

Rayat Shikshan Santha's
Shri Sadguru Gangageer Maharaj Science, Gautam Art's &
Sanjivani Commerce College, Kopargaon .

Department Of Physics

Internal Unit Test -I (2021/22)

Subject:- Atoms and Molecules

Class - M.Sc.-I

Roll No.-

Date:- 04/05/2022

Marks - 20

Time:- 11.00am to 12.30pm

Q) Attempt any four of the following

- 1) Discuss Bohr's atomic model
- 2) Explain LS Coupling scheme for two valence electron system using neat vector diagram ?
- 3) Explain experimental set up of stark effect. Explain main features of stark effect?
- 4) Calculate the linear velocity of an electron in the first , second and third orbit of hydrogen atom
- 5) Using F-F electron configuration Find all possible values of total angular momenta

Savitribai Phule Pune University, Pune
Rayat Shikshan Sanstha's
S.S.G.M. College, Kopargaon
SYBSC 2021-22

Class test / Assignment . 2

Sub-communication Electronics(20 Marks)

Q.1 Short Answer Questions(each 2 marks)

1. Define Modulation. State its Different Types.
2. Define Modulation Index and percentage modulation index in AM.
3. State Different Application of Electronic Communication.
4. Define the term Communication. Give its classification.

Q.2 Long Answer Questions(Any 3)

1. Draw block diagram of communication system . Explain The role of each block in it.
2. Define AM and Drive the equation for AM wave.
3. Define noise . Explain any one type of noise.
4. A $20\text{k}\Omega$ resistor is at room temp(290k) calculate the thermal noise voltage for a BW of 100kHz .

RAYAT SHIKSHAN SANSTHA'S



**SHRI SADGURU GANGAGEER MAHARAJ SCIENCE,
GAUTAM ARTS & SANJIVANI COMMERCE COLLEGE
KOPARGAON, DIST. AHMEDNAGAR**

Jr. Supervisor's Signature

Examination 201 -201

Class : S.Y.BSC (A) Sub : Electronics
 Roll No. : 7206 Paper No : _____
 Date : 22/12/2021 Marks Obtained

Answer Book	Suppliment	Total

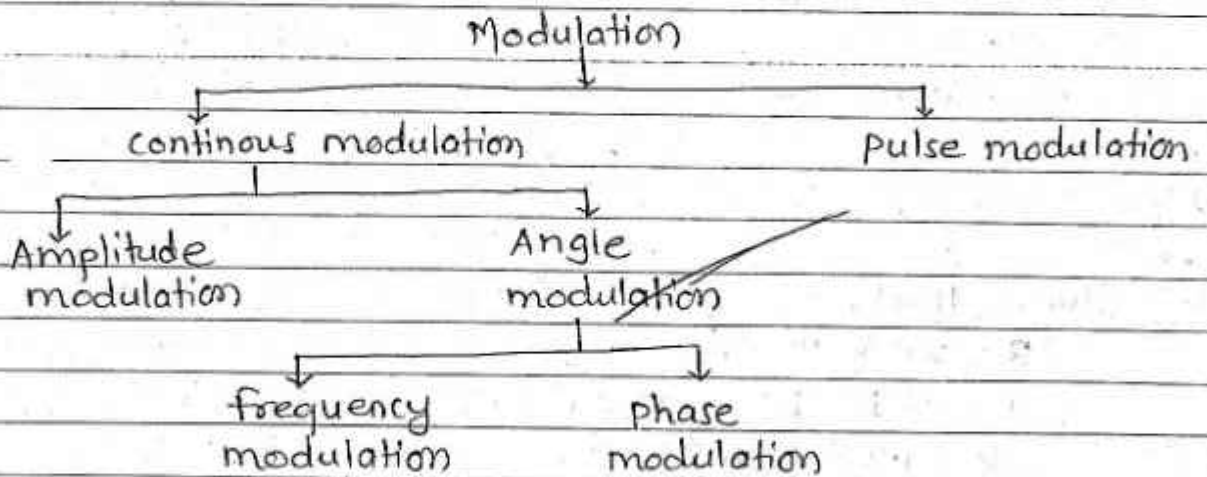
$11+7 = \frac{18}{20}$

Please Write from here. Write on both Sides.

Q.A)

$\frac{7}{8}$

- 1) Define modulation . state its diff types (2)
 → Modulation → The carrier signal varies according to instantaneous value of modulating signal



- 2) Define the modulation Index & % of M.I. in AM (2)
 → Modulation Index → The ratio of the peak value of modulating signal to the peak value of carrier signal is called as modulation index.

$$m_a = \frac{E_m}{E_c}$$

% of modulat

$$\% \text{ M.I} = \frac{E_{\text{ccos}\omega t} - E_{\text{mcos}\omega t}}{E_{\text{mcos}\omega t} + E_{\text{ccos}\omega t}}$$

- 3) state diff. application of electronic signal comm
- 1) Telemetry
 - 2) Radio broadcasting
 - 3) Wireless
 - 4) Surveillance
 - 5) T.V. Broadcasting
 - 6) Navigation

4) Define the term of communication & give its classification

→ Communication → Communication is a transfer of a signal one place to another place.
communication

Q.2)

4) →

Given that,

$$R = 20 \text{ k}\Omega$$

$$T = 290 \text{ K} = 290 + 273 =$$

$$k = 1.38 \times 10^{-23}$$

$$B.W = 100 \text{ kHz}$$

$$k \cdot T = 4.002 \times 10^{-21}$$

formula,

$$V_n^2 = 4RkTB$$

$$= 4 \times (20 \times 10^3) (1.38 \times 10^{-23}) (100 \times 10^3)$$

11/12

Test

1) Draw the block Dia. of comm. system & explain

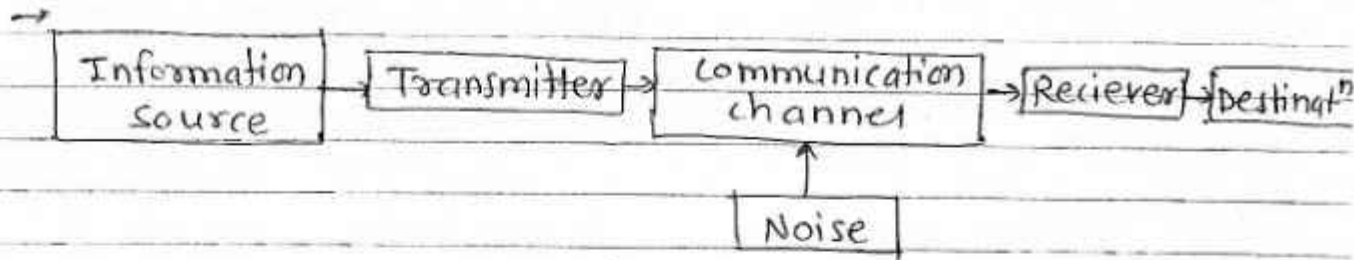


fig- block diagram of communication system

1) Information source → The man made sound waves are in the information signal. For electric communication the transfer for the suitable form for transmission.

2) Transmitter → The sound wave are transfer in the electrical signal. The information source are natural in nature for the communication are important to transmit sound wave in electrical signal.

3) Communication channel → The communication system through the signal goes transmitter to receiver. This process in their communication channel or medium.

4) Noise → The unwanted or undesirable signal along with desired signal is called Noise. Undesirable signal enter with the communication system and interferes the system is called a noise.

5) The Receiver → The desired signal are transfer receiver to destination. The collection of electronic component are process and transmitted to the destination is called as the Receiver.

3) Define A.M. and Derive eqn for AM wave (3)

→ Amplitude modulation → The amplitude carrier signal varies according to the instantaneous value of modulating signal.

