

SANT GADGE BABA AMRAVATI UNIVERSITY GAZETTE

Official Publication of Sant Gadge Baba Amravati University



PART - TWO

गुल्वार, दिनांक २१ डिसेंबर, २०१४

अधिसूचना

क्रमांक : १४६/२०१४

विषय : संलग्नकरणाबाबत..

G. C. & Co.,
Amravati.
2014
Outward No. _____
Date: 23 DEC 2014

सर्व संबंधितांचे माहितीकरीता अधिसूचित करण्यात येते की, छात्री दर्शविलेल्या महाविद्यालयांकरीता, अभ्यासक्रम / विषय / अतिरीक तुकडी च्या संलग्नकरण यादीसंदर्भात नियुक्त करण्यात आलेल्या चौकशी समितीचे अहवाल दि.२६.०९.२०१४ व तह. व सभा दि. २९.०९.२०१४ रोजी झालेल्या विद्वत परिषदेने विषय क्र. ४४, ६५, ७० व ९८ अन्वये तसेच दि.१८.०४.२०१३ रोजी झालेल्या विद्वत परिषदेने विषय क्र. ४४ अन्वये मान्य करण्यानुसार स्तंभ क्र.२ मध्ये दर्शविलेल्या महाविद्यालयास, स्तंभ क्र.३ मध्ये दर्शविलेल्या अभ्यासक्रम / विषय / अतिरीक तुकडीस, स्तंभ क्र.४ मध्ये दर्शविलेल्या कालावधीकरीता म.पि.कायदा १९९४ मधील कलम ८३, ८६ व ८७ मध्ये दर्शविलेल्या सधुनीचे तसेच B.Ed., M.Ed., LL.B. या अभ्यासक्रमास संबंधीत शिक्षण संस्थांच्या (Apex Body) मान्यतेचे अधिन राहून, विद्वत परिषदेच्या खालील निर्णयाचे अनुषंगाने संलग्नकरण प्रदान करण्यात येत आहे.

* Council took the decision that, the colleges having less than 50% of approved teachers, such colleges will be granted continuation of affiliation till 2014-2015. *

TABLE

| Sr. No. | Name of the College | Subject(s) / Course(s)/ Add. Section(s) | Period of continuation of affiliation |
|---------|--|---|--|
| 1. | 2. | 3. | 4. |
| 1. | Govt. Vidarbha Institute of Science & Humanities, Amravati. | B.A., B.Sc., B.Sc.(Home-Science) M.A. (Marathi,Sanskrit, English,Economics, History,Psychology, Urdu,Political Sci., Hindi,Geography, Philisophy,Music) M.Sc. (Math,Physics, Chemistry,Botany, Zoology,Stastics, In-organic Chemistry, Home-Science) M.Phil (Marathi,English, Urdu,Economics, Geography, Physics,Chemistry, Zoology,Botany, Stastics,Math, Home-Science) | For the session 2009-2010 2010-2011 2011-2012 2012-2013 & 2013-2014 |
| 2. | Amravati Nagar Wachanalaya, Amravati. | C.Lib. | For the session 2013-2014 & 2014-2015 |
| 3. | Matoshri Vimalabai Deshmukh Mahavidyalaya, Panchawati Chowk, Morshi Road, Amravati . | B.A, B.Sc.(Home-Science) D.B.M. | For the session 2014-2015 2015-2016 2016-2017 2017-2018 & 2018-2019 |

