

B.A. /B.Sc. Part-I
GEOGRAPHY
PAPER-I
PHYSICAL GEOGRAPHY

Max. Marks: 50

- UNIT-I** The Nature and Scope of Physical Geography. Origin of the Earth, Geological Time Scale, Earth's Interior, Continental Drift Theory (Wegner), Plate Tectonics, Isostasy.
- UNIT-II** Earth movements: Earthquakes and Volcanoes. Rocks, Weathering, Erosion, and Normal cycle of erosion, Evaluation of landscapes- Fluvial, Arid, Glacial, Karts and Coastal landscape.
- UNIT-III** Elements of Weather and Climate, Composition and Structure of the Atmosphere. World patterns of Atmospheric Temperature, Pressure, and Wind.
- UNIT-IV** Atmospheric Moisture, and Disturbances, Climatic Classification (Koppen and Thornthwait) types, characteristics and World patterns.
- UNIT-V** Surface relief of Pacific Ocean, Atlantic Ocean, and Indian Ocean. Distribution of Temperature and Salinity of oceans and seas, Currents and Tides, Ocean Deposits and Coral Reefs, and Oceanic Resources.

Books Recommended:

1. Barry, R. G. and Chorley, R. J. (1998): Atmosphere, Weather and Climate. Routledge, London.
2. Bryant, H. Richard (2001): Physical Geography Made Simple, Rupa and Company. New Delhi
3. Bunnett, R.B. (2003): Physical Geography in Diagrams, Fourth GCSE edition, Pearson Education (Singapore) Private Ltd.
4. Garrison, T. (1998): Oceanography, Wordsworth Company., Belmont.
5. Lake, P. (1979): Physical Geography (English and Hindi editions), Cambridge University Press, Cambridge.
6. Lal, D.S. 1993 : Climatology, 3rd edition, Chaitanya Pub. House, New Delhi
7. Leong Goh Cheng (2003): Certificate Physical and Human Geography, Oxford University Press, New Delhi.
8. Monkhouse, F.J. (1979): Physical Geography. Methuen, London
9. Singh, S. (2003): Physical Geography. (English and Hindi editions.). Prayag Pustak Bhawan, Allahabad;
10. Trewartha, G.T., Robinson, A.H., Hammond, E.H., and Horn, A.T. (1976/1990): Fundamentals of Physical Geography, 3rd edition. MacGraw-Hill, New York.
11. Singh, M.B. (2001): *Bhoutik Bhugol*, Tara Book Agency, Varanasi
12. Strahler, A.N. and Stahler, A.M. (1992): Modern Physical Geography. John Wiley and Sons, New York.

उ.स.वि.
प्राचार्य
शासकीय महाविद्यालय बैरमगढ़
जिला -बीजापुर (छ.ग.)

B. A. Part- III
ECONOMICS
PAPER-I
DEVELOPMENT AND ENVIRONMENTAL ECONOMICS

UNIT - I Economic Growth and Development: Factor affecting economic growth (Labour, capital and technology). Developed and under developed Economy. Poverty-absolute & relative. Marxian model of Economic Growth. Mahalanobis Model of Economic Growth. Balanced and unbalanced growth.

UNIT-II Problems of Population and growth pattern of population. Theory of demographic transition. Population, poverty and environment. Schumpeter's theory of economic growth. Theory of Big-Push. Nelson's theory of low-level income equilibrium trap. Theory of Critical minimum efforts.

UNIT-III Harrod and Domar growth model. Solow's model of economic growth. Meade's Neo classical models. Mrs. Joan Robinson's growth model. A. Lewis theory of unlimited supply of labour.

UNIT-IV Environment: Environmental and use, environmental disruption as an allocation problem. valuation of environmental damages- land, water, air & forest, prevention control and abatement of pollution. choice of policy instruments in developing countries. environmental legislation, indicators of sustainable development, environmental accounting

UNIT-V Concept of Intellectual Capital : Food Security, Education, Health & Nutrition. Role of agriculture in economic development. Land reforms. Efficiency & Productivity in Agriculture, new technology & Sustainable agriculture, Globalization & agriculture growth, the choice of technique appropriate technology & employment.

REFERENCE:-

1. Behrman's And T.N. Srinivasan (1995) "Hand book of Development Economics." Vol 1, 2. & 3 Elsevier; Amsterdam.
2. Ghatak (1986) "An introduction to development Economics". Allen & Elnein. London.
3. Sen. A.K. (Ed.) 1990 "Growth Economics". Penguin. Hormones worth.
4. Mehrotra. S. And J. Richard (1998). Development with a Human Face. Oxford University Press New Delhi.

उत्तीर्ण
प्राचार्य
शासकीय महाविद्यालय धैरमगढ़
जिला -बीजापुर (छ.ग.)