* Expression -

$$e_m = E_m \cos \omega_m t \quad \text{--- (1)}$$

$$e_c = E_c \cos \omega_c t \quad \text{--- (2)}$$

A is the new amplitude,

$$A = E_c + E_m \cos \omega_m t \quad \text{--- (3)}$$

then $e = A \cos \omega_c t \quad \text{--- (4)}$

the eqn (3) put in eqn (4)

$$\begin{aligned} e &= (E_c + E_m \cos \omega_m t) \cos \omega_c t \\ &= E_c \left(1 + \frac{E_m \cos \omega_m t}{E_c} \right) \cos \omega_c t \end{aligned}$$

$$e = E_c (1 + m_a \cos \omega_m t) \cos \omega_c t$$

where, $m_a = \frac{E_m}{E_c}$

4)

Given that,

$$R = 20 \text{ k}\Omega$$

$$T = 290 \text{ K}$$

$$kT = 4.002 \times 10^{-21}$$

$$B = 100 \text{ kHz}$$

$$V_n^2 = 4RkTB$$

$$= 4(20 \times 10^3)(4.002 \times 10^{-21})(100 \times 10^3)$$

$$= 3.2016 \times 10^{-11}$$

$$V_n = \sqrt{3.2016 \times 10^{-11}}$$

$$= 5.65826 \times 10^{-6}$$

$$V_n = 5.65826 \mu$$

Rayat Shikshan Sanstha's
S.S.G.M.College,Kopargaon
Digital system design
TY BSC paper I

Date:09/12/2021
Teacher Name:Bhagure R.S.

Assignment 1st

- Q.1) what is the VHDL
- Q.2) compared the VHDL and HDL
- Q.3) what is the features of VHDL
- Q.4) Explain the top down and bottom up design methodology
- Q.5) Explain the different types of Operator's
- Q.6) Define the following terms
 - a) String b) identifier c) keywords d) Instances e) Comment f) Module g) Array
- Q.7)What is the 4 level it used in VERILOG
- Q.8) Explain the Data type used in VERILOG in detail
- Q.9) Explain the system tasks
- Q.10) Explain the Compiler Directives

Advance digital system design.

① what is the VHDL

Verilog HDL is general purpose hardware description language that is easy to learn and easy to use. it is similar in syntax to 'c' programming language.

② Compare the VHDL & HDL

VHDL	HDL
① An HDL in electronic design automation to describe digital & mix signal system such as Feed programming get arrays an integrated CKT.	① An HDL use to modes in electronic system.
② Based on add & Pascal language	② It is based on 'c' language.
③ Not Case in sensitive	③ It is case sensitive
④ It is a older language more complex	④ It is newer language
	⑤ less complex

③ what is Features of VHDL ?

① It is easy to use and learn.

② It is similar to 'c' programming language in syntax

③ Verilog HDL allows different level of abstraction to be mixed the same mod. thus, designer can defined hardware modes in terms of switches, gates and general codes.

④ most popular logic synthesis terms support Verilog HDL

⑤ Verilog having both structural and behavioral language

⑥ By using functional verification can be done easily in the designing cycle

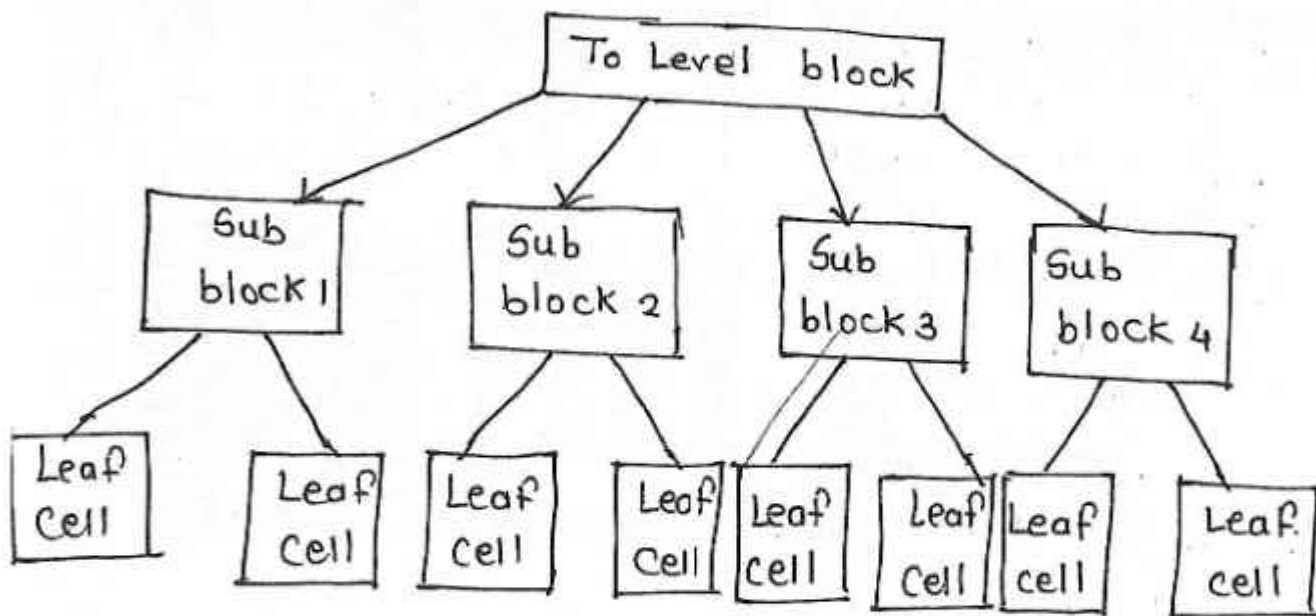
④

④ Explain the top down and bottom up design methodology.

→ ① Top-down.

In this methodology we define the top level block & identify sub block necessary to build the top level block.

We further sub-divided the subblock until we come left cells which are the cells that can not be further divided



Top down design methodology

② Bottom-up

In this methodology, we first identify the buildings blocks that are available to us, we build bigger cell using buildings blocks this cell use for higher level blocks until we build the top-level blocks.

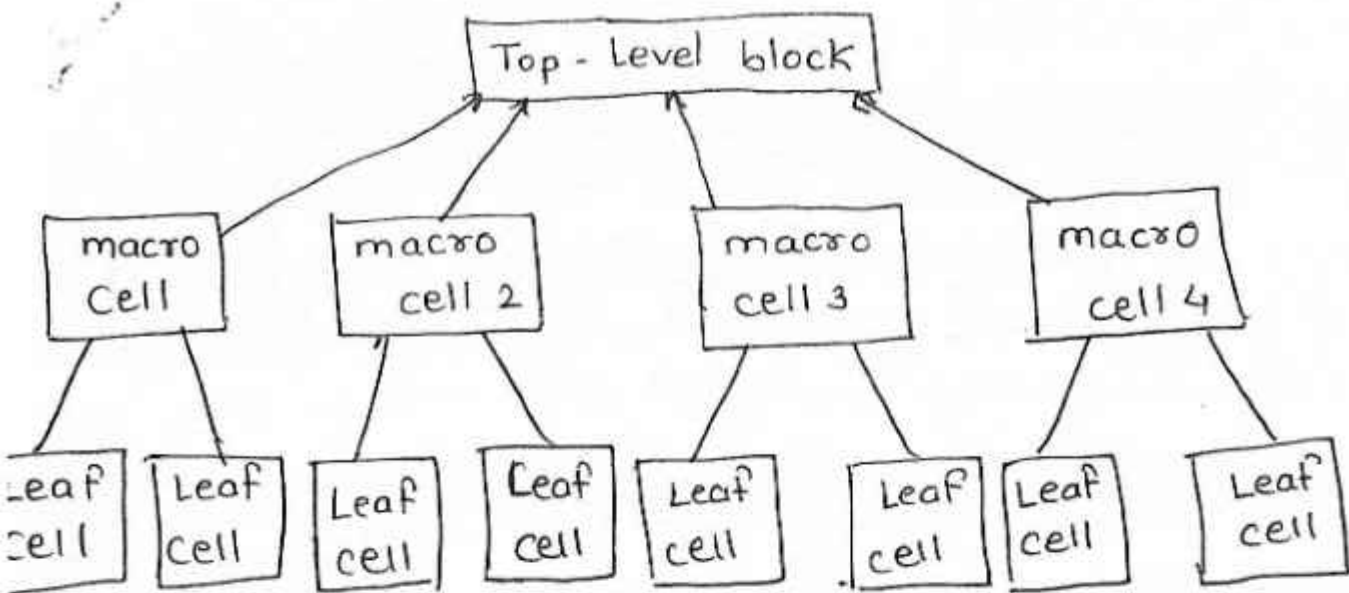


Fig Bottom up design methodology.

