**60 Lectures** 

#### Instruction to Question Setter for

End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks
Practical record notebook = 5 marks
Viva-voce = 5 marks

## PRACTICAL- STATISTICAL METHODS IN GEOGRAPHY

- 1. Tabulation and Descriptive Statistics: Frequencies (Deciles, Quartiles), Cross Tabulation,
- 2. Central Tendency (Mean, Median and Mode)
- 3. Dispersion (Standard Deviation, Variance and Coefficient of Variation) Scattered diagram, Histogram, Frequency Polygon & Frequency Curve

**Class Record:** Each student will submit a record containing five exercises:

- 1. Measures of central tendency and dispersion would be computed and interpreted for any two attributes.
- 2. Histograms and frequency curve would be prepared and interpreted for one or two variables.
- 3. Based on of the sample set and using two relevant attributes, a scatter and regression line would be plotted and mapped with a short interpretation.

| Berry B. J. L. and Marble D. F. (eds.): Spatial Analysis – A Reader in Geography.                      |
|--|
| Ebdon D., 1977: Statistics in Geography: A Practical Approach.   |
| Hammond P. and Mc Cullagh P. S., 1978: Quantitative Techniques in Geography: An Introduction,          |
| Oxford University Press.   |
| King L. S., 1969: Statistical Analysis in Geography, Prentice-Hall.                                    |
| Mahmood A., 1977: Statistical Methods in Geographical Studies, Concept.                                |
| Pal S. K., 1998: Statistics for Geoscientists, Tata McGraw Hill, New Delhi.                            |
| Sarkar, A. (2013) Quantitative geography: techniques and presentations. Orient Black Swan PrivateLtd., |
| New Delhi  |
| Silk J., 1979: Statistical Concepts in Geography, Allen and Unwin, London.                             |
| Spiegel M. R.: Statistics, Schaum's Outline Series.  |
| Yeates M., 1974: An Introduction to Quantitative Analysis in Human Geography, McGraw Hill, NewYork.    |
| Shinha, Indira (2007) Sankhyiki bhugol. Discovery Publishing House, New Delhi                          |
|  |

#### SEMESTER IV **GENERIC ELECTIVE**

1 Paper

Total  $100 \times 1 = 100 \text{ Marks}$ 

#### **GENERIC ELECTIVE (GE 4)** IV.

(Credits: Theory-04, Practicals-02)

#### Instruction to Question Setter for

End Semester Examination (ESE):

There will be two group of questions. Group A is compulsory and will contain two questions. Question No.1 will be very short answer type consisting of ten questions of 1 mark each. Question No.2 will be short answer type of 5 marks. Group B will contain descriptive type six questions of fifteen marks each, out of which any four are to answer.

*Note:* There may be subdivisions in each question asked in Theory Examinations.

## **ECONOMIC GEOGRAPHY**

Theory: 60 Lectures

- 1. Introduction: Concept and classification of economic activity
- 2. Factors Affecting location of Economic Activity with special reference to Agriculture (Von Thunen theory), Industry (Weber's theory).
- 3. Primary Activities: Subsistence and Commercial agriculture, forestry, fishing and mining.
- 4. Secondary Activities: Manufacturing (Cotton Textile, Iron and Steel- with reference to world), Concept of Manufacturing Regions, Special Economic Zones
- 5. Tertiary Activities: Transport, Trade and Services.

| Alexander J. W., 1963: <i>Economic Geography</i> , Prentice-Hall Inc., Englewood Cliffs, New Jersey. |
|--|
| Coe N. M., Kelly P. F. and Yeung H. W., 2007: Economic Geography: A Contemporary Introduction,       |
| Wiley-Blackwell.   |
| Hodder B. W. and Lee Roger, 1974: Economic Geography, Taylor and Francis.                            |
| Combes P., Mayer T. and Thisse J. F., 2008: Economic Geography: The Integration of Regions           |
| andNations, Princeton University Press.  |
| Wheeler J. O., 1998: Economic Geography, Wiley.  |
| Durand L., 1961: Economic Geography, Crowell.  |
| Bagchi-Sen S. and Smith H. L., 2006: Economic Geography: Past, Present and Future, Taylor and        |
| Francis.   |
| Willington D. E., 2008: Economic Geography, Husband Press.   |
| Clark, Gordon L.; Feldman, M.P. and Gertler, M.S., eds. 2000: The Oxford                             |
|  |

## **GEOGRAPHY PRACTICAL- GE4 LAB**

**60 Lectures** 

## Instruction to Question Setter for

End Semester Examination (ESE):

There will be one Practical Examination of 3Hrs duration. Evaluation of Practical Examination may be as per the following guidelines:

