

कार्यालय प्राचार्य, (अग्रणी) शासकीय घनश्याम सिंह गुप्त स्नातकोत्तर महाविद्यालय
बालोद, जिला-बालोद (छ.ग.)

Website - www.govtcollbalod.ac.in

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// अर्धवार्षिक परीक्षा सत्र-2021-22 सूचना //

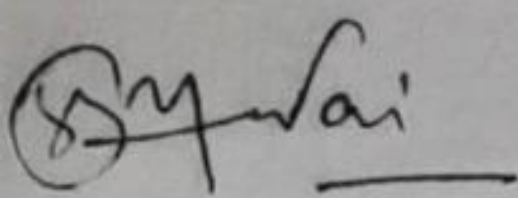
दिनांक 09/02/2022

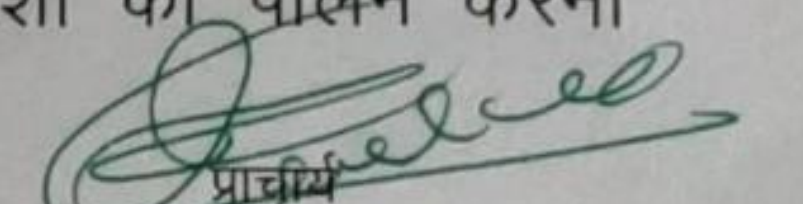
महाविद्यालय के बी.ए./बी.एस.सी./बी.कॉम/बी.सी.ए. भाग-एक, दो एवं तीन के नियमित विद्यार्थियों की अर्धवार्षिक परीक्षा 2021-22 दिनांक- 15/02/2022 से 19/02/2022 तक ऑनलाईन/ब्लैन्डेड पद्धति में आयोजित की जा रही है। समस्त नियमित विद्यार्थी निम्न दिशा निर्देशों का पालन करते हुए परीक्षा में सम्मिलित हो सकते हैं :-

1. विद्यार्थी उत्तर पुस्तिका समय सारिणी के अनुसार महाविद्यालय से समय-11:00 से 4:00 बजे तक प्राप्त कर सकेंगे अथवा उत्तरपुस्तिका के रूप में ए-4 साईज पेपर का भी उपयोग कर सकेंगे।
2. विद्यार्थी स्व:हस्तलिखित उत्तर पुस्तिका प्रश्नपत्रवार पृथक-पृथक तैयार करेंगे, जिसके मुख्य पृष्ठ में परीक्षार्थी का नाम, पिता का नाम, कक्षा एवं संकाय, विषय एवं प्रश्न पत्र का नाम, प्रवेश क्रमांक, मोबाईल नंबर अनिवार्यतः अंकित करेंगे।
3. उत्तर पुस्तिका जमा करने की निर्धारित तिथि में महाविद्यालय में निर्देशित विभाग/कक्ष में जमा समय-11:00 से 4:00 बजे करना होगा। जमा करते समय प्रवेश कार्ड लाना अनिवार्य है।
4. समस्त कक्षाओं एवं विषयों का प्रश्न पत्र महाविद्यालय के वेबसाईड (www.govtcollbalod.ac.in) में दिनांक 15/02/2022 को अपलोड किया जायेगा।

उत्तर पुस्तिका वितरण हेतु विवरण				उत्तर पुस्तिका जमा हेतु विवरण		
क	दिनांक	कक्षा / पाठ्यक्रम	कक्षा क्रमांक	दिनांक	कक्षा / पाठ्यक्रम	कक्षा क्रमांक
1	10/02/2022	BA -Ist	26	21/02/2022	BA -Ist	48
		BSc-Ist (Maths)	10		BSc-Ist (Maths)	10
		BSc-Ist (Computer Sc.)	07		BSc-Ist (Computer Sc.)	07
		BCA-Ist			BCA-Ist	
		BSc-Ist (Bio)	34		BSc-Ist (Bio)	35
		BCom-Ist	09	BCom-Ist	41	
2	11/02/2022	BA -IIInd	26	22/02/2022	BA -IIInd	48
		BSc-IIInd (Maths)	10		BSc-IIInd (Maths)	10
		BSc-IIInd (Computer Sc.)	07		BSc-IIInd (Computer Sc.)	07
		BCA-IIInd			BCA-IIInd	
		BSc-IIInd (Bio)	34		BSc-IIInd (Bio)	35
		BCom-IIInd	09	BCom-IIInd	41	
3	12/02/2022	BA -IIIrd	26	23/02/2022	BA -IIIrd	48
		BSc-IIIrd (Maths)	10		BSc-IIIrd (Maths)	10
		BSc-IIIrd (Computer Sc.)	07		BSc-IIIrd (Computer Sc.)	07
		BCA-IIIrd			BCA-IIIrd	
		BSc-III (Bio)	34		BSc-III (Bio)	35
		BCom-IIIrd	09	BCom-IIIrd	41	

नोट- उत्तर पुस्तिका वितरण/जमा करते समय कोविड-19 हेतु जारी निर्देशों का पालन करना अनिवार्य है।




प्राचार्य
शासकीय घनश्याम सिंह गुप्त
स्नातकोत्तर महाविद्यालय बालोद
Distt. Balod (C.G.)