5) Explain the different type of operators

Operators are of 3 types

- ① unary operators
- ② binary operators
- ③ ternary operators

① unary Operators:-

Unary Operators precedes the Operand unary Operators
e.g $a = Nb$; // N is unary Operators bisoperand.

② Binary Operators :-

Binary Operators preceds the Operand ~~Unary Operators~~
the ~~Operands~~. the between two Operands

e.g $a = b \& c$; // & is binary Operator, b and c are Operands.

③ Tertiary Operators :-

Tertiary Operators have two separate Operands that separates three Operands

e.g $a = b ? c : d$; // ? : is tertiary Operator

6) Define the following terms.

1) String :-

A String is sequence of character that are enclosed by quotes (" ") The restriction on a string is that it must be contained on a single line, that is with a carriage return. It cannot be on multiple lines.

eg

1) "Hello Verilog 'would // is a string

2) "a/b" // is string

2) Identifiers :-

Identifiers are names given to objects so, they can be referenced in the design. Identifiers are made up of alphanumeric character under score (-) or the dollar sign (\$) Identifiers are the case sensitive. They start with an alphabetic character or an underscore

⊗ They not start with a digit or (\$) sign

Ident

2) Keywords :-

Keywords are special identifiers reserved to determine the language constructors. Keywords are in lower case. A list of all keywords in Verilog is contained in appendix c. list of keywords, system tasks and compiler directive

e.g

1) reg value : // reg is keyword

2) input clk : // input is keyword

4) Comments :-

Comments can be inserted in the code for readability and documentation two ways to write comments.

Write the different between functions and tasks

Functions	Tasks
1) A function can enable another function but not another task	A task can enable other task and function.
2) fu ⁿ always executes in 10 stimulation time	task may execute in non-zero stimulation time.
3) fu ⁿ must not contain any delay event or timing control state means.	Tasks may contain delay events or timing control statements.
4) fu ⁿ always returns a single value they can not have o/p or input argument	Tasks may have zero or more arguments of type. o/p or input

i) Explain the System tasks.

(i) System tasks :-

Verilog provided standard system tasks form certain routing operation. all systems tasks appears in the form of \$ keywords operation such as displaying on the screen monitoring values of net stopping and finishing are done by the system task.

e.g \$ display ; ("Hello verilog world.")

2) monitoring information :-

Verilog provides a mechanism to monitor a signal when its value is changed.

This facility to provided by monitor tasks.

e.g monitre { P₁, P₂ / - - - P_n } ;

where P₁, P₂ & P_n are Variable signal.

3) stopping a simulation :-

The task \$ stops :- as provided to stop and derive stimulation.

e.g \$ stop.

4) finishing a stimulation.

The \$ finish task terminate the stimulation.
time 100

9) Explain the Compiler directives.

→ Compiler directives :-

All compiler directives are defined by using the keywords constant with deep with the two most useful compiler directives.

Define :-

The directives is used to define next microbes in Verilog this is similar to define construct in c.

Includes :-

The includes allows you to includes entire certain or the Verilog source file in another Verilog file during compiling.

10) Explain the data types used in Verilog in detail.

→ There are four data types in Verilog.

1) Value set :-

Verilog supports four value set & 8 Verilog to model the functionality or real hardware the 4 Value Level are listed in below.

Value Level

0

1

x

z

Condⁿ in hardware FE CKT

Logic zero, False condition Logic One,

True condition unknown, unknown

Logic vhigh impedance

State.

In addition two logic Values strength Level are Often used to resolved Confics between drivers of different strength—in digital CKt value Level 0 and 1 Can have the Strength Level Listed in table below.

Strength Level	types	Degree
Supply	Driving	
Strong	driving	
pull	driving	
Large	Strong	
Weak	driving	
medium	Strong	
Small	Strong	
high	high	
	impedance	

2) Net :-

Net represents Connection in between hardware element just is a netl CKt. nets have Value Continuous

drive n on them by the O/p of device Nets are declared primarily with keywords

e.g wire a; // declares as a net.

Net is not a keyword but represent the data tupe such as wire, wand, wortri, triorr, trireg etc.

3) Resistor :-

Resistor represent the data Storage element

resistor retain value until another value is placed onto them in Verilog the turn of resistor a variable that can hold a value means.

resistors do not need a driver Value of resistor
Can be change any tym in simulation by assigning new
Value to resistor . the default Value for the resistor is X.

e.g.
reg reset ; // dectave Variable reset that Can
hold its Value.

4) vectors :-

Nets Or resistors data tupe Can be declared as a
vector (multiple bit width).

If bit width not specified the default is
Scaler is one bit

- e.g
- 1) wire a; // scaler net Variable
 - 2) wire [0,7] // 8 bit bus
 - 3) wire [0,3] // 32 bit bus.



Instructions

Student work

Due 12 Apr.

Zoology

30 points

Introduction to class - Mammalia

Class comments

Add class comment





30 points ▾



Instructions

Student work

44

Assigned

54

Handed in



HANDED IN



AKSHADA DAVANGE

Handed in



Aarti Bhoir

Handed in



Aarti Satote

Handed in



Abhishek Bagate

Handed in



Abhishek Pangavhane

Handed in



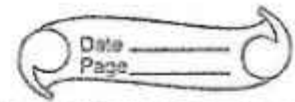
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Handed in




Principal
M. College
Bhargavaon

★ Assignment No :- ④ ★



Introduction to class - pisces

- ① Lateral line system is present in
① Fish / ③ Reptiles
② Frog / ④ Man
- ② Which one of the following is Cartilaginous Fish.
① Silver Fish / ③ Cray Fish
② Dog fish / ④ Star Fish
- ③ Which of the following has a Cartilaginous ~~fish~~ endoskeleton.
① Elasmobranch / ③ Mollusca
② Dipnoi / ④ Bony Fishes
- ④ Electric Organs are found in
① Sharks / ③ Gold Fish
② porpoises / ④ Rays (Torpedo)
- ⑤ A Fish is characterised by the presence of
① Dermal scales / ③ pharyngeal gills
② paired fins / ④ All the above
- ⑥ Elasmobranchs are exclusively
① Fresh water forms
② Marine Water Forms
③ Brackish Water Forms
④ None of these
- ⑦ swim bladder or air bladder is present

only in.

- (a) Fish (c) Aquatic reptilla
(b) Amphibia (d) Aquatic mammals

(8) pristis belongs to the class

- (a) Dipnoi (c) Elasmobranchii
(b) Telostomi (d) Holocephali

(9) Heart in fishes is

- (a) One chambered (c) Three chambered
(b) Two chambered (d) Four chambered

(10) Fishes are

- (a) Homiotheemic (c) Both A & B
(b) poikilothermic (d) None of these

(11) Which of the following are first Gnathostomes

- (a) Fish (c) Aves
(b) Amphibians (d) Mammalians

(12) Catadromous fish migrates from

- (a) Sea to river (c) River to estuary
(b) River to Sea (d) Deep sea to surface water

(13) Cartilaginous fishes do not have

- (a) Operculum (c) Gill slits
(b) Scales (d) pelvic fins

(14) Which is viviparous

- (a) Bony fishes (c) Frog
(b) lung fish (d) Shark

- 15 Common name of fish Anguilla is
(a) Eel (c) Hilsa
(b) Rohu (d) Bombay duck
- 16 presence of clasps is an important character in
(a) Sphyrna (c) Hippocampus
(b) Echeneis (d) Exocoetus
- 17 Cartilaginous fishes belong to the class
(a) Chondrichthyes (c) Agnatha
(b) Osteichthyes (d) None of these
- 18 Choose the Cat Fish from the following
(a) Cirrhina mrigala (c) Labeo rohita
(b) Wallago attu (d) ~~Catla catla~~
- 19 Salmon is
(a) Anadromous fish (c) Mollusca
(b) Catadromous fish (d) Insect
- 20 Which fins are paired in fishes
(a) Dorsal fin and anal fin
(b) pelvic fin and ventral fin
(c) pectoral fin and pelvic fin
(d) Caudal fin and dorsal fin.