Experiment = 15 marks
Practical record notebook = 5 marks
Viva-voce = 5 marks

## **INSTRUMENTAL SURVEY**

1. Plane Table: Radiation, Intersection Method.

2. Prismatic Compass: Open & Closed Traverse.

| Misra, R.P & Ramesh A: (1986): Fundamentals of Cartography, McMillan Co.New Delhi        |
|--|
| Robinson A.H (1995) Elements of Cartography John Wiley &Sons USA                         |
| Sarkar A.K.(1997): Practical Geography: A Systematic Approach, Oriental Longman Calcutta |
| Sharma J.P.(2010): Prayogatmak Bhugol, Sahitya Bhawan                                    |
|  |
| <br>   |

## SAMPLE CALCULATION FOR SGPA & CGPA FOR UNDERGRADUATE 'B.Sc./B.A./B.Com Honours & General' PROGRAMME

# **Distribution of Credits Semester wise for Undergraduate Honours Courses**

Table B-1: UG (B.A./ B.Sc./B.Com. Hons. Programme)

#### Semester wise distribution of 140 Credits

|              | CC | AECC | GE  | SEC | DSE | Total credits |
|--------------|----|------|-----|-----|-----|---------------|
| Semester I   | 12 | 02   | 06  |     |     | 20            |
| Semester II  | 12 | 02   | 06  |     |     | 20            |
| Semester III | 18 |      | 06  | 02  |     | 26            |
| Semester IV  | 18 |      | 06  | 02  |     | 26            |
| Semester V   | 12 |      |     |     | 12  | 24            |
| Semester VI  | 12 |      | IVE |     | 12  | 24            |
|              | 84 | 04   | 24  | 04  | 24  | 140           |

CC=Core Course; AECC=Ability Enhancement Compulsory Course; GE=Generic Elective; SEC=Skill Enhancement Course; DSE=Discipline Specific Elective

Table B-2: UG (B.A./ B.Sc./B.Com. Programme)

#### Semester wise distribution of 120 Credits

|              | CC | AECC | GE | SEC | DSE | Total credits |
|--------------|----|------|----|-----|-----|---------------|
| Semester I   | 18 | 02   |    |     |     | 20            |
| Semester II  | 18 | 02   |    |     |     | 20            |
| Semester III | 18 |      |    | 02  |     | 20            |
| Semester IV  | 18 |      |    | 02  |     | 20            |
| Semester V   |    |      |    | 02  | 18  | 20            |
| Semester VI  |    |      |    | 02  | 18  | 20            |
|              | 72 | 04   |    | 08  | 36  | 120           |

CC=Core Course; AECC=Ability Enhancement Compulsory Course; GE=Generic Elective; SEC=Skill Enhancement Course; DSE=Discipline Specific Elective

Table B-3: Sample calculation for SGPA for B.Sc./B.A./B.Com Honours Programme

| Course       | Credit | Grade Letter | Grade Point | Credit Point<br>(Credit X Grade) | SGPA<br>(Credit<br>Point/Credit) |
|--------------|--------|--------------|-------------|----------------------------------|----------------------------------|
| Semester I   |        |              |             |                                  | ,                                |
| C-1          | 06     | A            | 8           | 48                               |                                  |
| C-2          | 06     | B+           | 7           | 42                               |                                  |
| AECC-1       | 02     | В            | 6           | 12                               |                                  |
| GE-1         | 06     | В            | 6           | 36                               |                                  |
| Total        | 20     |              |             | 138                              | 6.9 (138/20)                     |
| Semester II  |        |              |             |                                  |                                  |
| C-3          | 06     | В            | 6           | 36                               |                                  |
| C-4          | 06     | С            | 5           | 30                               |                                  |
| AECC-2       | 02     | B+           | 7           | 14                               |                                  |
| GE-2         | 06     | A+           | 9           | 54                               |                                  |
| Total        | 20     |              |             | 134                              | 6.7 (134/20)                     |
| Semester III |        |              |             |                                  |                                  |
| C-5          | 06     | A+           | 9           | 54                               |                                  |
| C-6          | 06     | 0            | 10          | 60                               |                                  |
| C-7          | 06     | A            | 8           | 48                               |                                  |
| SEC-1        | 02     | A            | 8           | 16                               |                                  |
| GE-3         | 06     | 0            | 10          | 60                               |                                  |
| Total        | 26     |              | 0.0         | 238                              | 9.15 (238/26)                    |
| Semester IV  |        |              | 100         |                                  |                                  |
| C-8          | 06     | В            | 6           | 36                               |                                  |
| C-9          | 06     | A+           | 9           | 54                               |                                  |
| C-10         | 06     | В            | 6           | 36                               |                                  |
| SEC-2        | 02     | A+           | 9           | 18                               |                                  |
| GE-4         | 06     | A            | 8           | 48                               |                                  |
| Total        | 26     | 0            |             | 192                              | 7.38 (192/26)                    |
| Semester V   |        |              |             | /                                |                                  |
| C-11         | 06     | В            | 6           | 36                               |                                  |
| C-12         | 06     | B+           | 7           | 42                               |                                  |
| DSE-1        | 06     | 0            | 10          | 60                               |                                  |
| DSE-2        | 06     | A            | 8           | 48                               |                                  |
| Total        | 24     |              |             | 186                              | 7.75 (186/24)                    |
| Semester VI  |        |              |             |                                  | ` ′                              |
| C-13         | 06     | A+           | 9           | 54                               |                                  |
| C-14         | 06     | A            | 8           | 48                               |                                  |
| DSE-3        | 06     | B+           | 7           | 42                               |                                  |
| DSE-4        | 06     | A            | 8           | 48                               |                                  |
| Total        | 24     |              |             | 192                              | 8.0 (192/24)                     |
| CGPA         |        |              |             |                                  | - (                              |
| Grand Total  | 140    |              |             | 1080                             | 7.71 (1080/140)                  |