(2014-15)
अधिसूचना

| | | | |
|-----|--|--|---|
| 47. | Rajiv Gandhi Science College, Mehakar Distt. Buldhana. | B.Sc., B.Com., B.Sc.(Home-Science) B.C.A. | For the session 2013-2014. |
| 48. | Shahu Maharaj College of Education, Buldana | M.Ed. | For the session 2013-2014 |
| 49. | Rambhau Lingade Shikshan Mahavidyalaya, Buldhana. | B.Ed. | For the session 2013-2014 |
| 50. | Satyajit B. Ed. College, Mehakar. Distt. Buldhana. | B.Ed. | For the session 2013-2014 & 2014-2015 |
| 51. | Shri Pundalik Maharaj College, Nandura Rly. Distt. Buldhana. | B.Sc. | For the session 2011-2012 & 2012-2013 |
| 52. | Abhinav College of Education, D.P. Road, Chikhali. Distt. Buldhana. | B.Ed. | For the session 2013-2014 & 2014-2015 |
| 53. | Saraswati College, Gaulkhed, Road, Shegaon. Distt. Buldhana. | B.B.A., B.C.A. | For the session 2013-2014 |
| 54. | Savitribai Fule Vidyan Mahavidyalaya, Shindkhed Raja. Distt. Buldhana. | B.Sc., B.A. | For the session 2013-2014 |
| 55. | Mahatma Jyotiba Fule Science College, Sangrampur Tq. Sangrampur Distt. Buldhana. | B.Sc. | For the session 2013-2014 |
| 56. | Shinde B.Ed. College, Anjani Bu. Mehakar. Distt. Buldhana. | B.Ed. | For the session 2013-2014 & 2014-2015 |
| 57. | G.S. Science, Arts And Commerce College, Khangaon, Distt. Buldhana. | B.C.A., M.Sc.(Chemistry, Zoology, Computer Science) COP 1. Stastical Application of Various Techniques 2. Fiber optics Communications 3. Solar Energy. | For the session 2013-2014 |
| 58. | Chhaganrao Bhujbal Arts & Commerce College, Hiwara Ashram, Tq. Mehakar, Distt. Buldhana. | B.A. | For the session 2013-2014 |
| 59. | Shivajirao Moghe Kala, Vanijya & Vidnyan Mahavidyalaya, Kelapur (Pandharkawada) Distt:-Yavatmal. | B.A., B.Com., B.Sc. | For the session 2013-2014 & 2014-2015 |
| 60. | Shri Govindrao Pawar Physical Education College, Kalamb. Distt:-Yavatmal. | B.P.Ed., B.P.E | For the session 2013-2014 |

| | | | |
|-----|---|---|---|
| 61. | Rajiv Vidhyan & Vanijya Mahavidyalaya, Zari, Tq. Zari, Distt:-Yavatmal. | B.Com., B.Sc. | For the session 2013-2014 |
| 62. | Phulsingh Naik Mahavidyalaya, Pusad. Distt:-Yavatmal. | B.A.(Urdu,Urdu Litt., Persian Litt.) B.Com.(Urdu) B.Sc.(Urdu) | For the session 2013-2014 & 2014-2015 |
| 63. | Akola College of Journalism & Social Work, Akola. | B.J.M.C. M.J.M.C. | For the session 2013-2014 |
| 64. | Jai Bajrang Arts College, Channi, Dist :- Akola. | B.A. | For the session 2013-2014 |
| 65. | Shri Datt Arts College, Asegaon Pen, Tq. Risod. Distt :- Washim | B.A. | For the session 2013-2014 |
| 66. | Matoshri Nanibai Gharphalkar Science College, Babhulgaon Distt:-Yavatmal | B.Sc. | For the session 2014-2015 |
| 67. | Abasaheb Parvekar Arts, Commerce College, Yavatmal. | B.A. (Rural Handicraft) COP 1.Communication Skill in English 2. E-Commerce 3. Hotel Management 4. Library Office Automation | For the session 2013-2014 |
| 68. | Jijaou College of Education, Yavatmal. | B.Ed. | For the session 2013-2014 & 2014-2015 |
| 69. | S.P.M. Science & Gilani Arts & Commerce Mahavidyalaya, Ghatanji Distt:-Yavatmal | M.A-I,II (History, Marathi) | For the session 2012-2013 |
| 70. | Mungsaji Maharaj Mahavidyalaya, Darwha Distt-Yavatmal | M.A.-I,II (Political Science) M.Com.-I,II | For the session 2012-2013 |

