

Vivekanand College, Kolhapur. (Autonomous)
Department of Physics
Internal Examination Notice
2021-22

Date: 05/01/2022

All students of class B.Sc. I, B.Sc. II and B.Sc. III are hereby noticed that the first term internal evaluation examination is scheduled as per following time table.

Nature of question paper:

For B.Sc. I : Long answer question (Any one from given two questions) for 10 marks

Short answer question (Any two from given three questions) for 20 marks

For B.Sc. II : Long answer question (Any one from given two questions) for 10 marks

Short answer question (Any two from given three questions) for 10 marks

For B.Sc. II (Astro) : Long answer question (Any one from given two questions) for 10 marks

Short answer question (Any two from given three questions) for 10 marks

For B.Sc. III : Long answer question (Any one from given two questions) for 10 marks

Short answer question (Any two from given three questions) for 10 marks


Internal Evaluation Examination 2021-22.

SEM I, SEM III and SEM V

Time Table

Sr. No.	Class	Paper	Date	Time
1.	B.Sc. I	Paper I	12/01/2022	11:00 am to 12:00 pm
2.	B.Sc. II	Paper III	12/01/2022	11:00 am to 12:00 pm
3.	B.Sc. II (Astrophysics)	Paper I	13/01/2022	04:00 pm to 05:00 pm
4.	B.Sc. III	Paper V (section I)	14/01/2022	11:00 am to 12:00 pm
		Paper V (section II)		01:00 am to 02:00 pm
		Paper VI (section I)	15/01/2022	11:00 am to 12:00 pm
		Paper VI (section II)		01:00 am to 02:00 pm




HOD, Physics
Head of the
Department of Physics
Vivekanand College, Kolhapur

"Education for Knowledge, Science and Culture"
-Shikshanmaharshi Dr. Babuji Salunkhe
Shri Swami Vivekanand Shikshan Sanstha's
Vivekanand College, Kolhapur (Autonomous).
Department of Physics

B.Sc. Part-I SEM I Internal Examination (2021-22)
Mechanics I and II
(Paper code: DSC-1001A)

Date :
Day :

Total Marks: 30
Time :-

Q.1) Attempt the following

A) Choose the correct alternative

(5)

1. The scalar product of $5\hat{i} + \hat{j} - 3\hat{k}$ and $3\hat{i} - 4\hat{j} + 7\hat{k}$ is-----
a. 10 b. -10 c. 15 d. -15
2. The triangular law of vector addition is used to find the resultant of ----
a. only two vectors b. parallel vector
c. unit vectors only d. more than two vectors
3. The number of independent variables in the general solution of differential equation of second order is
a. 1 b. 0 c. 3 d. 4
4. An equation involving variables and Their derivatives Is called -----
a. differential equation b. second order equation
c. first order equation d. non-differential equation
5. The general solution of First order differential equation Second has ----
a. Only one arbitrary constant b. Two arbitrary constant
c. 0 d. 3 arbitrary constants
6. The order of ----Order derivatives in the differential equation is the order of differential equation -----
a. Higher b. Lower
c. Highest to lowest d. Lowest to highest
7. A non-inertial reference frame is a frame of reference that undergoes ----- with respect to an inertial frame.
a. displacement b. velocity
c. acceleration d. momentum
8. An object of----- mass requiers the force of 90 N to accelerate at rate of 2.6 m/s²-----
a. 25.7 b. 33.8
c. 34.6 d. 28.9
9. A girl getting down from running train falls Forward because of ----
a. inertia of rest b. inertia of motion
c. inertia of direction the combined d. effect of the three stated in above options



10. If M.I. of a rotating solid cylinder is increased, then its angular velocity will be----
- a. constant b. increases c. decreases d. zero
11. The torque is the product of ----
- a. mass and acceleration b. M.I. and angular acceleration
c. force and displacement d. force and angular acceleration
12. The cause of couple is----
- a. body at rest b. Purely rotational motion
c. Linear and rotational motion d. Purely linear motion
13. The M.I. of a body is independent on -----
- a. mass b. position of the axis of rotation
c. distribution of the mass about axis of rotation d. angular acceleration of the body
14. If the external torque acting on a body is zero, then its _____
- a. angular momentum is zero b. angular momentum is conserved
c. angular momentum is maximum d. angular acceleration is maximum
15. If there is Increase in torque --- Will be increases
- a. Force b. Linear momentum c. angular momentum d. Torque
16. When work is done on a body by an external force, its-----
- a. kinetic energy increases
b. potential energy increases
c. Both kinetic energy and potential energy increases
d. Sum of the kinetic energy and potential energy remains constant
17. While walking in desert, the camel possesses---- energy
- a. kinetic energy increases
b. potential energy increases
c. Both kinetic energy and potential energy increases
d. Sum of the kinetic energy and potential energy remains constant
18. The momentum of bullet in the gun before firing is ----
- a. Zero b. maximum c. minimum d. one
19. An object mass 200KG is observed to accelerate at the rate of four meters per second square then force required to produce acceleration is ----
- a. 50N b. 800N c. 204N d. 300N
20. The following statement is true in case of particle has zero acceleration-----
- a. Particle is at the state of rest b. Particle is in uniform motion
c. Both A and B d. Particle has fast speed



