COOCH BEHAR PANCHANAN BARMA UNIVERSITY
B.A. Honours 3rd Semester Examination, 2019

## SANSKRIT

## Communicative Sanskrit

## SEC-1 (SECSANH1)

Time Allotted: 2 Hours

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

प्रश्नपत्रेऽस्मिन् सर्वेषां प्रश्नानामुत्तरं संस्कृतभाषया देवनागरीलिप्या च देयम्।

## Unit-I

1. अधः प्रदत्तैः पदेः संलापः रचनीयः (एकस्य)
(क) अध्यापकैः सह छात्राणां संलापः विरचयत।
विषयः - नवीनवरणम्
संकेतशब्दाः - अध्यक्षः, नृत्य-गीतम्, सांस्कृतिक अनुष्टानम्, वरणम् , सूचना , प्रदीपप्रज्ज्वलनम् , अनुष्ठानसूची, नवीनानामुद्दिश्य वार्ताः।
(ख) अध्यापकेन सह छात्रस्य / छात्रायाः संलापः रचनीयः।
विषयः - महाविद्यालये स्वच्छताभियानम्।
संकेतशब्दाः - स्वच्छतायाः प्रयोजनीयता, स्वच्छताभियानस्य रूपरेखा, छात्राणां मध्ये स्वच्छताचेतनाबृद्धिः।

## Unit-II

2. अधोलिखितेषु प्रात्यहिकजीवने व्यवहृतानां पश्चानाम् आङ्नलशब्दानां संस्कृत्प्रतिशब्दं लिखतु। $1 \times 5=5$

Carpenter, Doctor, Duster, Calculator, Lemon, Owl, Crow, Elephant, Department, Office.

## Unit-III

3. कालनिर्धारणं कार्यम् (पश्चानाम्) -
(i) 5.15 P.M., (ii) 3.20 A.M., (iii) 9.55 A.M., (iv) 12.00 Noon, (v) 8.45 P.M., (vi) 11.10 A.M., (vii) 7.15 P.M.
4. अधोलिखितेषु पश्चानाम् संख्यावाचक-शब्दानां संस्कृते रूपान्तरं कार्यम् -
(i) 8 , (ii) 6 , (iii) 79 , (iv) 17 , (v) 55 , (vi) 98 , (vii) 45 , (viii) 58 , (ix) 99 .

## Unit-IV

5. तव प्रिय-पुस्तकविषये ग्रन्थागारिकमुद्दिश्य लेखनीयम्।

अथवा
महाविद्यालये संस्कृतदिवसपालनार्थं अध्यक्षमहोदयसमीपे अनुमतिलाभाय पत्रमेकं लेख्यम्।

# COOCH BEHAR PANCHANAN BARMA UNIVERSITY 

B.A./B.Sc. Honours 3rd Semester Examination, 2019

## GEOGRAPHY (PRACTICAL)

# Environmental Impact Assessment <br> SEC-1 (SECGEOH1) 

SET-I

Time Allotted: 3 Hours
Full Marks: 40

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

## SECTION-I

Answer any one question from the following

1. Differentiate hazard and vulnerability with examples. Explain the effects of flood disaster on the environment.
2. Briefly explain the conceptual background of Environmental Impact Assessment.

What are the processes and stages of EIA? Explain the principles of EIA.

## SECTION-II

3. Project Report Evaluation.
4. Viva-voce.

# COOCH BEHAR PANCHANAN BARMA UNIVERSITY 

B.A./B.Sc. Honours 3rd Semester Examination, 2019

## GEOGRAPHY (Practical)

## Environmental Impact Assessment

## SEC-1 (SECGEOH1)

## SET-II

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

## SECTION-I

## Answer any one question from the following

1. What do you mean by Mitigation? Explain the effects of landslide disaster on the environment. Discuss the mitigation measures to reduce landslide risk.