स्वा/-
(दिनेशकुमार जोशी)
कुलसचिव
संत गाडगे बाबा अमरावती विद्यापीठ

SANT GADGE BABA AMRAVATI UNIVERSITY GAZETTE



Official Publication of Sant Gadge Baba Amravati University

PART-TWO

Thursday, the 8th November, 2012

Notification

No.: 155/2012

Dated : 8/11/2012

**Subject : Syllabus For Certificate / Diploma / Advanced Diploma Course In
"Fibre Optic Communication " Under The Scheme Of Career Oriented
Programme.**

It is notified for general information of all concerned that the authorities of University have accepted the syllabi for Certificate / Diploma / Advanced Diploma Course in "Fibre Optic Communication" along with other details under the scheme of Career Oriented Programme at first degree level shall be as given in Appendix-A, appended with this notification.

It is further notified that the eligibility criteria and other details along with the Scheme of examination shall be as provided under Ordinance No.47 of 2005, Regulation No.38 of 2005, Direction No.6/2008 and 7/2008.

Sd/-
(Dineshkumar Joshi)
Registrar,
Sant Gadge Baba Amravati University

Appendix-A

**Syllabus Prescribed for Certificate Course in "Fibre Optic Communication"
under the Scheme of Career Oriented Programme**

Theory paper shall be of 3 hours duration & carry 100 marks. Each Unit carry 20 marks. The practical shall be of 4 hours duration and carry 50 marks.

Theory :

Unit-I : Overview of Optical Fibre Communication :- Block diagram of optical fibre communication system. Advantages and disadvantages of optical fibre system. Applications – industry, defence, commercial fields.

Optical Fibres :- Types of optical fibres, structure of optical fibres, principle of transmission of light in optical fibre, basic optical laws, refraction & Snell's law, total internal reflection, conditions for total internal reflection, light propagation through an Optical Fibre, acceptance angle, numerical aperture.

Unit-II : Classification of Optical Fibres :- Modes of propagation, step index fibre, monomode step index fibre, multimode graded index fibre, ray path inside the core, inertial and skew rays.

Fibre Fabrication :- Classification, External CVD, Internal CVD processes and their characteristics.

Fibre Cables :- Types, materials used, construction, testing, role of strength material, selection criteria.

Unit-III : Electronic Components :- Construction of pn junction diode, symbol forward & reverse biased operation, VI characteristics, applications. NPN & PNP transistors – construction & working of BJT, symbols, CB, CE & CC configurations.

Power Supply : Avalanche breakdown, Zener breakdown, Zener diode operation & VI Characteristics, Rectifier & filter. Regulation – Zener regulator, Block diagram of power supply, regulated power supply, IC power supply & their functional description.

Unit-IV : Optical Display Devices :- Necessity of optical displays, types of optical displays, numeric, alphanumeric displays, segmental displays – seven segment, fourteen segment, dot matrix, LCD display – dynamic scattering & field effect type, construction & working principle.

Measuring Instrument :- Multimeter, Cathode Ray Oscilloscope, Digital voltmeter, Function generator – working principle of each with simple block diagrams & applications.

Unit-V : Optoelectronic Devices :- LDR- Construction, operation & VI characteristics.
Optical Sources :- Construction, operation and Characteristics of LED, LET, Semiconductor laser diode.
Photodetectors :- Photoemissive, photoconductive and photovoltaic devices, construction, operation and characteristic of pn junction photodiode, PIN photodiode, avalanche photodiode, phototransistor, photovoltaic cell.

Practicals :- Any 10 Experiments based on above syllabus.

Duration of Practical Marks :

One Experiment - 30 Marks
Viva - 10 marks
Practical Record - 10 marks

Total Marks - 50

**Syllabus Prescribed for Diploma Course in “Fibre Optic Communication”
under the Scheme of Career Oriented Programme**

Theory paper shall be of 3 hours duration & carry 100 marks. Each Unit carry 20 marks. The practical shall be of 4 hours duration and carry 50 marks.