Seen

11/11
10/10/2024

रयत शिक्षण संस्थेचे,

श्री.सद्गुरू गंगागीर महाराज सायन्स, गौतम आर्टस आणि संजीवनी कॉमर्स कॉलेज, कोपरगांव
परीक्षा विभाग

दि. ०१/०१/२०२१

महाविद्यालयातील प्रथम, द्वितीय व तृतीय वर्ष बी.ए. / बी.कॉम. / बी.एस्सी. / बी.बी.ए. / बी.एस्सी. (Computer), Regular व Backlog (२०१९ Pattern) च्या अंतर्गत मूल्यमापनासाठी परीक्षेचे नियोजन सोबत जोडलेल्या वेळापत्रकाप्रमाणे ऑनलाईन पद्धतीने करण्यात आलेले आहे. तरी संबंधीत विद्यार्थ्यांनी आपल्या विषय शिक्षकांशी संपर्क साधून सदर परीक्षेच्या लिंककरिता तयार करण्यात आलेल्या Whatsap group ला जॉईन व्हावे.

- सदर परीक्षा हि online पद्धतीने घेण्यात येणार आहे.
- सदर परीक्षेसाठी लागणारी प्रश्नपत्रिका हि Google Form मध्ये तयार केलेली असेल.
- प्रश्नपत्रिकेतील प्रश्न हे बहुपर्यायी (MCQ) पद्धतीचे असतील म्हणजेच प्रत्येक प्रश्नास चार पर्याय असतील.
- प्रश्नपत्रिकेत एकूण १० प्रश्न असतील विद्यार्थ्यांने सर्व प्रश्न सोडवावेत.
- एक प्रश्न २ गुणांसाठी असेल म्हणजे सदर प्रश्नपत्रिका २० गुणांची असेल.
- प्रश्नपत्रिकेतील प्रश्न हे संबंधित विषयाच्या प्रथम सत्राच्या झालेल्या अभ्यासक्रमाला अनुसरून बहुपर्यायी असतील.
- वेळापत्रकानुसार प्रत्येक विषयाची प्रश्नपत्रिकेची (Google Form) लिंक विषय शिक्षकांनी तयार केलेल्या Whatsap group वरती विद्यार्थ्यांना प्राप्त करून देण्यात येईल.
- सदर प्रश्नांची काठीप्यपातळी ही विद्यापीठ नियमानुसार असेल.

Ranbir
S.S.

परीक्षा अधिकारी

एस.एस.जी.एम. कॉलेज कोपरगाव



Shubert

प्राचार्य

एस.एस.जी.एम. कॉलेज कोपरगाव

Principal

Principal
S.S.G.M.College
Kopergaon

रयत शिक्षण संस्थेचे,

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Randhir
२०२१

परीक्षा अधिकारी

एस.एस.जी.एम. कॉलेज कोपरगाव



Shripati

प्राचार्य

एस.एस.जी.एम. कॉलेज कोपरगाव

Principal

Principal
S.S.G.M.College
Kopergaon

श्री सदगुरु गंगागीर महाराज सायन्स, गौतम आर्ट्स अण्ड सजीवनी कॉमर्स कॉलेज, कोपरगाव
सत्रात परीक्षा नोव्हेंबर / डिसेंबर २०१९-२०

वर्ग - S.Y.B.A

मराठी (विशेषस्तर पेपर क्र. १) (S.1) मराठी साहित्यातील विविध प्रवाह

वेळ: ८.१५ ते १०.१५

दिनांक: २६/११/२०१९

मार्क - ६०

सूचना- १ सर्व प्रश्न सोडविणे आवश्यक आहे.

२ उजव्या बाजूचे अंक पूर्ण गुण दर्शवितात.

प्रश्न १ खालील पैकी कोणत्याही तीन प्रश्नांची उत्तरे ५० शब्दात लिहा.

गुण १५

- १) नाटकाचे विविध घटक लिहा.
- २) आशयानुसार नाटकाचे प्रकार लिहा.
- ३) नाटकातील संगीताचे स्थान.
- ४) नाटकाच्या दोन व्याख्या स्पष्ट करा.
- ५) नाटककला एक प्रभावी माध्यम

प्रश्न २ रा खालीलपैकी कोणत्याही ही पाच प्रश्नांची उत्तरे प्रत्येकी २० शब्दांपर्यंत लिहा.

गुण १०

- १) अप्पांनी कावेरीचा उल्लेख कोणत्या नावाने केला आहे.
- २) अप्पांच्या सूनेचे नाव लिहा.
- ३) 'नटसम्राट' या नाटकाचे अंक किती आहे.
- ४) अप्पा आणि कावेरी यांच्या गावाचे नाव काय होते.
- ५) अप्पांच्या व्यक्तिमत्त्वाचे कोणतेही दोन पैलू सांगा.
- ६) 'ठमी'चे पूर्ण नाव काय ते लिहा.
- ७) अप्पांनी कावेरीचा उल्लेख कोणत्या नावाने केला आहे.
- ८) सुहासचे टोपण नाव काय?
- ९) अप्पांना किती रुपयांची थैली मिळते ?
- १०) अप्पांच्या दोन मुलांची नावे लिहा.

प्रश्न ३ रा. खालीलपैकी कोणत्याही तीन प्रश्नांची उत्तरे ५० शब्दात लिहा.

गुण १५

- १) 'नलू' ची व्यक्तिरेखा लिहा.
- २) 'नटसम्राट' मधील विठोबाचे नाटकवेड लिहा.
- ३) सुहासचे बालपण व आजोबा यांच्यातील संवाद लिहा.
- ४) 'शारदेची' व्यक्तिरेखा स्पष्ट करा.
- ५) नटसम्राट मधील दुय्यम व्यक्तिरेखा कोणत्या आहेत.

प्रश्न ४ था. खालीलपैकी कोणत्याही दोन प्रश्नांची उत्तरे लिहा.

गुण २०

- १) 'नटसम्राट' या नाटकाचे मूल्यमापन करा.
- २) 'नटसम्राट' या नाटकाची शोकात्मिका प्रसंगानुरूप लिहा.
- ३) अप्पांच्या प्रभावी व्यक्तिरेखेचे गुणविशेष लिहा.
- ४) 'मनुष्य' हा नियतीच्या हातातील बाहुले असतो काय? 'नटसम्राट' या नाटकाच्या आधारे लिहा.

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स्वतः शिक्षण संस्थेचे
श्री सवगुरु गंगागौर महाराज सायन्स, गौतम आर्ट्स अण्ड संगीतनी कॉमर्स कॉलेज, कोपरगाव
सत्रांत परीक्षा नोव्हेंबर / डिसेंबर २०१९-२०
वर्ग - S.Y.B.A

मराठी (विशेषस्तर पेपर क्र.१) (S.1) मराठी साहित्यातील विविध प्रवाह

वेळ: ८.१५ ते १०.१५

दिनांक: २६/११/२०१९

मार्क - ६०

सूचना- १. सर्व प्रश्न सोडविणे आवश्यक आहे.
२. उजव्या बाजूचे अंक पूर्ण गुण दर्शविताने.

प्रश्न १ खालील पैकी कोणत्याही तीन प्रश्नांची उत्तरे ५० शब्दात लिहा.

गुण १५

- १) नाटकाचे विविध घटक लिहा.
- २) आशयानुसार नाटकाचे प्रकार लिहा.
- ३) नाटकातील संगीताचे स्थान.
- ४) नाटकाच्या दोन व्याख्या स्पष्ट करा.
- ५) नाटककला एक प्रभावी माध्यम

प्रश्न २ रा खालीलपैकी कोणत्याही ही पाच प्रश्नांची उत्तरे प्रत्येकी २० शब्दांपर्यंत लिहा.

गुण १०

- १) अप्पांनी कावेरीचा उल्लेख कोणत्या नावाने केला आहे.
- २) अप्पांच्या सूनूचे नाव लिहा.
- ३) 'नटसम्राट' या नाटकाचे अंक किती आहे.
- ४) अप्पा आणि कावेरी यांच्या गावाचे नाव काय होते.
- ५) अप्पांच्या व्यक्तिमत्त्वाचे कोणतेही दोन पैलू सांगा.
- ६) 'उमी'चे पूर्ण नाव काय लिहा ?
- ७) अप्पांनी कावेरीचा उल्लेख कोणत्या नावाने केला आहे.
- ८) सुहासचे टोपण नाव काय?
- ९) अप्पांना किती रुपयांची धैली मिळते ?
- १०) अप्पांच्या दोन मुलांची नावे लिहा.