The question paper B.A/B.S.c./B.Com/B.H.S.c English Language cultural values shall comprise the following units:

UNIT-I	Short answer questions to be asked by (Five short answer questions of three marks each)	15 Marks
UNIT-II	(a) Reading comprehension of an unseen passage (b) Vocabulary	05 Marks
UNIT-III	Report-Writing	10 Marks
UNIT-IV	Expansion of an idea	10 Marks
UNIT-V	Grammar and Vocabulary based on the prescribed text book	20+15 Marks

Note : Question on all the units shall be asked from the prescribed text which will comprise specimens of popular creative/writing and the following in any

- (a) Matter & technology
- State of matter and its structure
 - Technology (Electronics Communication, Space Science)
- (b) Our Scientists & Institutions
- Life & Work of our eminent scientist Arya Bhatt, Kaurd Charak Shusruta, Nagarjuna, J.C. Bose and C.V. Raman, S. Ramanujam, Homi J. Babha Birbal Sahani.
 - Indian Scientific Institutions (Ancient & Modern)

Book Prescribed:

- Foundation English for U.G. Second Year - Published by M.P. Hindi Granth Academy, Bhopal.

अ.प्र.सिं
प्राचार्य
शासकीय महाविद्यालय धैरमगढ़
जिला - बीजापुर (छ.ग.)

F.C. Paper - II

English Language

Course Contents

1.	Sonnet — To Science	1
2.	All men Are Scientists	9
3.	Science in Ancient India	27
4.	Major Ancient Indian Scientists	38
5.	J.C. Bose	58
6.	Srinivasa Ramanujan	73
7.	Communication in the Modern Age	82
8.	Computers	94
9.	Plastic Surgery	108
10.	Fighting Disease	118
11.	Water Pollution	127
12.	Hiroshima	141
13.	War	158
14.	October 2026 : The Million-Year Picnic	17i

उत्तीर्ण

प्राचार्य
शासकीय महाविद्यालय भैरमगढ
जिला -बीजापुर (म.प्र.)

B.A./B.Sc./B.Com./B.H.Sc. Part III
Foundation Course
English Language

M.M. 75

The question paper for B.A./B.Sc./B.Com./B.H.Sc. III Foundation course, English Language and General Answers shall comprise the following items : Five question to be attempted, each carrying 3 marks.

UNIT-I	Essay type answer in about 200 words. 5 essay type question to be asked three to be attempted.	15
UNIT-II	Essay writing	10
UNIT-III	Precise writing	10
UNIT-IV	(a) Reading comprehension of an unseen passage	05
	b) Vocabulary based on text	10
UNIT-V	Grammar Advanced Exercises	25

Note: Question on unit I and IV (b) shall be asked from the prescribed text. Which will comprise of popular create writing and the following items. Minimum needs housing and transport Goeconomic profile of M.P. communication Educate and culture. Women and Worm in Empowerment Development. management of change, physical quality of life. War and human survival. the question of human social value survival. the question of human social value. new Economic Philosophy Recent Diberliation Method) Demoration decentralization (with reference to 73, 74 constitutional Amendment.

Books Prescribed:

Aspects of English Language and Development-Published by M.P. Hindi Granth Academy. Bhopal.

अन्याईस १
मध्य (३) :- जावसाउर नम
राक्षी
प्राचार्य
शासकीय महाविद्यालय भैरमगढ़
जिला - बीजापुर (म.प्र.)

B.Sc. Part-II
BOTANY
PAPER-II

ECOLOGY AND PLANT PHYSIOLOGY

- UNIT-I** Introduction and scope of ecology, environmental and ecological factors, Soil formation and soil profile, Liebig's law of minimum, Shelford's law of tolerance, morphological and anatomical adaptations in hydrophytes, xerophytes and epiphytes.
- UNIT-II** Population and community characteristics, Raunkiaer's life forms, population interactions (e.g. Symbiosis, Amensalism etc.), succession, ecotone and edge effect, ecological niches, ecotypes, keystone species
- Concept of ecosystem, trophic levels, flow of energy in ecosystem, food chain and food web, concept of ecological pyramids
- Biogeochemical cycles: carbon cycle, nitrogen cycle and phosphorus cycle
- UNIT-III** Plant water relations: Diffusion, permeability, osmosis, imbibitions, plasmolysis, osmotic potential and water potential, Types of soil water, water holding capacity, wilting, Absorption of water, theories of Ascent of sap, Mineral nutrition and absorption, Deficiency symptoms, Transpiration, stomata movement, significance of transpiration, Factors affecting transpiration, guttation.
- UNIT-IV** Photosynthesis: Photosynthetic apparatus and pigments, light reaction mechanism of ATP synthesis. C₃, C₄ CAM pathway of carbon reduction, photorespiration, factors affecting photosynthesis.
- Respiration: Aerobic and anaerobic respiration, Glycolysis, Krebs's cycle, factors affecting respiration, R.Q.
- UNIT-V** Plant growth hormones: Auxin, Gibberellins, Cytokinin, Ethylene and Abscisic acid. Physiology of flowering, Florien concept, Photoperiodism and Vernalization. Seed dormancy and germination, plant movement.