Table B-4: Sample calculation for CGPA for B.Sc./B.A./B.Com Honours Programme

| Semester I | Semester II | Semester III | Semester IV | Semester V | Semester VI |
|------------|-------------|--------------|-------------|------------|-------------|
| Credit:20; | Credit:20;  | Credit:26;   | Credit:26;  | Credit:24; | Credit:24;  |
| SGPA:6.9   | SGPA: 6.7   | SGPA: 9.15   | SGPA: 7.38  | SGPA: 7.75 | SGPA: 8.0   |

**Thus CGPA**= (20x6.9+20x6.7+26x9.15+26x7.38+24x7.75+24x8.0)/140**=7.71** 

Table B-5: Sample calculation for SGPA for B.A./B.Sc./B.Com. Program

| Course             | Credit | Grade Letter | Grade Point   | Credit Yoint (Credit X Grade) | SGPA (Credit<br>Point/Credit) |
|--------------------|--------|--------------|---|-------------------------------|-------------------------------|
| Semester I         |        |              |   |                               |                               |
| DSC - 1A           | 06     | В            | 6   | 36                            |                               |
| DSC - 2A           | 06     | B+           | 7   | 42                            |                               |
| DSC - 3A           | 06     | С            | 5   | 30                            |                               |
| AECC – 1           | 02     | В            | 6   | 12                            |                               |
| Total              | 20     |              |   | 120                           | 6.0 (120/20)                  |
| Semester II        |        |              |   |                               |                               |
| DSC - 1B           | 06     | В            | 6   | 36                            |                               |
| DSC - 2B           | 06     | В            | 6   | 36                            |                               |
| DSC - 3B           | 06     | С            | 5   | 30                            |                               |
| AECC – 2           | 02     | A+           | 9   | 18                            |                               |
| Total              | 20     |              |   | 120                           | 6.0 (120/20)                  |
| Semester III       |        |              |   |                               |                               |
| DSC - 1C           | 06     | A            | 8   | 48                            |                               |
| DSC - 2C           | 06     | A+           | 9   | 54                            |                               |
| DSC - 3C           | 06     | A            | 8   | 48                            |                               |
| SEC – 1            | 02     | A            | 8   | 16                            |                               |
| Total              | 20     |              | and the same  | 166                           | 8.3 (166/20)                  |
| Semester IV        |        |              | WILL STATE OF THE |                               |                               |
| DSC - 1D           | 06     | C            | 5   | 30                            |                               |
| DSC - 2D           | 06     | В            | 6   | 36                            |                               |
| DSC - 3D           | 06     | B+           | 7   | 42                            |                               |
| SEC - 2            | 02     | A+           | 9   | 18                            |                               |
| Total              | 20     |              |   | 126                           | 6.3 (126/20)                  |
| Semester V         |        |              |   | 3                             |                               |
| DSE - 1A           | 06     | В            | 6   | 36                            |                               |
| DSE - 2A           | 06     | A+           | 9   | 54                            |                               |
| DSE - 3A           | 06     | A            | 8   | 48                            |                               |
| SEC – 3            | 02     | В            | 6   | 12                            |                               |
| Total              | 20     |              | STILL STATE   | 150                           | 7.5 (150/20)                  |
| Semester VI        |        |              |   |                               |                               |
| DSE - 1B           | 06     | B+           | 7   | 42                            |                               |
| DSE - 1B           | 06     | В            | 6   | 36                            |                               |
| DSE - 1B           | 06     | С            | 5   | 30                            |                               |
| SEC - 4            | 02     | С            | 5   | 10                            |                               |
| Total              | 20     |              |   | 118                           | 5.9 (118/20)                  |
| CGPA               |        |              |   |                               |                               |
| <b>Grand Total</b> | 120    |              |   | 800                           | 6.67 (800/120)                |