प्रश्न ३ रा खालीलपैकी कोणत्याही तीन प्रश्नांची उत्तरे ५० शब्दात लिहा.

गुण १५

- १) 'नलू' ची व्यक्तिरेखा लिहा.
- २) 'नटसम्राट' मधील विठोबाचे नाटकवेड लिहा.
- ३) सुहासचे बालपण व आजोबा यांच्यातील संवाद लिहा.
- ४) 'शारदेची' व्यक्तिरेखा स्पष्ट करा.
- ५) नटसम्राट मधील दुय्यम व्यक्तिरेखा कोणत्या आहेत.

प्रश्न ४ था खालीलपैकी कोणत्याही दोन प्रश्नांची उत्तरे लिहा.

गुण २०

- १) 'नटसम्राट' या नाटकाचे मूल्यमापन करा.
- २) 'नटसम्राट' या नाटकाची शोकात्मिका प्रसंगानुरूप लिहा.
- ३) अप्पांची प्रभावी व्यक्तिरेखेचे गुणविशेष लिहा.
- ४) 'मनुष्य' हा नियतीच्या हातातील बाहुलं असतो काय? 'नटसम्राट' या नाटकाच्या आधारे लिहा.

२५


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SA

UNIVERSITY OF PUNE S.Y.B.A
 S.S.G.M.Science, Gautam Arts & Sanjivani Commerce College, Kopergaon
 Supplementary/Backlog/Term End/ Annual Examination Sept/Oct/Nov/April 2019

STATEMENT OF MARKS

Class :- S.Y.B.A Subject :- ~~2~~ S1 Subject Code :- Paper :-
 Title of the paper :-

Roll No.	Name of the Students	University Seat. No.	Marks of Out			Total Marks out of 100
			-20/60	20	80/60	
2107						
2111						
2112	डोखे अकाश भाद्रनाथ		47	16	✓	
2113	फुलोरे महेश संजय -		44	15	✓	
2114	AB AB		AB	-		
2115	AB AB		AB	-		
2116	सुडके मनीषा भिमा		44	15	✓	
2117	पवार अश्विनी निलारु		53	19	✓	
2118	पवार संतोष वाळू		34	12	✓	
2120	ओकरे विकी बाळाबाहेर		42	14	✓	
2119	पवार अंकुश नरहरी		26	09	✓	
2121	साळवे ज्योती संजय		48	16	✓	
2122	समीर शकील शौलव		42	19	✓	
2125	शिंदगाडे दिक्षा कृष्णराव		53	19	✓	
2127	तांबोकी परवेज काशी		53	19	✓	
2131	दुवंडे पूजा सुखदेव		52	18	✓	
	AB - 2122, 2123, 2124, 2126, 2128, 2129, 2130, 2114, 2115.					
	(12)					

Total Present: 12 Total Absent: 08 Grand Total: 20

Note 1. Absentees to be Marked As *AA* 2. Roll number should written in a serial order

Date: 28/11/19

Signature

Signature

Name of the Examiner

Dr. B. R. Shendage

Head Department

Principal

S.S.G.M. College
Kopergaon

S. S. G. M. College, Kopargaon

Class Test: 2019-20

PAPER-VI: Fiber Optic Communication

Class: T.Y.B.Sc

Subject: Electronic Science

Time: 40 Min.

Date: 18/ 09/2019

Roll No.....

Marks: 20

N.B.(i) All questions are compulsory

A) Short Answer Questions :

.....8-M

1. Define NA if fiber is surrounded by air.
2. Compute the NA, acceptance angle of fiber having core refractive index 1.48 and cladding refractive index 1.30.
3. Compare single mode and multimode.
4. Define meridional and skew rays.

B) Long Answer Questions :

.....12-M

1. Write a note on numerical aperture of graded index fiber.
2. Write a short note on plastic fiber.
3. What is dispersion. Explain types of dispersion in fiber optic.

To be submitted by Tuesday
(13/01/2020)

ELECTRONIC SCIENCE DEPARTMENT
S.Y.B.Sc.
PAPER-2 ELECTRONIC INSTRUMENTATION
SEM-II
ASSIGNMENT 1

1. Draw the block diagram of measurement system. Explain each block
2. Define the measurement characteristics
3. Explain the role of signal conditioning ckt in measurement
4. List various test and measuring instruments
5. What is static error? How it is classified?
6. Give working Principle of multimeter
7. State and explain types of errors in measurement system
8. Determine static error if digital voltmeter reads 4.65 v and true value of the voltage is 4.52 v
9. State the working principle of voltmeter and ammeter
10. Give series type and shunt type ohmmeter ckt and explain its working
11. Give any 4 points for operating procedure of : Mutimeter, multirange meter, ammeter, voltmeter
12. Give any 4 specifications of : Electronic voltmeter, ammeter, voltmeter, multirange meter, AC voltmeter
13. With the help of block diagram explain the working of electronic voltmeter

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Commerce College.

n Sanstha's

ice, Gautam Arts And Sanjivani
ist- Ahmadnagar- 423601

Department of Botany

Students Seminar

Date-07/09/2019

Paper:- BO.3.1 - Spermatophytic botany

Class:- M.Sc-II

Name of the Students:- Bagal Tushar sharad.

Topic of the Seminar:- Distribution of gymnosperm in the world.

Abstract

Distribution of gymnosperm in the world.
1000 living sps of gymnosperm.

- * Coniferales - Divi Distributed in the all over the world.
- * Cycadales - Cycadales are present or distributed in the some region of the world.



Signature

Student



Signature

Teacher in Charge

Signature

Head of the Department



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Rayat Shikshan Sanstha's

Shree Sadguru Gangageer Maharaj Science, Gautam Arts And Sanjivani
Commerce College, Kopargaon, Dist- Ahmadnagar- 423601

Department of Botany

Students Seminar

Date: ~~24/10/19~~ 07/09/19

Paper:- Bo. 3.1 (Spermetophytic Botany)

Class:- MSc-II

Name of the Students:- Gondkar Mayur Kacharu

Topic of the Seminar:- Lyginopten's Reproductive organs.

Abstract

The Lyginopten's it is the fossil family member, it has reproductive organs it has two organs which is heterosporous and it ovules and seeds were enclosed within well protective cuples.

Gondkar M
Signature

Student

AKV
Signature

Teacher in Charge

Signature

Head of the Department

AKV

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Department of Botany

Students Seminar

Date-5/9/2019

Paper:- B.O - 3.1

Class:- M.Sc. II

Name of the Students:- Jamdhade Rachana Appasahab.

Topic of the Seminar:- Cycadiodales & morphological
(general characters, morphology)

Abstract

Cycadiodales -

- i) cycadiodales are formed the dominant fossil plant during Palaeozoic age.
- ii) Cycadiodales are closely related to present cycad plant.
- iii) It had a short columnar stem like most living cycad.
- iv) stem had multiple crowns.
- v) Cycadiodales they were either bisporangiate and they were either terminal or axillary in position.

Signature

Student

Signature

Teacher in Charge

Signature

Head of the Department

Jamdhade


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Kopargaon

Roll no:

Name:

SP PUNE UNIVERSITY
S. S. G. M. COLLEGE, KOPARGAON
Internal test – Sem-II

Sub – Morphology and anatomy (Paper- I)

Class- F.Y.B.Sc.

Date - 15 -02- 2019

Time- 11 to 11.40

Marks- /20 Sign.

N.B.-1) All questions are compulsory & carry equal marks.

Q. 1 Four alternatives are suggested for each question. Choose correct alternative out of four. (5)

- 1) Adventitious is a type of-----system.
a. root b. stem
c. leaf d. branch
- 2) Root of Cuscuta is a type of -----root.
a. storage b. parasite
c. respiratory d. none
- 3) Reticulate is the type of -----.
a. placentation b. aestivation
c. venation d. none
- 4) Tripinnate is the type of -----.
a. stem b. leaf
c. root d. none
- 5) Potato tuber is the modification of-----.
a. leaf b. stem
c. inflorescence d. none

(5)

Q.2 Write true or false of the following.