# 2. Provide an overview on the detailed methodologies of EIA. What is 'Battelle Environmental Evaluation System'? 

## SECTION-II

3. Project Report Evaluation. 20
4. Viva-voce.

# COOCH BEHAR PANCHANAN BARMA UNIVERSITY 

B.A./B.Sc. Honours 3rd Semester Examination, 2019

## GEOGRAPHY (Practical)

## Environmental Impact Assessment

## SEC-1 (SECGEOH1)

## SET-III

Time Allotted: 3 Hours
Full Marks: 40

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

## SECTION-I

## Answer any one question from the following

1. Define risk. Briefly explain the causes behind earthquake. Suggest risk reduction measures for earthquake.
2. Briefly state the implications of Fuzzy Logic on EIA. Provide worldwide
instances of EIA in context of developmental projects. Explain the relationship
between EIA and Environmental Audit.

## SECTION-II

3. Project Report Evaluation. 20
4. Viva-voce.

# COOCH BEHAR PANCHANAN BARMA UNIVERSITY 

B.A./B.Sc. Honours 3rd Semester Examination, 2019

## GEOGRAPHY (Practical)

## Environmental Impact Assessment

## SEC-1 (SECGEOH1)

## SET-IV

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

## SECTION-I

## Answer any one question from the following

1. Explain the disaster profile of India in detail. Write a short note on 'Disaster $10+5$
Management Cycle' with suitable examples.
2. What is Environmental Quality Index Curve? Explain with hypothetical diagram. $\quad 5+10$
Discuss the role of EIA in society.

SECTION-II
3. Project Report Evaluation. 20
4. Viva-voce. 5
$\qquad$

# COOCH BEHAR PANCHANAN BARMA UNIVERSITY 

B.A./B.Sc. Honours 3rd Semester Examination, 2019

## GEOGRAPHY (PRACTICAL)

# Environmental Impact Assessment <br> SEC-1 (SECGEOH1) 

## SET-V

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

## SECTION-I

## Answer any one question from the following

1. What is meant by Disaster? Classify different types of hazards in detail.$3+12$
2. Define Environmental Impact Assessment by UNEP and IAIA. What are the $2+5+6+2$ differences between Environmental Impact Assessment and Strategic Environmental Assessment? Provide the historical account of Environmental Impact Assessment with special reference to India. What is NEPA?

## SECTION-II

3. Project Report Evaluation. 20
4. Viva-voce.

# COOCH BEHAR PANCHANAN BARMA UNIVERSITY 

B.A. Honours 3rd Semester Examination, 2019

## English

## Film Studies/Business Communication <br> SEC (SECENGH1A/1B)

(NEW SYllabus)
Time Allotted: 2 Hours
Full Marks: 40
The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

# The question paper contains SECENGH1A and SECENGH1B. The candidates are required to answer any one from two courses. <br> Candidates should mention it clearly on the Answer Book. 

## SECENGH1A

FILM STUDIES

1. Attempt a critical appreciation of any one of the following films: $15 \times 1=15$
(a) La Dolce Vita
(b) Titanic
(c) Pyaasa.
2. Answer any one question of the following:
$10 \times 1=10$
(a) Discuss with examples how colour, lighting, set design and camera angles contribute to the mise en scene of a film.
(b) What is montage? What are the different ways in which it may be used as a storytelling device?
(c) How is time manipulated through the use of flashbacks? Discuss with examples.
(d) What is the necessity of having close up shots in a film? Discuss with examples.
(e) Which genre of films use backlighting copiously and why?
(f) Why does voiceover become necessary in certain films? Do you think it proves the inadequacy of the visual medium as a means of storytelling?
(g) Why are long shots used in a film? What would happen if a film is shot entirely using long shots?
(h) Discuss with examples the effects achieved by using the freeze frame technique.
(i) What is jump cut? What does a filmmaker try to communicate by using such a technique?
(j) Discuss with examples the psychological implications of using the slow motion in narration.
3. Write short note on any one of the following film personalities:
(a) Utpal Dutta
(b) Amitabh Bachchan
(c) Gulzar.
4. Answer any ten questions of the following:
(a) Name the first film directed by Mrinal Sen.
(b) What image of the hero does Amitabh Bachchan represent in the 1970s?
(c) Who directed "Sholay"?
(d) What kind of camera movement was predominantly used in the climactic scene of "Meghe Dhaka Tara", in which Neeta expresses her desire to live?
(e) "Bicycle Thieves" belongs to which famous film movement?
(f) Aparna Sen made her directorial debut with which film?
(g) Which French filmmaker is noted for his frequent use of jump cuts?
(h) What is the difference between panning and tracking?
(i) Give an example of a visual clue through which a flashback is indicated.
(j) What is a fill light?
(k) What are the three boons that Goopy and Bagha receive from the King of Ghosts?
(l) Name a film directed by Utpal Dutta.

