

## डॉ. भीमराव अंबेडकर प्रौद्योगिकी संस्थान r. B.R. AMBEDKAR INSTITUTE OF TECHNOLOGY (NAAC ACCREDITED)

पहाड गाँव पोर्ट ब्लेयर अंकमान राषा निकोबार द्वीप समृह

PAHARGAON, PORT BLAIR-744103 ANDAMAN & NICOBAR ISLANDS



Recruitment Notice for Guest AP, Guest Lecturers, PTI

Selected candidates shall be eligible for an amount of Rs.1000/- per hr for theory and Rs.500/- per hr for practical classes not exceeding Rs.25,000/- per month for Guest AP (Degree Program) and Rs.250/- per hr for theory and Rs.125/- per hr for practical classes not exceeding Rs.10,000/- per month for Guest Lecturer (Diploma Program). For Part Time Instructor, Rs.150/- per hr for the practical classes not exceeding Rs.10,000/- per month. Selection will be based on the performance of the candidates in the Demo theory and practical class. The venue for theory demo will be AV Room of the Institute.

Details of	Educational Qualification	Date and time	
requirement		Practical	Theory
Guest Lecturer ( CO/IT)	First class B.E./B.Tech., from recognized university in relevant course	27.09.2022 9:30 am to 11:30 am	27.09.2022 2:00 pm to 2:30 pm
Guest AP (Civil)	B.E./B.Tech., and M.E.,/M.Tech., in relavant course from recognized	27.09.2022 9:30 am to 11:30 am	27.09.2022 2:30 pm to 3:00 pm
Guest AP (CSE)	university with first class or equivalent either in B.E./B.Tech., and M.E./M.Tech.	27.09.2022 9:30 am to 11:30 am	27.09.2022 2:30 pm to 3:00 pm
Guest AP (Chemistry)	First class Master's Degree in appropriate subject with first class or equivalent at Bachelor's or Master's level	27.09.2022 9:30 am to 11:30 am	28.09.2022 2:00 pm to 2:30 pm
Guest AP (English)	, v	*****	28.09.2022 2:30 pm to 3:00 pm
Guest Lecturer (Management)	First class Master's Degree in appropriate subject with first class or equivalent at Bachelor's or Master's level		28.09.2022 3:00 pm to 3:30 pm
Part time Instructors (CSE/ECE)	Bachelor Degree of Engineering in the respective field from a recognised University  OR  Diploma in respective field from a recognised Educational/Technical institution.  OR  Senior secondary pass(10+2) with vocational course certificate in an appropriate trade with 3 years practical experience	27.09.2022 9:30 am to 11:30 am	
	requirement  Guest Lecturer (CO/IT)  Guest AP (Civil)  Guest AP (CSE)  Guest AP (Chemistry)  Guest AP (English)  Guest Lecturer (Management)	Guest AP (Civil)  Guest AP (Civil)  Guest AP (Cose)  Guest AP (Cose)  Guest AP (Cose)  Guest AP (Chemistry)  Guest AP (English)  First class Master's Degree in appropriate subject with first class or equivalent at Bachelor's or Master's level  First class Master's Degree in appropriate subject with first class or equivalent at Bachelor's or Master's level  Bachelor Degree of Engineering in the respective field from a recognised University  OR  Diploma in respective field from a recognised University  OR  Diploma in respective field from a recognised Educational/Technical institution.  OR  Senior secondary pass(10+2) with vocational course certificate in an appropriate trade with 3 years practical	Guest AP (Civil)   B.E./B.Tech., and M.E./M.Tech., in relavant course from recognized university with first class or equivalent either in B.E./B.Tech., and M.E./M.Tech. in relavant course from recognized university with first class or equivalent either in B.E./B.Tech., and M.E./M.Tech.   27.09.2022 9:30 am to 11:30 am   27.09.

Junglighat P.O, Pahargaon, Port Blair, A & N Islands Ph: 03192 - 250587, Fax: 03192 - 259225

e-mail: dbragpt.and@nic.in, Website: https://dbrait.andaman.gov.in



# अंडमान तथा निकोबार प्रशासन ANDAMAN & NICOBAR ADMINISTRATION डॉ. भीमराव अंबेडकर प्रौद्योगिकी संस्थान Dr. B.R. AMBEDKAR INSTITUTE OF TECHNOLOGY (NAAC ACCREDITED) प्रवाद गाँव पोर्ट क्षेयर अंडमान तथा निकोबार द्वीप समूह ANDAMAN & NICOBAR ISLANDS



		appropriate trade with 3 years practical experience		
		OR 10 <sup>th</sup> passed with ITI in the relevant field passed from a recognised Institute/ Board with 3 years' experience		
Ę	Part time Instructors (Physics)	Bachelor Degree in Science from a recognised university OR Senior secondary pass(10+2) in Science subject from a recognised educational/ Technical Institution OR Senior secondary pass(10+2) with vocational course certificate in an	27.09.2022 9:30 am to 11:30 am	
		appropriate trade with 3 years practical experience	÷	-