Books Recommended:

1. Koromondy, E.J. **Concepts of Ecology**, Prentice Hall, USA
2. Singh, JS Singh SP and Gupta SR. **Ecology and Environmental Science and Conservation**, S. Chand Publishing, New Delhi
3. Sharma, PD. **Ecology and Environment**, Rastogi Publications, Meerut
4. Hopkins, WG and Huner, PA. **Introduction to Plant Physiology**, John Wiley and Sons.
5. Pandey SN and Sinha BK, **Plant Physiology**, Vikas Publishing, New Delhi
6. Taiz, Land Zeiger. E. **Plant Physiology**, 5th edition, Sinauer Associates Inc. M.A, USA
7. Srivastava, HS **Plant Physiology and Biotechnology**, Rastogi Publications, Meerut

उत्तीर्ण
प्राचार्य
राजकीय महाविद्यालय धैरमगढ़
जिला -बीजापुर (छ.ग.)

B.Sc. Part-III
ZOOLOGY
PAPER-I

**ECOLOGY, ENVIRONMENTAL BIOLOGY:
TOXICOLOGY, MICROBIOLOGY AND MEDICAL ZOOLOGY**

UNIT- I

(Ecology)

- Aims and scopes of ecology
- Major ecosystems of the world-Brief introduction
- Population- Characteristics and regulation of densities
- Communities and ecosystem
- Bio-geo chemical cycles
- Air & water pollution
- Ecological succession

UNIT- II

(Environmental Biology)

- Laws of limiting factor
- Food chain in fresh water ecosystem
- Energy flow in ecosystem- Trophic levels
- Conservation of natural resources
- Environmental impact assessment

UNIT-III

(Toxicology)

- Definition and classification of Toxicants
- Basic Concept of toxicology
- Principal of systematic toxicology
- Heavy metal Toxicity (Arsenic, Mercury, Lead, Cadmium)
- Animal poisons- snake venom, scorpion & bee poisoning
- Food poisoning

UNIT-IV

(Microbiology)

- General and applied microbiology
- Microbiology of domestic water and sewage
- Microbiology of milk & milk products
- Industrial microbiology: fermentation process, production of penicillin, alcoholic beverages', bioleaching.

UNIT-V

(Medical Zoology)

- Brief introduction to pathogenic microorganisms, Rickettsia, Spirochetes, AIDS and Typhoid
- Brief account of life history & pathogen city of the following pathogens with reference to man: prophylaxis & treatment
- Pathogenic protozoan's- Endameba, Trypanosome & Plasmodium
- Pathogenic helminthes- Schist soma
- Nematode pathogenic parasites of man
- Vector insects



प्राचार्य
राजसूरीय महाविद्यालय पैरमगढ़
जिला -बीजापुर (छ.ग.)

SHAHEED MAHENDRA KARMA VISHWAVIDYALAYA, BASTAR, JAGDALPUR
SESSION 2021-22

B.COM PART- I
COMPULSORY
GROUP-I
PAPER-II
BUSINESS COMMUNICATION

OBJECTIVE – To develop effective business communication skills among the students.

UNIT-I Introducing Business Communication: Definitions, concept and Significance of communication, Basic forms of communicating; Communication models and process; principles of effective communication; Theories of communication; Self-Development and Communication; Development of positive personal attitudes, SWOT analysis;

UNIT-II Corporate Communication: Formal and Informal communication networks; Grapevine; Miscommunication (Barriers); improving communication. Practices in business communication; Group discussions; Seminars; Effective Listening: Principles of effective listening; Factor affective listening exercises; Oral, Written, and video session, Audience analysis and feedback.

UNIT-III Writing skill: Business letters – Definition, concepts, structure, advantages disadvantage, need and kinds of business letter, Essentials of effective business letter. Good news and bad new letters; Office memorandum. Writing Resume and Letter of Job Application.

UNIT-IV Report Writing: Introduction to a proposal, Short report and formal report, report preparation.
Oral Presentation: Principles of oral presentation, factor affecting presentation, sales presentation, training presentation, conducting surveys, speeches to motivate, presentation skill.

UNIT-V Non-Verbal Aspects of Communicating. Body Language: Kinesics, Proxemics, Para Language.

Interviewing skills: Appearing in interviews; conducting interviews; mock interview.

Modern Forms of Communicating: Fax; E-Mail; video conferencing; etc.

International Communication for global business.

Suggested Readings:

1. Dr. P. K. Agrawal, Dr. A.K. Mishra; Business Communication; Sahitya Bhawan Publication; Agra (Hindi medium)