## SECENGH1B BUSINESS COMMUNICATION

1. Answer any one question of the following:
(a) Write a notice inviting quotations for supplying desktop computers for setting up a computer lab in your college.

## OR

Write a letter for submission of tender for construction of a cycle stand in your college.
(b) Write a letter of appointment for a probationary officer of a bank.
(c) Draft a brochure for an art exhibition.
2. Answer any one question of the following:
(a) Write a docket for a consignment of books to be shipped.
(b) Design a file tracking system for the administrative needs of a school.
(c) Write a circular announcing a code of conduct for the employees of an office.
(d) Write the minutes of a meeting held in your local club to plan a social service drive.
(e) Write a brief overview of the legalities in preparing a draft concerning the rules of an inter-district volley ball championship.
3. Answer any one question of the following:
(a) Compare and contrast lateral and down-line communication.
(b) Write an advertisement for the sale of a plot of land.
(c) Write an advertisement for selling a motorcycle.
4. Answer any ten questions of the following:
(a) What is the correct format of email address?
(b) What is the use of HTML?
(c) What is cloud storage?
(d) What is a server?
(e) Name a search engine.
(f) What does spam mean?
(g) What is the selling of products through internet called?
(h) Mention a way in which payments can be made through the internet.
(i) What is a virus in computer parlance?
(j) What is a hyperlink?
(k) What is URL?
(l) What is the storage folder for incoming email messages called?


# COOCH BEHAR PANCHANAN BARMA UNIVERSITY 

B.A. Honours 3rd Semester Examination, 2019

## Bengali

(ব্যবशরিক বাংলা : গণ৫্ঞাপনের উদ্দেশ্য, পদ্ধতি, উপাদান, ভাযা)

## SEC-1 (SECBNGH1)

## সময়: ২ ঘন্টা

পূর্ণমান:80

> পার্শস্থ সংখ্যা প্রশ্নের পূর্ণান নির্দেশ করে।
> পরীক্ষর্থীরা যথাসম্তব নিজের ভাষায় নির্দিষ্ট শব্দসীমার মর্যে উত্তর করিবে।

১। निম্নলিখিত যে-কোনো দশটি প্রশ্নের উত্তর দাওঃ ১×১০ = ১০
(ক) Interaction-শব্দটির পরিভাষা লেখো।
(খ) গণজ্ঞাপনের প্রধান উদ্দেশ্য কী ?
(গ) মুদ্রণ যন্ত্রের আবিষ্কারকে ভিক্টোর হুগো কী বলেছেন ?
(ঘ) গণজ্ঞাপন মানুযের কোন্ অংশ নিয়ে কাজ করে ?
(ঙ) নীরব ভাষা কী ?
(চ) জ্ঞাপনের কটি শ্রেণী ?
(ছ) গণসমাজকে ‘Way of life’ বলে কে মন্তব্য করেছেন ?
(জ) গণবিকার কাকে বলে ?
(ঝ) দুটো গণসংস্কৃতির উদাহরণ দাও ?
(@) নিরক্ষর গণশ্রোতা কাদের বলা হয় ?
(ট) গণমাধ্যমের দুটি মৌলিক উপাদান কী কী?
(ঠ) প্রতিবার্তা বলতে কী বোঝায় ?
(ড) গুজব কী?
(ঢ) জ্ঞাপক বলতে কী বোঝো ?
(ণ) উপসংস্কৃতি কাকে বলে ?