Table B- 6: Sample calculation for CGPA for B.A./B.Sc./B.Com. Program

| Semester I       | Semester II      | Semester III     | Semester IV      | Semester V       | Semester VI      |
|------------------|------------------|------------------|------------------|------------------|------------------|
| Credit:20;       | Credit:20;       | Credit:20;       | Credit:20;       | Credit:20;       | Credit:20;       |
| <b>SGPA: 6.0</b> | <b>SGPA: 6.0</b> | <b>SGPA: 8.3</b> | <b>SGPA: 6.3</b> | <b>SGPA: 7.5</b> | <b>SGPA: 5.9</b> |

**Thus CGPA**= (20x6.0+20x6.0+20x8.3+20x6.3+20x7.5+20x5.9)/120=**6.67** 

## MARKS DISTRIBUTION FOR EXAMINATIONS AND FORMAT OF QUESTION PAPERS

#### **Marks Distribution of Mid Semester Theory Examinations:**

Table No. 15: Marks distribution of Theory Examinations of Mid Semester

|       |      | Full<br>Marks | Pass<br>Marks |      | Group-A<br>(Very short  | Group-B  | Total No. of Questions<br>to Set |         |
|-------|------|---------------|---------------|------|---|--|----------------------------------|---------|
| Topic | Code |               |               | Time | answer type Compulsory Questions) No. of Questions x Marks = F.M. | (Descriptive Questions with Choices) No. of Questions x Marks = F.M. | Group A                          | Group B |
| Mid   | T15  | 15            | 6             | 1 Hr | 5 x1 =5   | 2 (out of 3) x5 =10  | 5                                | 3       |
| Sem*  | T25  | 25            | 10            | 1 Hr | 5 x1 =5   | 4 (out of 6) x5 =20  | 5                                | 6       |

## **Marks Distribution of End Semester Theory Examinations:**

Table No. 16: Marks distribution of Theory Examinations of End Semester

|       | Code     | Full<br>Marks | Pass<br>Marks | Time  | Group-A#<br>(Very short answer type                   | Group-B<br>(Descriptive                                  | Total No. of<br>Questions to Set |            |
|-------|----------|---------------|---------------|-------|---|--|----------------------------------|------------|
| Topic |          |               |               |       | Compulsory Questions) No. of Questions x Marks = F.M. | Questions with Choices ) No. of Questions x Marks = F.M. | Group<br>A#                      | Group<br>B |
|       | T60      | 60            | 24            | 3 Hrs | Q.No.1 $(10x1) + 1x5 = 15$                            | 3 (out of 5) x15 =45                                     | 2                                | 5          |
| End   | T75      | 75            | 30            | 3 Hrs | Q.No.1 $(10x1) + 1x5 = 15$                            | 4 (out of 6) x15 =60                                     | 2                                | 6          |
| Sem   | T100     | 100           | 40            | 3 Hrs | Q.No.1 $(10x1) + 2x5 = 20$                            | 4 (out of 6) x20 =80                                     | 3                                | 6          |
|       | T50 +T50 | 50X2=100      | 20            | 3 Hrs | 2 x5 =10  | 2 (out of 3) x20 =40                                     | 2                                | 3          |

# Question No.1 in Group-A carries 10 very short answer type 1 Mark Questions.

## Marks Distribution of Mid/End Semester Practical Examinations:

Table No. 17: Marks distribution of Practical Examinations of End Semester

| 7F    | Full Pass |       | TE:   | Distribution of Marks |            |        | Track No. of Occasions As Cat |   |
|-------|-----------|-------|-------|-----------------------|------------|--------|-------------------------------|---|
| Topic | Code      | Marks | Marks | Time                  | Experiment | Record | Viva                          | Total No. of Questions to Set           |
|       | P25       | 25    | 10    | 3 Hrs                 | 15         | 5      | 5                             |   |
| End   | P50       | 50    | 20    | 3 Hrs                 | 30         | 10     | 10                            | Pr. with components of both papers      |
| Sem   | P75       | 75    | 30    | 3 Hrs                 | 45         | 15     | 15                            | Pr. with components of all three papers |
|       | P100      | 100   | 40    | 3 Hrs                 | 60         | 20     | 20                            | Pr. with components of all four papers  |

**Abbreviations**: **T**= Theory Examination, **P**= Practical Examination.

Mid Sem\* : There will be 15 Marks Theory Examination in Practical Subjects and 25 Marks Theory

Examination in Non-Practical Subjects/ Papers. 25 Marks Theory Examination may include 10

Marks questions from Assignment/ Project/ Tutorial where ever applicable.

**Note** : There may be subdivisions in each question asked in Theory Examinations.