Bed.

ગુજરાત થુનિવર્સિટી ન. ચેકેડે મિક-ળ - <u>૩</u>૧૩૮૯ -२००० ગુજરાત શુનિવર્ભિટી કાંચલિય અમદાવાદ-૯. તાં. ૯ -૮-૨૦૦૦

प २ पतः भें रू

યુનિવર્સિટી સાથે સલગ્ન શિહ્યા વિદ્યાસાખાની સર્વે કોલેજોના યા ચાર્ચશ્રીને જણાવવાનું કે, બી.એડ. પાર્ટ-૧ના અભ્યાસક્રમમાં પેપર-૩મા કોમ્પ્યુટર સ્પેશી થલ ફિલ્ડ હતું, તેની જગ્લાચે વિષયનું નામ બદલીને યા ઇ. ટી. ઇન ચેજચુકેશનનો નવા વિષય સાથેનો સુધારેલો અભ્યાસક્રમ જુન-૨૦૦૦થી ચમલી બનાવવામાં આવ્યો છે, જે પરિ શિષ્ટ તરી કે સામેલ છે.

વધુમાં બી. ચેડ. ના ચાતરીક ગુણાકન (૪૦૦ગુણ) નુ વિશાજન કરેલ છે. જે પરિશાબ્ટ-ર તરીકે સામેલ છે, જેની નોધ લેવા લ્યતી છે.

કુલસ. (ચવારાજ

પ્રતિ:

- (૧) સિક્ષણ વિદ્યાશાખાની સર્વે કોલેજોના ચાચાર્ચવી યો
- (૨) ડીનથી, સિલ્લ્યની વિધાશાખા
- (૩) પરીક્ષા નિયામકશી, પરીક્ષા વિશાગ, ગુજરાત થુનિ. અમદાવાદ-૯
- (૪) મદદનીશ કુલસ ચિવ, પરીક્ષા વિભાગ, ગુજરાત ચુનિ. અમદાવાદ-૯
- (૫) શ્રીમતી પ્રકુલ્લા ખેત જે. તિવેદી પરીધા વિશાગ,ગુજરાત યુનિ. અમદાવાદ-૯

- (a) Word Processing-Notepad, Wordpad, MSWORD. Document creation, formatting, linking, insertion of text and images, editing, spell/grammer checking, page-layouts, table creation, printing . in MSWORD.
- (b) Spread sheets-entering data, formula, what-if analysis, formats, functions, templates, charts and maps in MS-EXCEL. Spread sheet applications.
- (c) Database Applications-Data organizations, creation of databases, forms, data validity checks, printing reports, queries, relational and logical operators (27). in MS-ACCESS.

Unit-5 Communication, Web and Internet

[8 Hrs]

- (a) Local Area Networks-architecture, servers, ring/star/bus topology, peerto-peer networks, wireless LANs. Network Interface Card. Ethernet, Token Ring.
- (b) Wide Area Networks-Public networks, Intranets and Extarnets, firewalls, network devices, network protocols.
- (c) The Internet and WWW-Access options for Internet, modems, ISDN lines, dial-up, cable, leased line. World Wide Web-URLs, web sites, Uses of Internet. Various search engines and prominent sites for information access.
- (d) Introduction to simple functions of HTML

Unit-6 Use of Multimedia and Presentation Software for Instructional Design [3 Hrs]

- (a) Multimedia-Fundamentals, applications in entertainment, education & training. Tools of multimedia-Paint & draw, 3D graphics, animation, morphing, sound & music, video, authoring packages. Multimedia projectors and kiosks.
- (b) Presentation Software-Full features of a typical presentation package such as MS-POWERPOINT.

Unit-7 Use of IT in Education and Administration

[3 Hrs]

Introduction to educational software for teaching and enhancing understanding of various subjects. Use of IT in class-room teaching, library, research, tutorials, examinations and school administration.