Theory :

Unit-I : Digital Techniques :- Decimal, binary number system, gates – OR, AND, NOT, NOR, NAND gates – definition, symbol, Boolean equations, truth tables, pin diagrams of each. Flip-flop – symbol & function. Counter & register – symbolic functional description.
Combinational Logic – Definition, function & operation of Encoder, Decoder, Multiplexer, Demultiplexer with symbolic diagrams.

Unit-II : LASER System :- Definition, properties, laser action, laser as an amplifier of light, absorption, spontaneous & stimulated emission, population inversion, principle of 3 & 4 level laser. Applications, semiconductor laser, fibre laser.
Transmission Characteristics of Fibres :- Fibre losses, attenuation, absorption, scattering, bending, dispersion, distortion, noise – brief introduction of each.

Unit-III : Optical Amplifiers :- Transistor amplifier CB, CE mode action, Feedback concept.
Operational Amplifiers – symbol, functional description, Inverting – Non Inverting functions, pin diagram.
Optical Amplifiers :- Basic applications and types of Optical Amplifiers, Semiconductor laser amplifier, fibre amplifier.

Unit-IV : Optical Components :- Optical Splicers :- Splicing techniques, fusion splice method, steps involved in splicing.
Optical Fibre Connectors :- Types V groove connector system.
Optical Switches :- Brief introduction.
Optical Couplers :- Star and T Couplers, characteristic, operating modes, Applications-diode-diode coupler, diode-transistor coupler.

Unit-V : Optical Devices :- Repeaters, Regenerators, Transponders, Filters, Isolators, Attenuators – functional description of each with simple diagrams.

Practicals :- Any 10 Experiments based on above syllabus.

Duration of Practical Marks :

One Experiment - 30 Marks
Viva - 10 marks
Practical Record - 10 marks

Total Marks - 50

**Syllabus Prescribed for Advanced Diploma Course in “Fibre Optic Communication”
under the Scheme of Career Oriented Programme**

Theory paper shall be of 3 hours duration & carry 100 marks. Each Unit carry 20 marks. The practical shall be of 4 hours duration and carry 50 marks.

Theory :

- Unit-I :** Electronic Communication :- Analog Communication – Modulation, need of modulation, Types of modulation, Basic ideas of AM, FM & Demodulation.
Digital Communication :- Data Transmission – Serial & parallel transmission, Direction of data transmission – simplex, half duplex, full duplex, pulse modulation – PAM, PWM, PCM.
- Unit-II :** Transmitter & Receiver :- Functional descriptions.
Optical Transmitter Operation – Driver circuit for LED, driver circuit for Laser.
Optical Receiver Operation – Pre-amplifier design of APD control circuit, fibre optic trunk transmission * broadband transmission – Basic ideas with functional description.
- Unit-III :** Fibre Optic Measurements :- Test equipment, fibre loss & attenuation measurement, dispersion measurement, OTDR – block diagram & working.
Optical Power, wavelength, frequency, bandwidth & signal quality measurements.
Fibre Optic Sensors – Coherent and non coherent system, Mach-Zehnder Fibre Optic interferometer, Fibre Fabry Perot interferometer.
- Unit-IV :** Fibre Optic Networks :-
Computer Network Communication :- Network, types of network, concept of LAN, MAN, WAN, Network Topologies – bus, ring, star, tree.
Optical Networks :- Network Concepts, Introduction to SONET & SDN.
- Unit-V :** Advanced Optical Communication :- Fibre data links, Digital transmission System – Point to point link, digital links. Wave length division Multiplexing.
Internet Communication – Basic concepts.
Modem – Brief Explanation with simple diagrams.
Satellite Communication – Orbital Mechanics and Launching, satellite communication system.
Mobile Communication – Cellular Phone – functional description with simple block diagram.

Practicals :- Any 05 Experiments based on above syllabus.

Duration of Practical Marks :

One Experiment - 30 Marks

Viva - 10 marks

Practical Record - 10 marks

Total Marks - 50

Project Work / Field Work :- Marks 50

The project work / field work involving study tour / visit to the related institution / organization / industry & the report should be submitted.