- 1) Collenchyma is the type of mechanical tissue. -----
- 2) Umbel is the type of racemose inflorescence -----
- 3) Spines of Opuntia is leaf modification. -----
- 4) Onion is the example of tunicate bulb. -----
- 5) Calyx is the essential whorl of flower. -----

(5)

Q.3 Give the answer in one / two sentence/s.

- 1) Function of vascular bundle.
- 2) Define morphology.
- 3) Define anatomy.
- 4) Define inflorescence.
- 5) Define flower.

Name:
Roll no:

UNIVERSITY OF PUNE
S. S. G. M. COLLEGE, KOPARGAON
Internal test

Sub – Plant Physiology (Paper-II)

Date – 21 - 09 - 2018

Class- S. Y. B Sc.

Marks- / 10

Sign.

N.B.-1) All question are compulsory & carry equal marks

Q. 1 Four alternatives are suggested for each question. Choose correct alternative out of four. (2.5)

- 1) Transpiration takes place through-----
 - a. stomata
 - b. bark
 - c. stem
 - d. none
- 2) Ascent of sap takes place through-----
 - a. xylem
 - b. phloem
 - c. pith
 - d. none
- 3) Boiling point of water is -----^oC
 - a. 10
 - b. 100
 - c. 50
 - d. 101
- 4) Plasmolysis occurs due to -----
 - a. endosmosis
 - b. exosmosis
 - c. TP
 - d. none
- 5) During seed germination -----takes place.
 - a. endosmosis
 - b. exosmosis
 - c. imbibition
 - d. Nostoc

Q.2 Write true or false of the following.

(2.5)

- 1) Diffusion takes place according to concentration gradient. -----
- 2) As transpiration increases the rate of water absorption increases. -----
- 3) OP of guard cell does not regulate closing and opening of stomata. -----
- 4) Aquaporins are important for water transport. -----
- 5) In imbibition swelling of colloidal substances takes place. -----

Q.3 Give the answer in one/ two sentence/s.

(2.5)

- 1) Give any one property of water.
- 2) Endosmosis.
- 3) Enlist types of solutions.
- 4) Plasmolysis.


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S.S.G.M. COLLEGE, KOPARGAON

F.Y.B.Sc. TERM I - Internal Test 2018-19

Jr. Supervisor's Sign:

Subject: Mathematics Paper-I (ALGEBRA AND GEOMETRY)

Name of the Student:

Roll N.

NOTE: Attempt each of the following questions.

Total Marks: 20

Que-1) Choose the Correct Alternative of the following -

[5]

- i. g.c.d. (a, b) = 3, l.c.m. (a, b) = 30. If a = 6 then b = ____
a) 30 b) 15 c) both 15 and 30 d) none of these
- ii. Which of the following is a composite number?
a) 2 b) 3 c) 23 d) 32
- iii. The solution set of system of equations
 $x + y + z = 10$; $2x + y + 2z = 17$; $3x + 2y + z = 17$ is
a) 1,1,1 b) 1,2,3 c) 2,3,5 d) none of these
- iv. The characteristic roots of a unit matrix are
a) all equal b) all zero c) all one d) none of these
- v. $R_1 = \{(1,1), (2,2), (3,3), (1,2), (2,3)\}$ is a _____ relation.
a) reflexive b) symmetric c) transitive d) none of these

Que-2) State TRUE or FALSE of the following -

[5]

- i. Every positive integer can be written as product of primes.
- ii. Any two consecutive integers are relatively prime.
- iii. $5 \equiv 20 \pmod{3}$
- iv. The rank of null matrix is 1.
- v. The equation $AX = 0$ is always consistent.

Que-3) Define the following term;

[5]

- i. Intersection of two sets.
- ii. Equivalence Relation.
- iii. Relatively prime.
- iv. System of Homogeneous equations.

v. Eigen Vector.

[5]

Que-4) Write the answer of following ;

- i. State principle of strong induction.

- ii. Let a, b and c be integers. If a/b and b/c then show that a/c .

- iii. Find the eigen values of the matrix $\begin{bmatrix} 1 & 4 \\ 2 & 3 \end{bmatrix}$

- iv. Let $A = \begin{bmatrix} 1 & 2 & 3 \\ 2 & 4 & 6 \\ -3 & -6 & 9 \end{bmatrix}$. Find rank of A .

- v. Reduce the matrix $A = \begin{bmatrix} 2 & 3 & 4 \\ 3 & 1 & 2 \\ -1 & 2 & 2 \end{bmatrix}$ to echelon form.

Rayat Shikshan Sanstha's

S.S.G.M. COLLEGE KOPARGAON

Department of Mathematic

Student's Seminar List

Year:2018-19

Sr.No.	Name of Student	Class	Topic
1.	AHER PRATIKSHA BABURAO	T.Y.B.Sc.	P-II(Complex Ana.)Example on Cauchy Residue Thm.
2.	GAIKWAD SURAJ PRAKASH	T.Y.B.Sc.	P-II(Complex Ana.)Example on Cauchy Residue Thm.
3.	GHARE DIPTI BHAUSAHEB	T.Y.B.Sc.	P-V(P.D.E.) Example on Charpits Method
4.	JADHAV YOGITA SUBHASH	T.Y.B.Sc.	P-V(P.D.E.) Example on Jacobis Method
5.	JAGTAP PRITI BABASAHEB	T.Y.B.Sc.	P-IV(Group Theory) Example on not a subgroup
6.	KAHANDAL SHRADDHA VILAS	T.Y.B.Sc.	P-IV(Group Theory)Cyclic Gr. & Example
7.	KAPSE SHUBHAM DAGU	T.Y.B.Sc.	P-IV(Group Theory) Example on Generators of Cyclic gr.
8.	KHEDKAR SONAM ANAND	T.Y.B.Sc.	P-IV(Group Theory) Example on order of an element.
9.	MORE KIRAN ARUN	T.Y.B.Sc.	P-IV(Group Theory) Example on cyclic subgroup
10.	NIKAM RAHUL BHAUSAHEB	T.Y.B.Sc.	P-IV(Group Theory)Example on orbit & Cycle
11.	RAJOLE PADMAJA KIRAN	T.Y.B.Sc.	P-IV(Group Theory) Example on even & odd permutation.
12.	SABANE UJWALA PRAKASH	T.Y.B.Sc.	P-IV(Group Theory)Example of not a group
13.	SANDHAN AKSHAY BABASAHEB	T.Y.B.Sc.	P-IV(Group Theory)Def. of Subgr.& Examples
14.	THORAT SNEHA DINESH	T.Y.B.Sc.	P-II(Complex Ana.)Example on Cauchy Integral Formula
15.	UGALE KAVITA SANJAY	T.Y.B.Sc.	P-V(P.D.E.) Example 1 st order P.D.E.
16.	WAKCHAURE ASHWINI SUNIL	T.Y.B.Sc.	P-V(P.D.E.) Example 1 st order P.D.E.
17.	WAKCHAURE CHAITALI BHAGWAT	T.Y.B.Sc.	P-V(P.D.E.) Example 1 st order P.D.E.
18.	BANKAR RENUKA BALASAHEB	T.Y.B.Sc.	P-V(P.D.E.) Exampl. 1 st order P.D.E.


Head.

Department of Mathematics,
S. S. G. M. College, Kopergaon


Principal
S.S.G.M.College
Kopergaon

रमन शिक्षण संस्थेचे

दि: १५/०१/२०१७

श्री सद्गुरुकुल गंगुलीर महादलक सामान्य ज्ञान प्रश्नोत्तरी
अॅड सजीवनी जैमल कॉलेज कोपरगाव.

वेळ: १० ते १२

सुं: ६०

वर्ग - एम. एम. सी

संज्ञा संग्रहीत, सोटेवर २०१७, ३

विषय - सराठी विशेषतः पेपर १ - सराठी साहित्यातील विविध प्रकार

प्र. १ स्वातील प्रश्नांची ५० शब्दांपर्यंत उत्तरे लिहा. (कोणतेही तीन) (१५)

- १) नाटकातील संवाद म्हणजे काय?
- २) नाटकातील अर्थव्यंगाने महत्त्व लिहा.
- ३) नाटकातील संगीताने स्थान.
- ४) नाटकाचा प्रभावी माध्यम.
- ५) नाटकाचा दोन प्रकारचा स्पष्ट करा.