২। निম্নলিখিত যে-কোনো একটি প্রশ্নের উত্তর দাওঃ
(ক) গণসমাজ বলতে কী বোঝায় ?
(খ) জ্ঞাপনের শ্রেণীবিভাগগুলি লেখো।
(গ) সাংবাদিককে পরিবর্তন-প্রতিভূ বলা যায় কি না, লেখো।

৩। नিম্নলিখিত যে-কোনো একটি প্রশ্নের উত্তর দাওঃ
(ক) প্রতিবন্ধকতা কাকে বলে ? বার্তা গ্রাহকের ক্ষেত্রে প্রতিবন্ধকতাগুলি কী কী ?
(খ) শ্রোতা কাদের বলা হয় ? গণশ্রোতার চারিত্রিক বৈশিষ্ট্যগুলি কী কী ?
(গ) গণউন্মাদনা ও গণবিকার বলতে কী বোঝায় ?

81 निম্নলিখিত যে-কোনো একটি প্রশ্নের উত্তর দাওঃ
(ক) গণজ্ঞাপন বলতে কী বোঝায় ? গণজ্ঞাপনের ক্ষেত্রে সমাজতত্ত্ব, মনস্তত্ত্ব ও বিজ্ঞান প্রযুক্তির গুরুত্ব আলোচনা করো।
(খ) গণসমাজের মূল বৈশিষ্ট্যগুলি নিজের ভাষায় লেখো।
(গ) গণশ্রোতা কাকে বলে ? উদাহরণসহ গণশ্রোতার প্রকারভ্দেগুলি আলোচনা করো।

# COOCH BEHAR PANCHANAN BARMA UNIVERSITY 

B.A. Honours 3rd Semester Examination, 2019

## PHILOSOPHY

## An Introduction to Philosophical Analysis-I

## SEC-1(SECPHIH1)

Time Allotted: 2 Hours
Full Marks: 40

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

## SECTION-I

1. Answer any one question from the following:
$15 \times 1=15$
(a) State and explain the different criteria of sentence-meaning following Hospers.
(b) What is a priori Judgment? Distinguish between analytic and synthetic judgment. $2+8+5$
Are all a priori Judgment analytic? Discuss.
(c) Explain in brief the problem of induction after Hospers.

## SECTION-II

2. Answer any one question from the following:
(a) Write a note on ostensive definition. 10
(b) Explain strong and weak senses of the verb 'know'.

## SECTION-III

3. Answer any one question from the following:
$5 \times 1=5$
(a) Elucidate meanings of the word "meaning". 5
(b) Write a note on figurative language.

## SECTION-IV

4. Answer any ten questions from the following:
(a) What is definition of designation?
(b) What is persuasive definition?
(c) What is 'Knowing how'?
(d) Is word natural or conventional sign?
(e) What is Knowledge?
(f) 'All men are civilized' - Is it defining characteristics?
(g) What is the principle of verification?
(h) Are all words equally ambiguous?
(i) What do you mean by necessary truth?
(j) What is a concept?
(k) What do you mean by correspondence theory of truth?
(1) 'Man has four legs' - Is this sentence meaningless?
(m) Is believe knowledge?
(n) In what sense 'meaning' is used in the sentence - 'Do you know what is meaning of your life'?

COOCH BEHAR PANCHANAN BARMA UNIVERSITY
B.A. Honours 3rd Semester Examination, 2019

## Political Science

## Democratic Awareness with Legal Literacy SEC-1 (SECPLSH1)

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

## GROUP-A

Answer any one question from the following $15 \times 1=15$

1. Discuss the provision of the Right to Constitutional Remedies from the protection of Fundamental Rights in the Constitution of India.
2. Write a summary of important provisions of laws regarding environment
protection in India.
3. Discuss the general causes of Dowry in India with reference to Dowry Prohibition
Act 1961 .

## GROUP-B

Write short notes on any two of the following
4. Public Interest Litigation
5. Lok Adalat
6. Criminal Court
7. Domestic Violence.