### डॉ. भीमराव अंबेडकर प्रौद्योगिकी संस्थान Dr. B.R. AMBEDKAR INSTITUTE OF TECHNOLOGY

(NAAC ACCREDITED)
पहाड गाँव पोर्ट ब्लेयर Ранапсаон, Рок

PAHARGAON, PORT BLAIR- 744103 ANDARAN & NICOBAR ISLANDS



4. Data structure - radix sort, binary searching

6. Operating system – CPU scheduling (FCFS)

5. Computer graphics - DDA, Breshenham's algorithm

## DEMO TOPICS FOR GUEST AP, GUEST LECTURER AND PART TIME INSTRUCTOR DBRAIT 2022-2023

(ODD SEMESTER)		
DEPARTMENT	THEORY	PRACTICAL
GL	1. Preparation of balance sheet and profit-loss statement	
(Management)	2. Functions of management	
	3. Capital generation & management	
	4. Budgets & its types.	
	5. Total quality management	
	6. Straight line method of depreciation	
	7. Scientific management	
	8. Scope of engineering economics	
	9. Evaluation of public alternatives	
	10. Determination of economics life of asset	
GL (CO/IT)	1. Principle of database – normalization, ER model	1. Advanced java programming –
90	2. Advanced java programming – socket programming, AWT	Write a program to implement chat server using
	3. Client side scripting – function, cookies	Server Socket & Socket class
	4. Data structure – stack, queue	<ul> <li>Design form with components list, choice, label,</li> </ul>
	5. Computer graphics – windowing, clipping	checkbox, text field
	6. Operating system - memory management	2. Client side scripting –
	7. Software testing – test management, defect management	Develop java script o implement function
	8. Object oriented programming using C++ - inheritance & its	Develop a webpage for creating session &
	types	persistent cookies
	9. Advance computer network – IP addressing, transition from	3. Applied multimedia techniques –
	IPv4 to IPv6	Design wallpaper showing water drop effects of an
	10. Database management system - triggers, transaction	image
	processing	Design poster using different text effect
		Develop webpage which shows animation with sound effect



## डॉ. भीमराव अंबेडकर प्रौद्योगिकी संस्थान

## Dr. B.R. AMBEDKAR INSTITUTE OF TECHNOLOGY (NAAC ACCREDITED) पडाड गाँव पोर्ट ब्लेयर अंडमान तथा निकोबार द्वीप समूह ANDAMAN & NICC

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GAP (English)	<ol> <li>Strategies for effective communication</li> <li>Comprehension of technical &amp; non-technical materials</li> <li>Basics of phonetics</li> <li>Technical writing</li> <li>Presentation skills</li> <li>Office drafting</li> <li>Tenses</li> <li>Speeches- formulating speeches for welcome, farewell &amp; vote of thanks</li> <li>Use of articles in formulating sentences</li> <li>Active &amp; passive voice</li> </ol>	<ol> <li>Workshop practices – assemble &amp; dissemble of various part of computer systems</li> <li>Object oriented programming using C++ -         <ul> <li>Implementing the concept of multiple inheritances</li> <li>based on the given scenario</li> <li>Implement the concept of copy constructor</li> </ul> </li> <li>Advance computer network –         <ul> <li>Configure OSPF &amp; RIP using packet tracer</li> <li>Establish a client-server architecture using IPv6 addressing in packet tracer</li> </ul> </li> <li>Database management system –         <ul> <li>Implementing trigger for insert, updating &amp; deleting from the database</li> <li>Design a database based on the given requirement and execute required DML commands by following referential integrity constraints if required</li> </ul> </li> </ol>
GAP (Chemistry)	<ol> <li>Conducting polymers – classification &amp; application</li> <li>Protective coating &amp; its types in terms of corrosion</li> <li>Super conductivity</li> <li>Dielectric polarisation &amp; mechanism</li> </ol>	<ol> <li>Determine the pH value of given solution using pH meter</li> <li>&amp; universal indicator</li> <li>Determine thinner content in oil paint</li> </ol>



## अंडमान तथा निकोबार प्रशासन ANDAMAN & NICOBAR ADMINISTRATION डॉ. भीमराव अंबेडकर प्रौद्योगिकी सस्थान Dr. B.R. AMBEDKAR INSTITUTE OF TECHNOLOGY

(NAAC ACCREDITED)
पहाड गाँव पोर्ट कोयर
अंडमान तथा निकोद्दार द्वीप समूह
ANDAMAN A NICO