प्र. २ स्वातील प्रश्नांची उत्तरे पूर्वेकी २० शब्दांपर्यंत लिहा. (कोणतेही पाच) (१०)

- १) कावेरीचा उद्भव नटरसमाट म्हणून कोणत्या नावाने झाला आहे?
- २) कावेरी आणि अर्वांगेचे कथांवरून गौरवमक होतो?
- ३) राजांचा व्यवसाय कोणता ते लिहा.
- ४) विठोबाजी कोणत्या नाटकातून कथाची मुगिजा करवत होता?
- ५) कावेरी अर्वांगेचा नावाने कोणत्या नावाने?
- ६) अर्वांगे व कावेरी गंधर्वा जाताने नाव काय होते?
- ७) अर्वांगेचा व्यंगित्वाचे दोन महत्त्वाचे पैलू सांगा.
- ८) नटरसमाट नाटकात कितली अंश आहेत?
- ९) कितली कथांची प्रेक्षी अर्वांगेला मिळते?
- १०) नटरसमाट नाटकात एका कितली पात्रे आहेत?

प्र. ३ स्वातील प्रश्नांची ५० शब्दांपर्यंत उत्तरे लिहा. (कोणतेही तीन सोडवा) (१५)

- १) शारदेवी व्यक्तिरेखा लिहा.
- २) कावेरीचे व्यक्तिमत्त्व आपल्याला किचार् कथांमला मागवाटते यथोदाहरणाने.
- ३) सुहासने बालपण व आपोबा गंधर्वातील संवाद लिहा.
- ४) नटरसमाटचा शेवटचा प्रयोगाने वर्णन करा.
- ५) अर्वांगेचा संघर्ष कोणत्या दोतुनी कुटुंबाशी संबंधितचा संवाद लिहा.
- ६) नल्लुचे व्यक्तिमत्त्व किचार् करा.

प्र. ४ स्वातील प्रश्नांची पूर्वेकी १५० शब्दांपर्यंत उत्तरे लिहा. (कोणतेही दोन) (२०)

- १) नटरसमाट नाटकाचा आशय लिहा.
- २) अर्वांगेची प्रभावी व्यक्तिरेखा सोदाखण स्पष्ट करा.
- ३) राजा व अर्वांगेतील काही महत्त्वाच्या संवादांचा आशय लिहा.
- ४) 'नटरसमाट' एक शोकांत्य नाटक आहे? पुढील काय करते ते लिहा.

—x—

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Test/Term End Annual Examination Oct. / Nov. / April. 2017-2018

STATEMENT OF MARKS

Class T.Y. B.A Subject Marathi - G3 Subject Code _____ Paper _____

Title of the paper साधुलिक मराठी साहित्य साठी व्याख्यानिक व उपभोजित मराठी

Seat No.	Name of Student	Marks out of			Total Marks out of 100	Seat No.	Name of Student	Marks out of			Total Marks out of 100
		40	20	60/80				40	20	60/80	
3031	chire bhagyashri vasant	38	13			3106	Sarvatsarkar pritee prasad	32	11		
3035	Jambhade Sandip Bhaisaheb	26	09			3112	Tanpure Sachin Sajan	20	07		
3037	Katave Pooam Parasram	32	11			3139	Ahadke Tanmay Dilip	18	06		
3038	Kudekar Niranjan Laharu	24	08			3141	Hada Sandeep Bajrindra	25	09		
3040	Karhe Kapil Ravindra	29	10			3151	Pagare Nanda Shamka	42	14		
3043	Mokal Ravindra Balasaheb	29	10			3153	Rahane Sonyabai Kailas	28	10		
3045	Nikam Muktabai Parbhairnath	24	08			3015	Absent				
3049	Salunke Akash Govardhan	24	08			3036	Absent				
3057	Suryawanshi Jaya Dattatray	25	09								
3058	Thombre Jyesh Sampat	30	10								
3060	Tribhuvan Ajay Harishchandra	24	08								
3065	Bankar Krushna Machhindra	16	06								
3067	Chandole Monika Parasram	38	13								
3072	Gaware Prasant Prashant	36	12								
3073	Laxmi Ambay Kamble	25	09								
3076	Lonhe Herrant Manoj	29	10								
3088	Gaikwad Chaitali Maharao	31	11								
3093	Gosavi Balashankar	24	08								
3094	Hon sumit Dangadhar	25	09								
3096	Kshirsagar Angha Ganeshnath	25	09								
3097	Kasner Ajit Ramesh	18	06								
3098	Nangare Akash Machhindra	24	08								

Total Present _____ Total Absent _____ Grand Total _____

- Note-**
1. Absentees to be Marked as *AA*
 2. Seat numbers should be written in a serial order

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Kopergaon

Savitribai Phule Pune University

S.S.G.M. College, Kopargaon, Dist.: A.Nagar

Botany Paper II TERM I CIE TEST I 2017-18

Class: F.Y.B.Sc.

Date: 17/11/2017

Time 1.30 - 3.30

Marks: 40

Instructions to candidates:

1. All questions are compulsory.
2. Draw neat labeled diagrams wherever necessary.
3. Figures to the right indicate full marks.

Q.1. Attempt the following:

8

- a) Give 2 botanical names of food plants.
- b) What is timber?
- c) What is gum?
- d) Define tannin.

Q.2 Attempt any two of the following:

8

- a) Concept of industrial botany.
- b) Green house technology.
- c) Limitations of greenhouse technology.

Q.3 Write short notes on Any Two of the following:

8

- a) Advantages of greenhouse technology.
- b) Cultivation practices of tuberose.
- c) Harvesting of tuberose.

Q.4. Attempt Any one of the following:

8

- a) Explain in brief harvesting and marketing of rose.
- b) Explain in brief harvesting and marketing of tuberose.

Q.5 Explain in brief cultivation practices and harvesting of Gerbera.

8

OR

Q.5 Explain in brief cultivation practices of Rose.

8


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S.S.G.M.College, Kopargaon.

Internal Class Test-2017-18

Physics Paper I : Oscillations, Waves and Sound

Class: S.Y. B.Sc.

Marks: 20

Date: 07-02-2018

Time : ½ Hr.

Note. 1) All Questions are compulsory 2) All questions carry equal marks

Q.1 Tick mark correct alternatives of the following. [5 Marks]

- a) If $R^2 < 4mk$, the motion is said to be. i) Overdamped ii) Critically damped iii) underdamped
- b) The velocity at $X=a/2$ about mean position is given by
i) $\sqrt{3}/2 a\omega$ ii) $-\sqrt{3}/2 a\omega$ iii) 0
- c) The composition of two mutually perpendicular SHMs will produce figure if their frequencies are in the ratio... i) 1:1 ii) 2:1 iii) 3:1
- d) Disrupting force is observed in..... equilibrium
i) Stable Equilibrium ii) Unstable equilibrium iii) Neutral Equilibrium.
- e) The quality factor of undamped harmonic oscillation is..... i) 0 ii) 1 iii) ∞

Q.2 State true or False [5 marks]

- a) The total energy of undamped S.H.O is always conserved []
- b) A single particle can be subjected two or more SHMs simultaneously []
- c) The beam of cathode ray is subjected to two mutually parallel S.H.Ms which result into bright spot traces. []
- d) The amplitude of damped oscillator does not depend on time []
- e) The phase of motion at $t=0$ is ϕ is called starting phase of the motion []

Q.3 Answer the following question in two or three sentences. [5 Marks]

a) What are undamped free oscillations?

b) What are Lissajous figures?

c) Define quality factor Q?

d) What are damped oscillations?

e) Define angular simple harmonic motion.

Q4) Answer the following

[5 M]

a) Define Log Decrement. And derive the expression for it.

b) The two S.H.Ms acting on the particle simultaneously are given as $x = a \sin 3\omega t$ and $y = a \sin \omega t$, find the equation of resultant path.

Bo. 2.8. molecular biology & G.E.