## GROUP-C

8. Choose the correct alternative:
(i) In which part of the Constitution of India article 32 is mentioned
(a) Part-I
(b) Part-II
(c) Part-III
(d) Part-IV
(ii) The Environmental (Protection) Act was enacted in the year
(a) 1984
(b) 1986
(c) 1992
(d) 1974
(iii) Bhopal gas tragedy was happened in the year
(a) 1982
(b) 1984
(c) 1983
(d) 1985
(iv) For whom Dowry is a crime
(a) the receiver
(b) the giver
(c) both receiver and giver
(d) none of these
(v) The High Court has the power to issue writs under
(a) Article-32
(b) Article-33
(c) Article-226
(d) Article-31


# COOCH BEHAR PANCHANAN BARMA UNIVERSITY 

B.A. Honours 3rd Semester Examination, 2019

## Sociology

## Techniques of Social Research <br> SEC-1 (SECSOCH1)

Time Allotted: 2 Hours

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

## GROUP-A

1. Answer any one question from the following:
(a) What is Case study? Discuss the advantages and disadvantages of Case study.
$5+10=15$
(b) What is survey? Discuss the advantages and disadvantages of survey method.
$5+10=15$
(c) Discuss the various methods of data collection.

## GROUP-B

2. Answer any one question from the following: $10 \times 1=10$
(a) Write a short note on ethnography. 10
(b) Write a note on Significance of Sampling. 10
(c) What are the major steps involved in Research Design? 10

## GROUP-C

3. Answer any one question from the following: $5 \times 1=5$
(a) Write a short note on Probability Sampling. 5
(b) Mention the disadvantages of Interview method. 5
(c) Write a short note on questionnaire. 5

## GROUP-D

4. Answer any ten questions from the following:
$1 \times 10=10$
(a) What is variable?
(b) What is reliability?
(c) What is validity?
(d) Mention two advantages of Sampling method.
(e) What is Secondary data?
(f) What is sampling error?
(g) What is structural interview?
(h) What is open ended questionnaire?
(i) Mention two advantages of close ended questionnaire.
(j) Who wrote 'Doing Social Research'?
(k) What is sample?
(l) Mention two features of good sample.
(m) What is quota sampling?
(n) Mention two differences between qualitative and quantitative research.
(o) Who wrote "Methods in Social Research"?

# COOCH BEHAR PANCHANAN BARMA UNIVERSITY 

B.A. Honours 3rd Semester Examination, 2019

## History

## SEC-1 (SECHISH1)

Time Allotted: 2 Hours

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

## GROUP-A

## Answer any one question from the following

$15 \times 1=15$

1. Do you think that new religious cults and movements in the Sultanate period
influenced the growth of regional literature? Explain.
2. Write an essay on the art and culture of Vijaynagar Empire.
3. Write an essay on the historical literature of Mughal India.
4. How did music play an important role in the cultural assimilation during the 15
Mughal period?

## GROUP-B

## Answer any one question from the following

5. Discuss the main features of the Khalji architecture. ..... 10
6. Trace the development of Bengali literature during the Sultanate period. ..... 10
7. Write an essay on Mughal Visual and Performing art. ..... 10
8. Was the reign of Shah Jahan a Golden period of Mughal Architecture? ..... 10

## GROUP-C

## Answer any one question from the following

9. Write a short note on Persian literature during the Sultanate period.
10. What was the position of artists in the Mughal Court?
11. Write a short note on miniature painting of the Mughals.
12. Write a short note on Fatehpur Sikri.

## GROUP-D

13. Answer any ten questions from the following:
(a) Who built Alai Darwaza of Delhi?
(b) Which Indo-Islamic structure was designed by Abu-Bakr of Herat?
(c) Who wrote Khazain-ul-Futuh?
(d) Where is 'Sher Shah's tomb' situated?
(e) Who wrote Srikrishna Vijaya?
(f) Who built Fatehpur Sikri?
(g) Who wrote 'Muntakhab-ut-Tawarikh' in Persian language?
(h) On the bank of which river the Red Fort of Delhi was built?
(i) Name a famous musician of Akbar's Court.
(j) Bhakta Tukaram was a contemporary of which Mughal ruler?
(k) Who built the famous Shalimar bagh?
(l) Name a famous painter of Jahangir's Court.

# COOCH BEHAR PANCHANAN BARMA UNIVERSITY 

B.A. Honours 3rd Semester Examination, 2019

## Economics

## SEC-1 (SECECOH1A/B/C)

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.
All symbols are of usual significance.

