Recruitment notice for Guest AP, Guest Lecturers, PTI
Session: 2021-22, Odd Semester

A walk in interview (demo theory and practical) is scheduled from 09h August to 11th August 2021 for recruitment of Guest AP, Guest Lecturers and Part Time Instructors in various departments in the establishment of Dr. B. R. Ambedkar Institute of Technology, Port Blair. The details of qualifications, schedule for interview and demo topics can be downloaded from the institute website https://dbrait.andaman.gov.in .

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.

S. No.	Details of requirement	Course	Educational Qualification	Date and time
1	Guest Lecturer (Electrical)	Diploma	First class B.E./B.Tech., from recognized university in relevant course	09/08/2021 09:30 to 10:30 AM
2	Guest Lecturer (Hotel Management)	Diploma	First class Degree in Hotel Management & Catering Technology with 1 year Experience **Or** First class Diploma in Hotel Management and catering technology with 2 years' experience	09/08/2021 10:30 to 11:30 PM
3	Guest Lecturer (Hygiene and Nutrition)	Diploma	First class Master's Degree in Hygiene and Nutrition	
4	Guest Lecturer (CO/IT)	Diploma	First class B.E./B.Tech., from recognized university in relevant course	09/08/2021 11:30 to 12:30 PM
5	Guest AP (Chemistry)	Degree	First class Master's Degree in appropriate subject with first class or equivalent at Bachelor's or Master's level	10/08/2021 09:30 to 10:30 AM
6	Guest AP (Mechanical)	Diploma	First class Master's Degree in appropriate subject with first class or equivalent at Bachelor's or Master's level	10/08/2021 10:30 to 11:30 AM
7	Part Time Instructor (Electrical/ECE/Civil/ CSE)	Degree & Diploma	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 OR 10th passed with ITI in the relevant field passed from a recognised Institute/ Board with 3 years' experience	11/08/2021 09:30 to 11:30 AM
8	Part Time Instructor (Physics/Chemistry)	Degree & Diploma	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 appropriate trade with 3 years practical experience	11/08/2021 09:30 to 11:30 AM

Dean (Academics)

Demo topics for Guest AP, Guest Lecturer and Part Time Instructor DBRAIT 2021-22

DEPART-MENT	DEGREE	Practical(Degree)	DIPLOMA (Theory)	Practical(Diploma)	PTI
Electronics					To characteristics of JFET (a) Determination of output and transfer characteristics. (b) Determination of voltage gain , current gain , input and output resistance from the characteristics. To design of 8 bit processor for block operation using 8085 microprocessor. To realization of 8 bit magnitude comparator using 4 bit magnitude comparator ICs. To design and testing of biasing circuit (i) Fixed Bias (ii) Collector to base Bias (iii) Self Bias.
Civil					1. CT-Test for cement and aggregates 2. MOS - Test on steel 3. PHE- test for potability of water 4. Advanced Surveying-tacheometric survey
Electrical			1. MESH and nodal analysis. 2. AC fundamentals 3. RLC series circuit and series resonance 4. Measurement of single phase using Dynamometer type wattmeter. 5. Construction and working principle of transformer	1. Verification of Kirchhoff's law. 2.Measurement of three phase power by two wattmeter method 3.Staircase wiring 4.Go down wiring 5.Load test on single phase transformer	1.Perform brake test on DC shunt motor 2 Control the speed of DC series motor by different methods 3 Check the functioning of single phase transformer 4 Determine regulation and efficiency of single phase transformer by direct loading

DEPART-MENT	DEGREE	Practical(Degree)	DIPLOMA (Theory)	Practical(Diploma)	PTI
				6.Load test on three phase induction motor	5 Perform open circuit and short circuit test on single phase transformer to determine voltage regulation and efficiency 6 Connect the auto-transformer in step-up and step-down modes noting the input-output readings. 7 Use voltmeter, ammeter, wattmeter, p.f. meter to determine line and phase quantities of voltage and current for balanced three phase star and delta connected load and calculate active, reactive, and apparent power. Draw phasor diagram. 8 Use voltmeter, ammeter to determine current through the given branch of a electric network by applying node analysis 9 Use voltmeter, ammeter to determine current through the given branch and voltage across the given element of circuit by applying superposition theorem. 10 Use voltmeter, ammeter to determine equivalent circuit parameter in a given circuit by applying Thevenin's theorem.
Mech	1. Angle of projections. (first and third both) 2. Development of surfaces.	1. Conic Sections. 2. Isometric Projections.			