1. Gaikwad Akanksha
2. Thoke yogesh.
3. More Anita.
4. Gursal pragadi
5. Yeole Ashvini
6. Shinde sanket
7. khillari yogesh.
8. chine Rahul.
9. khot chetna.
10. Dhomase pallavi
11. Shete jayashri
12. Wabale Manali
13. shevare Snehal
14. kithe Mangal
15. Aher jyoti
16. Suryavanshi Bhavna



Rayat Shikshan Santha's

Shree Sadguru Gangaadhar Maharaj Science, Gauram Arts And Sanjivani Commerce College,
Kopergaon, Dist- Amravati-427501

Department of Botany

Students Seminar

Date 05/10/2017

Paper: BO.2.3. Molecular biology & Genetics engineering

Class : MSc-I

Name of the Students : Dhomase Poojavi Satebjao

Roll no. : 02

Topic of the Seminar : plasmid vector

Abstract

- Def.
- Types of plasmid vector.
- characteristics of plasmid vector.
- Example of plasmid vector.
- Features of plasmid vector.


Signature

student


Signature

Teacher In charge


Signature

Head of the department


Principal
S.S.G.M.College
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Rayat Shikshan Santha's

Shree Sadguru Gangageer Maharaj Science, Gautam Arts And Sanjivani Commerce College,
Kopargaon, Dist- Ahmednagar-423601

Department of Botany

Students Seminar

Date -5/10/2017

Paper: BO 2.3 Molecular Biology & Genetic Engineering.
Class : M.Sc -I Bot.
Name of the Students : shete Jayshri Shraavan
Roll no. :
Topic of the Seminar : USE of vector in cloning.

Abstract

USE of vector in cloning

* Shuttle vector -

- characteristics features

- Importance

- Structure of shuttle vector.

J. Shete
Signature

student

S.G. Charan
Signature

Teacher In charge

[Signature]
Signature

Head of the department

[Signature]
Principal
S.S.G.M. College
Kopargaon

2017-18 Home Economics
University of Poona

S.S.G.M. Science, Gautam Arts & Sanjivani Commerce College, Kopergaon
Test/Term End Annual Examination Oct. / Nov. / April. 2017

STATEMENT OF MARKS

Class FY B.A. Subject Home Economics Subject Code _____ Paper _____
Title of the paper Home Economics

Seat No.	Name of Student	Marks out of			Total Marks out of 100	Seat No.	Name of Student	Marks out of			Total Marks out of 100
		20	20	60 / 80				20	20	60 / 80	
1259	अमाली वैश्वरु कु.	24	08								
1249	चिन्ते महेर। सि.	23	08								
1391	माधव शुभवाणि गो.	50	17								
1320	भोरे लक्ष्मी नि.	44	15								
1148	मनिक पळ्ळणीस.	50	17								
1306	लळारे सुदीन ड.	10	03								
1119	जास अचिकेरा पो.	57	13								
1021	पळेण शुभकर.	23	08								
1167	पठारे प्रसीकु.	23	08								
1220	कुळे आरग अ.	53	18								
1144	मनिक शुभम अ.	47	16								
1199	शेख अक्षिक ड.	33	11								
1223	निपायले दिपकवा.	08	02								
1303	शोनवो सुदीन ड.	13	03								
1301	लळण प्रनिक न.	00	04								

Total Present 15 Total Absent 00 Grand Total _____

Note - 1. Absentees to be Marked as *AA*
2. Seat numbers should be written in a serial order

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S.S.G.M. College
Kopergaon

दिनांक - १२ १० २०१७

हजेरी क्रमांक -

रयत शिक्षण संस्थेचे
एस. एस. जी. एम. कॉलेज, कोपरगांव.

एफ. वाय. बी. ए.

प्रथम सत्र परीक्षा - ऑक्टोबर २०१७

विषय - अर्थशास्त्र (G - 1)

वेळ - २ तास

(भारतीय अर्थव्यवस्थेच्या समस्या व भवितव्य)

गुण - ६०

- सूचना : १) सर्व प्रश्न सोडविणे आवश्यक आहेत.
- २) उजव्या बाजूचे अंक प्रश्नांचे पूर्ण गुण दर्शवितात.

प्रश्न १ ला) खालील प्रश्नांची १०० शब्दांत उत्तरे लिहा. (कोणतेही तीन)

- १) भारतातील विकासाशी संबंधित प्रमुख वादप्रश्न सांगा.
- २) लोकसंख्या संक्रमण सिद्धान्त थोडक्यात सांगा.
- ३) भारतातील दारिद्र्याची कारणे सांगा.
- ४) भारतीय अर्थव्यवस्थेत शेतीचे महत्त्व थोडक्यात स्पष्ट करा.

प्रश्न २ रा) खालील प्रश्नांची प्रत्येकी २०० शब्दांत उत्तरे लिहा. (कोणताही एक)

- १) विकसनशील अर्थव्यवस्था म्हणून भारतीय अर्थव्यवस्थेची वैशिष्ट्ये स्पष्ट करा.
किंवा
भारतीय लोकसंख्येची वैशिष्ट्ये स्पष्ट करा.
- २) भारतातील बेरोजगारीचे प्रकार स्पष्ट करा.

प्रश्न ३ रा) खालील प्रश्नांची ४०० शब्दांत उत्तरे लिहा. (कोणताही एक)

- १) भारतीय शेतीची उत्पादकता कमी असण्याची कारणे सांगून शेतीची उत्पादकता वाढविण्यासाठी उपाय सूचवा.
- २) भारतातील बेकारीची कारणे सविस्तर स्पष्ट करा.

प्रश्न ४ था) टिपा लिहा. (कोणत्याही तीन)

- १) भारतातील लोकसंख्या वाढीची कारणे.
- २) मानवी विकास निर्देशांक.
- ३) दारिद्र्याच्या संकल्पना.
- ४) हरितक्रांती.
- ५) शेतमाल विक्री व्यवस्थेतील दोष.

(१)

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Rayat Shikshan Sanstha's,
S.S.G.M. COLLEGE, KOPARGAON
 S.Y.B.Sc. Internal Test (SEM-I), 2017-2018
 Subject: Mathematics Paper-I (Multivariable Calculus-I)

Jr. Supervisor's Sign: _____

Name of the Student: _____

Roll No.

NOTE: Attempt each of the following questions.
 Total Marks: 10

Q.1) Mark the following as True(✓) or False(×)

- a) Rate of change of f increases most rapidly in the direction of $-\nabla f$.
- b) If $f_x(a, b) = 0, f_y(a, b) = 0$ then f has a local extreme value at (a, b)
- c) A critical point at which f is maximum is called saddle point.
- d) If $x = \alpha(u, v), y = \beta(u, v)$ are any functions of u and v then $J = \frac{\partial(x,y)}{\partial(u,v)} \neq 0$
- e) The area of ellipse $\frac{x^2}{9} + \frac{y^2}{4} = 1$ is 6.

Q.2) Choose the Correct Alternative of the following -

- a) The function $f(x, y) = 3x^2(y - 1) + y^2(y - 3) + 1$ has saddle point at -
 a) (1,1) b) (0,2) c) (-1,-1) d) (0,0)
- b) The critical point of $f(x, y) = x^3y^2(1 - x - y)$ is
 a) (1/3, 1/2) b) (1/2, 1/3) c) (-1/3, -1/2) d) None of these
- c) Let $f(x, y) = x^2 - y^2$. Then
 a) f has a local maximum point at $(0, 0)$ b) f has a local minimum point at $(0, 0)$
 c) f has a saddle point at $(0, 0)$ d) $(0, 0)$ is not critical point
- d) Jacobian of a transformation $x = au, y = bv, z = cw$ is
 a) 0 b) 1 c) $a + b + c$ d) abc
- e) Polar equation of a circle centered at $(1/2, 0)$ and radius $1/2$ is
 a) $r = 1/2$ b) $r = \sin\theta$ c) $r = 1 + \cos\theta$

Q.3)

a) Answer the following
State Taylor's Theorem for functions of two variables.

b) Find extreme values of the function $f(x, y) = x^3 - y^3 - 2xy + 6$

c) Evaluate $\iint_R \frac{1}{xy} dx dy$ where R is the square $1 \leq x \leq 2, 1 \leq y \leq 2$

d) Evaluate $\iint_D e^{y/x} dy dx$ where D: $0 \leq y \leq x, 0 \leq x \leq 1$.

e) Evaluate $\iiint_R dz dy dx$ where $0 \leq x \leq a, 0 \leq y \leq b, 0 \leq z \leq c$.