# The question paper contains SEC-1A, SEC-1B and SEC-1C. <br> The candidates are required to answer any one from three courses. <br> Candidates should mention it clearly on the Answer Book. 

## SEC-1A <br> FOUNDATION COURSE IN ECONOMIC THEORY <br> SECTION-I

1. Answer any ten questions from the following:
$1 \times 10=10$
(a) What do you mean by opportunity cost?
(b) What is the equilibrium condition of a consumer in ordinal utility approach?
(c) Draw demand curve when price elasticity of demand is unity.
(d) What do you mean by 'break even point'?
(e) Draw AFC curve.
(f) What is the equilibrium condition of a firm under perfect competition in the long run?
(g) What is NNP?
(h) If MPC $=0.5$ then what will be the value of multiplier?
(i) What do you mean by "Barter system"?
(j) Is there any supply curve under monopoly?
(k) What do you mean by 'Cash Reserve Ratio'?
(1) Draw an indifference curve when two goods are perfect complement.
(m) If $E_{p} \rightarrow \infty$ then what is the relation between $A R$ and $M R$ ?
(n) What do you mean by elasticity of supply?
(o) If cross elasticity of demand between two goods is positive then comment on the nature of two goods.

## SECTION-II

2. Answer any one from the following questions: $5 \times 1=5$
(a) What is the difference between Positive Economics and Normative Economics? 5
(b) What are the characteristics of monopolistic competition? 5
(c) Write a short note on functions of money.

## SECTION-III

## Answer any one question from the following <br> $10 \times 1=10$

3. Distinguish between Cardinal and Ordinal utility analysis.
4. Why do we say that perfect competition and decreasing cost is incompatible in the long run equilibrium?
5. Explain the process of credit creation of commercial bank.

## SECTION-IV

## Answer any one question from the following

6. Discuss the credit control measures of Central bank.
7. Give reasons for the $U$ shape of long run average cost curve.

Why is the long run average cost curve called planning curve?
8. Explain the equilibrium of a firm under perfect competition in the long run. How does the conditions of firm's long run equilibrium differ from short run equilibrium? $10+5$

## SEC-1B <br> FOUNDATION COURSE IN MATHEMATICS-I <br> GROUP-A

1. Answer any ten questions from the following:
(a) If $2, x, 18$ are in continued proportion, find $x$.
(b) If the geometric mean of $a, 4,8$ be 6 , find the value of ' $a$ '.
(c) Find the value of $\sqrt[5]{32 \times(27)^{-\frac{5}{3}}}$.
(d) Find the equation of the line which makes intercepts 2 and 3 on the axes respectively.
(e) What is square matrix?
(f) Find the equation of the circle whose origin is $(2,-3)$ and radius $=5$.
(g) Find the value of $\log _{2} \log _{2} \log _{2} 16$.
(h) Find the $10^{\text {th }}$ term of the arithmetic progression (1, 7, 13, 19 $\qquad$
(i) Find the values of $27^{-4 / 3}$.
(j) Find the slope of the line $3 x-2 y+7=0$.
(k) How many different committees of 5 persons can be formed out of 7 gentlemen and 5 ladies?
(1) Find the third proportional to 4 and 12.
(m) Two matrices are given by $A=\left[\begin{array}{ll}2 & 4 \\ 3 & 1\end{array}\right]$ and $B=\left[\begin{array}{ll}1 & 3 \\ 4 & 2\end{array}\right]$, find $(A+B)$.
(n) Given $A=\left[\begin{array}{cc}2 & 3 \\ 7 & -5\end{array}\right]$, find the value of $|A|$.
(o) Find the simple interest on Rs. 10,000 for 5 years at 12 percent rate of interest per annum.

## GROUP-B

2. Answer any one question from the following:
(a) If $x: y: z=a: b: c$ show that $\left(a^{2}+b^{2}+c^{2}\right) \times\left(x^{2}+y^{2}+z^{2}\right)=(a x+b y+c z)^{2}$.
(b) Write short note on sinking fund.
(c) $A=\left[\begin{array}{ccc}2 & 3 & 4 \\ 1 & 2 & 3 \\ -1 & 1 & 2\end{array}\right], B=\left[\begin{array}{ccc}1 & 3 & 0 \\ -1 & 2 & 1 \\ 0 & 0 & 1\end{array}\right]$

Show that $A B \neq B A$.