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-I

Half Yearly Examination 2021-22

Subject- Bridge Course

(For Non - Mathematics Student Only)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. (i) Resolve into partial fraction-

$$\frac{1}{(x+2)(x+3)}$$

(ii) If the third term of an AP is 18 and seventh term is 30, find the series.

Q2. (i) Find the value of n if ${}^9P_5 + 5 {}^9P_4 = {}^{10}P_n$

(ii) Using the principle of mathematics induction prove that

$$1^2 + 2^2 + 3^2 + \dots + n^2 = \frac{n(n+1)(2n+1)}{6}, \text{ for all } n \in N$$

Q3. (i) Expand the following by using binomial theorem $(2x-3)^6$

(ii) Find $3A-B$ if

$$A = \begin{bmatrix} 0 & 2 & 3 \\ 2 & 2 & 4 \end{bmatrix} \text{ and } B = \begin{bmatrix} 7 & 6 & 3 \\ 1 & 4 & 5 \end{bmatrix}$$

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-I

Half Yearly Examination 2021-22

Subject- Discrete Mathematics (BCA-101)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. Prove that : (10 Marks)

i) $\sim\{p \wedge (\sim p)\}$ is a tautology.

ii) If $P \Leftrightarrow Q$ is true, then determine the truth value of $P \vee (\sim Q)$.

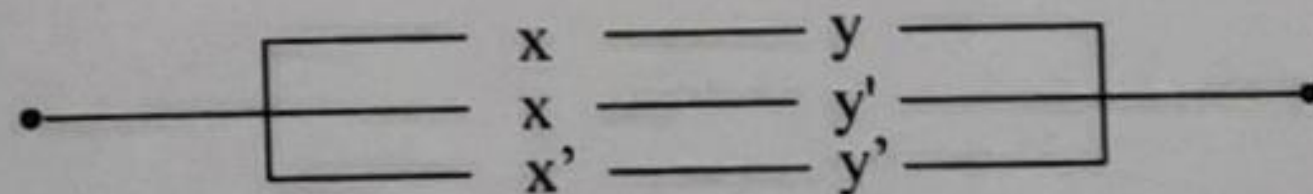
Q2. i) State and prove absorption laws in a Boolean algebra.

ii) In a Boolean algebra if $a.x = b.x$ and $a.x' = b.x'$, then show that $a = b$.

Q3 i) Write the following predicate into symbols and also write its negative in symbols :

“Every rational number is a real number.”

ii) Draw a simpler circuit for the following diagram and verify circuits by truth tables :



Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-I

Half Yearly Examination 2021-22

Subject- Computer Fundamental (BCA-102)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. Write short note on. (10 Marks)

i) Block diagram of computer

ii) Logic Gates.

Q2. Write short note on. (10 Marks)

i) Keyboard

ii) Printer

Q3. Write short note on. (10 Marks)

i) Digital, Analog and Hybrid Computer

ii) MICR.

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-I

Half Yearly Examination 2021-22

Subject- Programming in C Language (BCA-103)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. What is Operator? Explain different type of operators in C languages. (10 Marks)

Q2. What is Data type in C? Explain different data types in C. (10 Marks)

Q3. What is control statement? Explain with examples. (10 Marks)

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-I

Half Yearly Examination 2021-22

Subject- PC Software and Multimedia (BCA-104)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. What is MS word? Explain its feature. (10 Marks)

Q2. What is MS Excel? Explain its feature. (10 Marks)

Q3. Write short note on. (10 Marks)

i) Paragraph Setting ii) type of chart

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-I

Half Yearly Examination 2021-22

Subject- Web Technology and E-Commerce (BCA-105)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. What is OSI Model? Explain it. (10 Marks)

Q2. What is HTML? Explain any 10 tags. (10 Marks)

Q3. Write short note on. (10 Marks)

i) Various Protocol ii) Table and its attributes

Govt. Ghanshyam Singh Gupt PG College Balod
Half Yearly Exam- 2021-22
BCA-Ist Year
Communication Skills

(Marks-20)

- Q. 1 Write a report on annual day programme or the annual function and prize' distribution of your college . (7)
- Q. 2 Write a letter to your father, Who wants to know the progress in your studies.(7)
- Q. 3 Write the precis of the following passage and suggest a suitable title. (6)

Perhaps no definition of democracy is more popular and universally acceptable than which is given by Abraham Lincoln. He defines democracy as a government of the people, by the people and for the people, certainly democracy is the most representative form of government. We should not forget that India is a country with diverse cultures, tradition, religious and political beliefs. It has diverse linguistic groups and tribals. It is really quite a herculean task to keep such a country together. To bind the people and take the nation ahead on the path of progress.