Recommended Books :-

- 1) Basic Electronics – B.L.Theraja
- 2) Principles of Electronics – V.K.Mehata
- 3) A course in Electrical, electronics measurements & instrumentation – A.K.Sawhney
- 4) Digital Electronics & microcomputers – Gaur.
- 5) Modern digital electronics – R.P.Jain
- 6) A text book of communication engineering – A. Kumar
- 7) Principles of communication engineering – Umesh Sinha
- 8) Optical fibres and fibre optical communication systems – Subirkumar Sarkar
- 9) Optoelectronics & fibre optic communication – Sarkar and Sarkar
- 10) Fibre Optics Technology & Applications – Stewart Personick
- 11) Fibre Optic communication – D.G.Agrawal
- 12) T.B. on Optical fibre communication & applications – S.C.Gupta.
- 13) Fibre optic communication systems – G.P.Agrawal
- 14) Fundamentals of fibre optics in telecommunication & sensor system – B.P.Paul.
- 15) Optoelectronics – P.Bhushan Mital.
- 16) Optical fibre communication systems- M.K.Raina
- 17) Fibre Optics in Telecommunication – Sharma N.
- 18) Optical Electonics – Ghatak
- 19) Fibre Optics and Optical Communication – Ghatak A.K.
- 20) Introduction to fibre optics – Ghatak, Thyagrajan
- 21) Fibre Optics and Opto Electronics – R.P.Khare
- 22) Semiconductor optoelectronic devices – Bhattacharya P.

- 23) Optical Communication – Jain, Gupta.
- 24) Optical fibre system & their components – Sharma A.B., Halney, Butusov.
- 25) Laser : Principles, types & applications – K.R.Nambiar.
- 26) Lightwave communication systems – Rajappa Papannareddy
- 27) Electronic Communication – Roddy, Coolen.
- 28) Understanding Fibre optics – Jeff Hecht
- 29) Optoelectronic devices – Wilson.
- 30) Fundamentals of optical fibres – John Buck
- 31) A Introduction to optical fibre – Cherin A.H.
- 32) Introduction to Optical electronics – Jones, Harper, Row.
- 33) Optical communications systems – Growar.
- 34) Fibre optics communications – Palais.
- 35) Optical fiber system technology & applications – Kao
- 36) Optical Fiber Communication – Keiser.
- 37) Optical Fiber Communication Principles & applicatioans – Senior J.M>
- 38) Optical Communication System– John Grower
- 39) Optical Fiber Communication – A.Selverajan.

Notification

No.: 156 /2012

Date : 8/11/2012

Subject : One additional Chance for failures of old course of BLISc. & MLISc.

It is notified for information of all concerned that the Authorities of the University have provided one additional chance to appear for the examination to the failure students of old course of Bachelor of Library & Information Science (B.Lib.) and Master of Library and Information Science (M.Lib.) i.e. Summer-2013 Examination.

Sd/-

(Dineshkumar Joshi)

Registrar,

Sant Gadge Baba Amravati University.

NOTIFICATION

No.157 /2012

Date :8/11/2012

Subject : Nomination of one representative on University Senate

It is notified for general information of all the concerned that the following person as mentioned in column No.3 has been nominated by the Hon'ble Vice-Chancellor on the University Senate for a term of one year by rotation i.e. 1st September 2012 to 31st August, 2013 under the provisions of Maharashtra Universities Act, 1994, as mentioned in column No.2 of the following table.

| Sr.No. | Provision of Maharashtra Universities Act, 1994 | Name & Address of the person |
|--------|--|---|
| 1 | 2 | 3 |
| 1) | U/s 25(2)(aa) One representative of Municipal Council or a Municipal Corporation with the university area nominated by the Vice-Chancellor for a term of one year by rotation. | Sau.Aruna Kishor Kadam (Chairman, Municipal Council, Chikhali) Infront of Rest House, Anand Nagar, Behind Pawan Vyayam Shala, Ward No. 19, Chikhali Tq. Chikhali, Dist.Buldhana |

Sd/-

(Dineshkumar Joshi)

Registrar,