## GROUP-C

## Answer any one question from the following <br> $10 \times 1=10$

3. (a) If $x=3+3^{2 / 3}+3^{1 / 3}$, find the value of $x^{3}-9 x^{2}+18 x-12$.
(b) Given $\frac{x+4}{x-4}+\frac{x-4}{x+4}=5 \frac{1}{5}$, find the value of $x$.
4. (a) Prove that
$C_{0}+2 C_{1}+3 C_{2}+\ldots .+(n+1) C_{n}=(n+2) 2^{n-1}$
(b) If ${ }^{n} P_{r}=504$ and ${ }^{n} C_{r}=84$, find ' $n$ ' and ' $r$ '.
5. Find out adjoint and inverse of the following
(a) $\left[\begin{array}{cc}2 & -3 \\ 5 & 5\end{array}\right]$ (b) $\left[\begin{array}{lll}3 & -3 & 4 \\ 2 & -3 & 4 \\ 0 & -1 & 1\end{array}\right]$

## GROUP-D

Answer any one question from the following
6. (a) Find the present value of an annuity certain of Rs. 300 for 5 years reckoning compound interest at $4 \%$ per annum.
(b) In what time will a sum of money double itself at $5 \%$ compound interest.
7. (a) Write short notes on diagonal matrix, orthogonal matrix and null matrix.
(b) Find the solution of the system of equations with the help of Cramer's rule: $7 x_{1}-x_{2}-x_{3}=0,10 x_{1}-2 x_{2}+x_{3}=8,6 x_{1}+3 x_{2}-2 x_{3}=7$.
8. (a) Find the equation of the line which is parallel to $2 x+7 y=12$ and has an intercept of 5 units on $y$ axis.
(b) Find the centre and radius of the circle from $3 x^{2}+3 y^{2}-6 x+12 y-5=0$ equation.
(c) Find the coordinates of the vertices, foci and the equations of the directrices of the hyperbola $9 x^{2}-4 y^{2}=36$.

## SEC-1C <br> FOUNDATION COURSE IN STATISTICS-I <br> SECTION-I

1. Answer any ten questions from the following: $1 \times 10=10$
(a) What is primary data?
(b) What is frequency polygon?
(c) Define range.
(d) Give any two uses of GM.
(e) 'Correlation coefficient is independent of both change of origin and scale of measurement' - is it true?
(f) Define coefficient of variation.
(g) If $U+3 x=5,2 y-V=7$ and correlation coefficient of $x$ and $y$ is 0.12 , find the correlation coefficient between $U$ and $V$.
(h) If $b_{x y}=0.4, b_{y x}=0.9$ then what is the value of ' $r$ '?
(i) 'If $r=0$ then two regression lines are at right angle' - is the statement true?
(j) What is time series?
(k) What are the components of time series?
(l) What is the S.D. of two observations (in cm ) 53 and 57?
(m) If mean and median of a frequency distribution are 20 and 17 respectively, find the mode.
(n) The arithmetic mean of a variable $x$ is 100 . Find the mean of the variable $5 x-10$.
(o) 'When all observations are equal then $\mathrm{AM}>\mathrm{GM}>\mathrm{HM}$ ' - is the statement true?

## SECTION-II

2. Answer any one question from the following:
(a) What are the desirable properties of a statistical average?
(b) Show that mean deviation about mean for a set of values of a variable cannot exceed standard deviation.
(c) The lines of regression of $y$ on $x$ and $x$ on $y$ are $y=x+5$ and $16 x=9 y-94$ respectively. Find the variance of $x$ if variance of $y$ is 16 .