PAHARGAON, PORT BLAIR-744103 ANDAMAN & NICOBAR ISLANDS



	5. Crystal structure (all 7 types)	3. Determine total hardness, temporary hardness and
	<ol> <li>Crystal lattice</li> <li>Lattice point</li> <li>Different types of crystal structures (with angles)</li> <li>Qualitative idea of line, point, surface &amp; volume defect</li> <li>How to calculate coordination number &amp; atomic radius of FCP &amp; HCC unit cell</li> </ol>	permanent hardness of water sample by EDTA method 4. Standardization of KMnO4 solution using standard oxalic acid IV & determine the %age of iron present in given Hematite ore by KMnO4 solution 5. Determination of carbonates & bicarbonates in water 6. Determination of chloride content in a given sample of water 7. Estimation of vinegar 8. Estimation of available chlorine in bleaching powder 9. Estimation of ferrous by permagnometry 10. Estimation of magnesium by EDTA
GAP (Civil)	1. Bending Stress	Determination of quality of water
κ.	<ol> <li>Moment distribution method</li> <li>Environmental Engineering</li> <li>Transportation of sewage</li> </ol>	<ol> <li>Test on cement</li> <li>Test on aggregate</li> <li>Tachometric survey</li> </ol>
	<ul><li>5. Activated sludge process</li><li>6. Flocculators</li><li>7. Contour surveying</li><li>8. Tachometric Surveying</li></ul>	<ul><li>5. Compass surveying</li><li>6. Levelling</li><li>7. Test of steel</li></ul>
	9. One dimensional consolidation 10. Workability of concrete 11. Hydration of cement	
GAP (CSE)	<ol> <li>Computer programming – structures, arrays, pointers, functions, strings, files, and its operations and access</li> <li>Computer Hardware &amp; Network Troubleshooting- mother board components, bus standards, power supply, BIOS</li> <li>Language translator – source program analysis, lexical analysis, parsing</li> <li>Data structure &amp; OOP – stacks, Queues, inheritance</li> </ol>	<ol> <li>Computer programming &amp; data structure – pointers, structures, files, linked list, stack &amp; Queues</li> <li>Artificial intelligence lab – DFS, BFS, prepositional logic, Unification, heuristics</li> <li>Computer network &amp; hardware trouble shooting – circuit tracing, logic analyser, assembling, disassembling, troubleshooting printer, PCI bus, USB port</li> </ol>



#### डॉ. भीमराव अंबेडकर प्रौद्योगिकी सरंथान Dr. B.R. AMBEDKAR INSTITUTE OF TECHNOLOGY

(NAAC ACCREDITED)
पहाड गाँव पोर्ट क्लेयर
अंडमाम तथा निकोबार द्वीप समूह
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5. Network Protocol – Network layer protocols, data link layer protocols
6. Operating system – threads, CPU scheduling, algorithms, multiple processor scheduling, real time scheduling,
section problem, synchronization hardware, semaphores, classic problems of synchronization, critical regions,
monitors
7. Computer Organization & Architecture - I/O devices, interrupts & its types, uses, functions, handling multiple
devices, Pentium interrupt structure, DMA, buses, interface circuits, standard I/O interfaces

## **Demo Topics for Part Time Instructors**

DEPARTMENT	PRATICAL TOPICS	
CSE	1. OS installation	
	2. Hardware trouble shooting	
	3. Network cabling & trouble shooting	
	4. C programming – array, structures, pointers	
ECE	5. Design full and half adder	
	6. Build/test function od SR flip flop using NAND gate	
	7. Construct SR, JK, D & T flip flop and verify its truth table	
	8. Identify pins of 8051 & AVR microcontroller	
	9. Execute 'C' program to perform following arithmetic operations on 8-bit data – addition, subtraction, multiplication & division	
	10. Develop & test a 'C' program to perform data transfer from source to destination ( use internal memory locations)	
	11. Develop & test a 'C' program to turn ON LEDs with Key(s) press	



#### अंडमान तथा निकोबार प्रशासन ANDAMAN & MOOBAR ADMINISTRATION डॉ. भीमराव अंबेडकर प्रौद्योगिकी संस्थान Dr. B.R. AMBEDKAR INSTITUTE OF TECHNOLOGY

पक्षक गींच पोर्ट कोचर कंकनाग रामा गिकोबार ग्रीप शसूत PAHARBAON, PORT BLART-74110 ANDABBAN & RICOBAR ISLANDS



convex lens, by forming Newton's rings

- 4. Determine the specific resistance of given wire
- 5. Use Searle's method to determine the Young's modulus of given wire
- 6. Determination of radius of curvature of a planoconvex lens by using Newton's ring method
- 7. To determine the refractive index of a glass prism by using pin method
- 8. Vibration magnetometer calculation of magnetic moment & pole strength
- 9. To determine the co-efficient of viscosity of the given liquid by using stokes method
- 10. To determine the buoyancy force on solid immersed in liquid (Archemedies principle)

Dean (Academic)