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-II

Half Yearly Examination 2021-22

Subject- Calculus and Differential Equations (BCA-201)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. i) Check the continuity of the function f given by $f(x) = 2x + 3$ at $x = 1$.

ii) Examine whether the function f given by $f(x) = x^2$ is continuous at $x = 0$.

Q2. i) If a function f is differentiable at a point c , then it is also continuous at that point.

ii) Find the derivative of the function given by $f(x) = \sin(x^2)$.

Q3. i) Show that the function f defined by

$$f(x) = |1 - x + |x||,$$

where x is any real number, is a continuous function.

ii) Differentiate $x^{\sin x}$, $x > 0$ w.r.t. x .

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-II

Half Yearly Examination 2021-22

Subject- Database Management System (BCA-203)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. What is DBMS? Explain its architecture. (10 Marks)

Q2. What is ER Model? Explain with example. (10 Marks)

Q3. Write short note on. (10 Marks)

i) Database languages ii) Concept of Keys.

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-II

Half Yearly Examination 2021-22

Subject- Programming in C++ Language (BCA-203)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. What is OOPs? Explain its features. (10 Marks)

Q2. What is function? Explain how to call function in C++. (10 Marks)

Q3. Write short note. (10 Marks)

i) Control structure in C++

ii) assessing member function in C++

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-II

Half Yearly Examination 2021-22

Subject- Computer Networks (BCA-204)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. What is LAN? Explain LAN topology. (10 Marks)

Q2. What is data transmission? Explain data transmission mode. (10 Marks)

Q3. Write short note on. (10 Marks)

i) Protocol ii) Modem

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-II

Half Yearly Examination 2021-22

Subject- Operating Systems with Linux (BCA-205)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. What is Operating System? Explain different types OS. (10 Marks)

Q2. What is Process? Explain process state. (10 Marks)

Q3. Write short note on. (10 Marks)

i) Spooling ii) CPU Scheduling

Govt. Ghanshyam Singh Gupt PG College Balod
Half Yearly Exam- 2021-22
BCA-IIInd Year
Foundation course-II
English Language

(Marks-20)

Note – Attempt any 2 Questions.

- Q. 1 What are the identifying features of Indian art? (10)
- Q. 2 (a) Write a short note on Ramayan and Mahabharata. (5)
- (b) Write a short note on vedic Literature (5)
- Q. 3 Discuss the causes of freedom struggle of 1857. (10)

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-III (New)

Half Yearly Examination 2021-22

Subject- Statistical Analysis (BCA-301)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. Calculate the SD & coefficient of variation for the following table:

class	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
frequency	5	10	20	40	30	20	10	5

Q2. Draw a histogram for the following frequency distribution:

Age in year	0-10	10-20	20-30	30-40	40-50	50-70	70-100
	5	15	20	25	40	30	15

Q3. From a pack of 52 cards 6 cards are drawn at random find probability of the following events:

- i) 3 cards are red and 3 cards are black cards.
- ii) 3 cards are king and 3 cards are queen.

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-III (New)

Half Yearly Examination 2021-22

Subject- Programming in Python(BCA-302)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. Illustrate the different types of control flow statements available in python with Flowchart. (10 Marks)

Q2. Explain python functions & its types. (10 Marks)

Q3. Write a program to compare three numbers and print the largest one. (10 marks)

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-III (New)

Half Yearly Examination 2021-22

Subject- Dot Net Technology (BCA-303)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. What is Dot Net framework? Explain its features. (10 Marks)

Q2. Explain – (10 Marks)

- A) Operator & its types.
- B) Data type.

Q3. Write short note. (10 Marks)

- i) common type system
- ii) combo box
- iii) progress bar
- iv) text box
- v) progress bar

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-III (New)

Half Yearly Examination 2021-22

Subject- Software Engineering (BCA-304)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

- Q1. Explain the software quality assurance. (10 Marks)
- Q2. What is DFD? Draw a DFD for hospital management system.. (10 Marks)
- Q3. Explain SDLC. (10 Marks)

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-III (New)

Half Yearly Examination 2021-22

Subject- Data Structure (BCA-305)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. What is data structure & its types. (10 Marks)

Q2. Explain array & its types with example.(10 Marks)

Q3. What is sorting? Explain insertion sort algorithm with example. (10 Marks)

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-III (New)

Half Yearly Examination 2021-22

Subject- Computer System Architecture (BCA-306)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. Discuss various types of memories?