B. PRACTICALS

Following Practical work should be done in the computer laboratory:

1. Windows-98 or equivalent OS functions and file handling	4 4 Hours
2. Word Processing- 10 exercises (5:2)	न्ने - S Hours
3. Spread sheets- 10 exercises (xix)	3-5 Hours AN
4. Database creation and processing- 10 exercises (Six)	3-5 Hours Off
5. Internet demonstration/hands-on	7 3 Hours
6. Presentation Package-10 exercises (C(x))	3.8 Hours

ach student will have to prepare a file containing the record/output of practicals and the same but duly certified by the concerned teacher, will have to be presented before the examiner at the time of final practical examination.

References:

- 1. Information Technology: The Breaking Wave, Dennis Curtin et al, Tata McGraw-Hill, 1999.
- Computers In Your Future, Second Edition, Marilyn Meyer & Roberta Baber, Prentice-Hall, 1998.
- 3. Windows 98: 6 in 1, Calabria & Burke, Prentice-Hall, 1999.
- 4. MS OFFICE 97, Aptech, Tata McGraw-Hill, 1998.
- 5. Internet: AN Introduction, CIStems-TMH, 1999.

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GUJARAT UNIVESITY IT in Education (Optional Special Field of Education at B.Ed.)

- 1. The syllabus of the new special field "IT in Education" will be the appendix attached herewith.
- 2. Total theory hours will be 40 and practical hours will be 30.
- 3. The theory paper will be of 25 marks and of 1-1/2 hour's duration. The practical Examination of one hours too be conducted after examination will also carry 25 marks. Total marks however, will be 50 for this subject.
- Every student will be allocated one computer during practical work, i.e. only one student will be allowed to work on one machine. The batch size will be determined by number of computer.
- 5. The college desirous of offering this subject will have to
 - a. Arrange at least 5 computer with one DMP, one Inkjet printer, and an internet connection
 - b. Arrange a part time Programmer for practical sessions.
 - c. Arrange a part time Lecturer or train a Teacher to teach this subject.
- 6. The college may charge a fee of Rs.500/- per term as Laboratory fee.
- 7. The desirous college may be allowed of offer this subject from this academic year 2000-2001.

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Syllabus for B. Ed. Special Field IT in Education

Subject: IT in Education

Marks: 50

Objectives:

To help student-teachers develop

1. Awareness of potentiality of Information Technology.

2. Detailed knowledge of functioning of Microcomputers and Internet.

3. Hands-on experience of using Computers and theres.

- 4. Knowledge of window-based Operating system.
- 5. Skills in word processing, spreadsheet, database and presentation applications.
- 6. Knowledge of educational software.
- 7. Understanding applications of IT in school administration.

A. THEORY

Unit-1

Introduction to Information Technology and Computer Systems

[3 Hrs]

- (a) Introduction to IT —Information Processing, Hardware, Software, Data, Information, Applications of IT in different areas.
- (b) Types of Computers-Supercomputers, mainframes, servers, networks, desktop, workstations, notebook, palmtops.
- (c) Analog and digital signals, binary system, bit, byte and word.
- (d) Central Processing Unit-microprocessor chip, memory, memory types & uses, bus, communication with peripherals.

Unit-2 Input/Output and Secondary Storage Devices

[5 Hrs]

- (a) I/O devices-keyboards, OCR, bar code reader, speech recognitions, scanners, mouse, joystick, display screens, printers-laser, dmp, thermal, line-printers; plotters, special purpose I/O devices such as MICR, card scanners etc.
- (b) Storage devices and media-magnetic storage, optical storage, magnetooptical storage, solid state storage, storage characteristics.
- (c) Floppy disks, Hard disks, Optical disks-CD, DVD. Recording principles of these media.

Unit-3 Introduction to Operating System and Software

[3 Hrs]

Operating system functions. BIOS. Multitasking, multithreading, multi-user, multiprocessor operating systems. File Management-Files, folders, drives, trees, paths File Utilities-formatting, fragmenting, disk scanning, file deletion, recycle bins. OLE.

Unit-4 Office Automation Packages

[15 Hrs]