## SECTION-III

## Answer any one question from the following

3. Discuss various uses and limitations of coefficient of correlation.
4. For a group of 50 boys the mean score and the standard deviations of score of a test are 59.5 and 8.38. For a group of 40 girls the same results are 54.0 and 8.23. Find the mean and S.D. of the combined group of 90 children.
5. Fit a straight line trend by the least square method to the following figures of production of a sugar factory:

| Year | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Production <br> ('000 tons) | 76 | 87 | 95 | 81 | 91 | 96 | 90 |

Estimate the production for 1976.

## SECTION-IV

## Answer any one question from the following

6. What are the different measures of variability of observations?

Explain the advantages and disadvantages of the different measures of dispersion.
7. (a) Calculate median and standard deviation from the following data:

| Wages (Rs '000): | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| No. of Workers: | 12 | 17 | 23 | 39 | 16 | 03 |

(b) Find the mean of first ' $n$ ' natural numbers.
8. From the given data -

| Marks in Economics: | 25 | 28 | 35 | 32 | 31 | 36 | 29 | 38 | 34 | 32 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Marks in Statistics: | 43 | 46 | 49 | 41 | 36 | 32 | 31 | 30 | 33 | 39 |

Find:
(i) The two regression equation
(ii) The coefficient of correlation between marks in Economics and Statistics
(iii) The most likely marks in Statistics when marks of Economics is 30 .


# COOCH BEHAR PANCHANAN BARMA UNIVERSITY 

B.A. Honours 3rd Semester Examination, 2019

## Arabic

## SEC-1 (SECARBH1)

Time Allotted: 2 Hours

The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

1. Write an essay on one from the following:
$20 \times 1=20$
اكتب مقا لة عن ای مو ضوع ألا الادب الجا هلى (ب) الحياة النبد ية المد ينة (ج) الادب العربى فى الدور العباسى
2. Write a letter in Arabic from the following topics.
$10 \times 1=10$

$$
\begin{aligned}
& \text { اكتب رسالة عر بية من ای موضوع من النالىى } \\
& \text { (أ) رسالة صديق إلى صد يقه يكتب فيها عن الكلية } \\
& \text { (ب) رسالة طالب إلى إبيه يطلب فيها الروبيات } \\
& \text { (ج) رسالة طالب إلى مدير الكلية بلا جازة }
\end{aligned}
$$

3. Write a short conversation of ten sentences from the following topics. $10 \times 1=10$

$$
\begin{aligned}
& \text { اكتب محاد ثة عن ای مو ضوع من التالى } \\
& \text { (أ) المحاد ثة بين الطا لبين الحديدين } \\
& \text { (ب) المحاد ثة بين طالب وا بيه بعد الا متحان } \\
& \text { (ج) المحاد ثة بين الطالب والا ستاذ فى الفصل } \\
& \text { (د) المحاد ثة بين امجد و صـاحب دكان الكتب }
\end{aligned}
$$

# COOCH BEHAR PANCHANAN BARMA UNIVERSITY 

B.A. Honours 3rd Semester Examination, 2019

## Education

## School Based Activities <br> SEC-1 (SECEDCH1)

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

## GROUP-A

1. Answer any one question from the following:
$10 \times 1=10$
(a) What do you mean by educational objectives? Discuss with suitable examples $2+8=10$ Bloom's Taxonomy in classifying cognitive domain.
(b) What is awareness programme? Discuss different steps in organizing any $2+8=10$ awareness programme from your syllabus.

## GROUP-B

## Answer any two questions from the following as directed

2. (a) Differentiate between educational objectives and instructional objectives. 5

OR
(b) Prepare a question paper of 10 marks based on Bloom's Taxonomy. 5
3. (a) Discuss the importance of conducting Parent-Teacher Meeting in School.

OR
(b) How does gender sensitization programme promote social awareness?

## GROUP-C

4. Answer any five question from the following:
$2 \times 5=10$
(a) Give one slogan of environment awareness programme.
(b) Define instructional objectives.
(c) What is the full form of HIV?
(d) Name one National day that is observed in educational institution.
(e) Mention one importance of providing recess in time-table of school.
(f) Mention one objective of the course of SEC-I (School based activities).
(g) Mention one good habit that you want to introduce in School Morning Assembly.
(h) Name the highest order in cognitive domain of Bloom's classification.
$\qquad$