Q2. What is logic gate? Explain its types with truth table.

Q3. Explain k-map. Discuss sum of product & product of sum.

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-III (Old Course)

Half Yearly Examination 2021-22

Subject- English Language (Foundation Course)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

- Q1. (a) What does Information Technology actually deal with? (5 Marks)
(b) Write a summary of essay "Democratic Decentralisation". (5 Marks)
- Q2. Write essay on: (10 Marks)
(a) Computer Literacy. (b) Demonetisation in India.
- Q3. (i) Explain Luca's statement "Bores make cowards of all". (5 Marks)
(ii) Write essay on Environment Pollution. (5 Marks)

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-III (Old Course)

Half Yearly Examination 2021-22

Subject- Calculus and Geometry (BCA-301) Part-I

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

- Q1. If $f:[a,b] \rightarrow \mathbb{R}$ is a bound function, then for any partition p of $[a,b]$, prove that $L(p,f)$ and $U(p,f)$ are also bounded. (10 Marks)
- Q2. State and prove Fundamental theorem of integral calculus. (10 Marks)
- Q3. Prove that $\sin x(1+\cos x)$. (10 Marks)

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-III (Old Course)

Half Yearly Examination 2021-22

Subject- Differential Equations and Fourier Series (BCA-301) Part-II

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. Solve $(x^2 - yx^2)dy + (y^2 + xy^2)dx = 0$. (10 Marks)

Q2. Solve the following equation.

$(e^y + 1) \cdot \cos x \, dx + e^y \cdot \sin x \, dy = 0$ (10 Marks)

Q3. Solve the differential equation: (10 Marks)

$$\frac{d^2y}{dx^2} - 4y = e^x + \sin 2x$$

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-III (Old Course)

Half Yearly Examination 2021-22

Subject- Programming in JAVA (BCA-302)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. What is OOPs? Explain its feature. (10 Marks)

Q2. What Inheritance? Explain its type. (10 Marks)

Q3. Write short note on. (10 Marks)

- i) Class & Methods ii) Packages and Interface.

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-III (Old Course)

Half Yearly Examination 2021-22

Subject- Operating System (BCA-303)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. What is Operating System? Explain types of OS. (10 Marks)

Q2. What is scheduling algorithms? Explain FCFS. (10 Marks)

Q3. Write short note. (10 Marks)

i) Process Management

ii) Round Robin algorithms

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-III (Old Course)

Half Yearly Examination 2021-22

Subject- Software Engineering (BCA-304)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. Explain Software Life Cycle. (10 Marks)

Q2. Explain function oriented merit in SE. (10 Marks)

Q3. Write short note on. (10 Marks)

i) Waterfall Model

ii) Phase management process

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-III (Old Course)

Half Yearly Examination 2021-22

Subject- Multimedia Tools and Applications (BCA-305)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. What is Multimedia? Explain the steps to create simple multimedia in power point.
(10 Marks)

Q2. Explain principle and use of animation in multimedia. (10 Marks)

Q3. Write short note on. (10 Marks)

- i) Various image formats. ii) 2D-3D animation.

Govt. Ghanshyam Singh Gupta Post Graduate College, Balod (C.G)

Department of Computer Science and Application

BCA-III (Old Course)

Half Yearly Examination 2021-22

Subject- Financial Management and Accountancy (BCA-306- A)

Name: _____

Father's Name: _____

Mobile Number: _____

Email ID: _____

Note: Each question have equal marks. Solve any two questions. Max Marks 20.

Q1. What is Financial Management? Explain in details. (10 Marks)

Q2. Explain ratio analysis. (10 Marks)

Q3. Write short note on. (10 Marks)

i) Cost accounting. ii) Balance Sheet.

Govt. Ghanshyam Singh Gupt PG College Balod
Half Yearly Exam- 2021-22
BCA-IIIrd Year (old course)
Foundation course-II
English Language

(Marks-20)

Q. 1 Write a summary of the short story "Death of a clerk" in your own words? (5)

Q. 2 Write summary of the lesson "The Judgement seat of Vikramaditya" (5)

Q. 3 Give antonyms of the following words (5)

Guilty

Precious

Timid

Ancient

Sorrow

Q. 4 Write the precis of the following passage and give suitable title. (5)

A good teacher and an actor are alike with slightly difference. Both the teacher and actor hold the attention, interest of audience, pleasing voice facial expression, body language humour and good sense of understanding nice explanation, The actor learn's the speaking words by heart but teachers don't. Teacher can invent the word by his experience and expression audience take part in teachers play but not in actors play.