DEPART-MENT	DEGREE	Practical(Degree)	DIPLOMA (Theory)	Practical(Diploma)	PTI
	3. Losses in pipeline flow. 4. Mechanical drives systems. 5. Theories of failures. 6. Second law of thermodynamics. 7. Working principle of Differential unit. 8. Working of Electro Discharge Machining (EDM)	3. Verification of Bernoulli's theorem. 4. Determination of Friction Factor. 5. Linear measurement by Vernier Calliper. 6. Angular measurements by Sine bar & slip gauges. 7. Determine the M.A, V.R, Efficiency, ideal effort & effort lost in friction, state & justify whether machine is reversible or not for a given **single purchase crab winch**. 8. Determine the M.A, V.R, Efficiency, ideal effort & effort lost in friction, state & justify whether machine is reversible or not for a given Differential wheel & axle.			

DEPART-MENT	DEGREE	Practical(Degree)	DIPLOMA (Theory)	Practical(Diploma)	PTI
HM			1.Methos of cooking 2.Flower arrangement 3.Different types of hotel and room 4. Beer- Definition, manufacturing process and various international brands. 5.Regional cuisines of North west frontier	1. Basket Cookery 2. Table Layout & Food and Wine Pairing 3. Flower arrangement in different styles 4.Report generation	
Physics					AIRWEDGE – Determination of thickness of given piece of sample 2. NEWTON'S RING- determination of wavelength of monochromatic light 3. YOUNGS MODULUS – determination of elasticity of a metallic wire 4. METER BRIDGE – determination of resistance of unknown resistance 5. determination of velocity of sound by resonance column
Chemistry	Hardness Of Water 2. Polymer Properties 3. Vulcanization –Synthetic Rubber 4. Chemical and Electrochemical corrosion 5. Desalination process- reverse osmosis and Electrodyalisis	To determine the pH value of solution using pH meter and universal Indicator 2. Estimation of available chlorine in Bleaching powder 3. Determination of carbonates and bi carbonates in water 4. determination of percentage of iron			To determine the pH value of solution using pH meter and universal Indicator 2. Estimation of available chlorine in Bleaching powder 3. Determination of carbonates and bi carbonates in water 4. determination of percentage of iron present given Hematite ore by KMno4 Solytion 5. Determination of Hardness of the sample water by EDTA method

DEPART-MENT	DEGREE	Practical(Degree)	DIPLOMA (Theory)	Practical(Diploma)	PTI
	6. Moulding constituent of plastics and moulding techniques 7. Primary and secondary cells 8. Types of polymerization reactions	present given Hematite ore by KMno4 Solytion 5. Determination of Hardness of the sample water by EDTA method			
CO/IT			**1.Advance Java Programming:-**Delegation Event Model, Event sources, Event Listener Socket Programming. **2.Object Oriented Programming Using C++** :- Polymorphism in C++, File Operations **3.Data Structure Using 'C':-** Tree traversal.	**1.Advance Java Programming:-** Develop Program in java for client server communication. **2.Object Oriented Programming Using C++ :-** Develop programs for Operator overloading and function overloading. **3.Data Structure Using 'C':-** Develop program in C for various operations on a singly linked list. **4.Fundamental of ICT :-**Mail merge **5.Workshop Practices :-** Cabling, Assemble and Disassembly of PC.	1.Cabling 2.Assemble and Disassemble of various part of computer System. 3.OS installation 4.C/C++ program on pointer, structures.