Shri Swami Vivekanand Shikshan Sanstha's

Vivekanand College, Kolhapur

(Autonomous)

Department of Physics

Internal exam (2021-22)

B.Sc.I Sem I

Date:- 12/01/2022

Attendance Sheet

Roll No.	Name Of Student	Signature
6851	Adure Sakshi Madhukar	Sakshi
6852	Burambale Kartik Nandkumar	Burambale
6853	Chavan Aishwarya Sanjay	Ashwarya
6854	Chavan Vaishnavi Ganesh	Vaishnavi
6855	Chougale Anuja Anil	Achougale
6856	Dhavale Pratik Vijay	Dhavale
6857	Dongare Rushi Chandrakant	Dongare
6858	Ekashinge Sourabh Amar	Ekashinge
6859	Fernandes Riya Inas	Fernandes
6860	Gaikwad Samita Babaso	Samita
6861	Gavali Shubham Anil	Gavali
6862	Gavase Sahil Sanjay	Gavase
6863	Gawade Shweta Sanjay	Gawade
6864	Ghatage Shivani Shivaji	Shivani
6865	Gudle Pallavi Bhujgonda	Gudle
6866	Gujare Om Parshuram	Gujare
6867	Gujare Omkar Parshuram	Gujare
6868	Gurav Kunal Damodar	Kunal
6869	Gurav Reva Sunil	Reva
6870	Hasbe Sadd Sanjay	Hasbe
6872	Jadhav Prasad Maruti	Prasad
6873	Jadhav Sandesh Daji	Sandesh
6874	Jamadar Karishma Khudbuddin	Karishma
6875	Kamble Rutik Vitthal	Rutik
6876	Karake Sayyam Deshbhushan	Karake
6877	Karne Dipali Ramesh	Karne
6878	Kashid Namrata Maruti	N.M.K.
6880	Khilare Rutik Sunil	Rutik
6881	Khot Ganesh Vitthal	Ganesh
6882	Khot Soham Ananda	Khot
6883	Kokate Akash Arjuna	Akate
6885	Koruche Pratiksha Dipak	Pratiksha



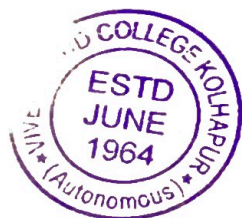
6887	Magadum Anuja Balaso	Anuja
6888	Malavi Sanika Yuvaraj	Malavi
6889	Mane Prachi Narendra	Mane
6890	Mane Siddhi Bipinkumar	Siddhi
6891	Metkari Sourabh Dadaso	Metkari
6892	Mohite Srusti Pandharinath	Mohite
6893	Morbale Aditya Sanjay	Morbale
6894	More Omkar Nandkumar	More
6895	More Shivani Pandurang	More
6896	Mujawar Ammar Mukhtar	Mujawar
6898	Parit Vaishnavi Sudesh	Vasit
6899	Pathan Misam Ashfak	Pathan
6900	Patil Abhishek Ananda	Patil
6901	Patil Diksha P	Patil
6902	Patil Hardik Dilip	Patil
6905	Patil Tejaswini Shahajirao	Patil
6906	Patil Vaishnavi Gorksha	Patil
6907	Pawar Priyanka Mansingq	Pawar
6909	Rathi Shreya Sanjay	Rathi
6910	Shelar Omkar Sardar	Omkar
6912	Shinde Atharva Dattatray	Shinde
6913	Shinde Avdhut Dattatray	Shinde
6914	Shinde Neha Rajesh	Shinde
6915	Shinde Pallavi Savanta	Pallavi
6916	Shinde Pranav Sarjerao	Pranav
6917	Shingare Sanskruti Sanjay	Shingare
6918	Singh Sadhana Sanjay	Singh
6920	Vhanmane Shubham Abaso	Vhanmane
6921	Anchi Siddharth Vikas	Anchi
6922	Atigre Sarthak Sujit	Atigre
6923	Bagwan Ahmed Jameer	Bagwan
6924	Bhojkar Sanika Satish	Bhojkar
6925	Bidkar Rasika Krushnath	Bidkar
6926	Buchade Vivek Vasant	Buchade
6927	Chavan Aditya Shrikrishna	Chavan
6928	Chavan Pratik Shivaji	Chavan
6929	Chavan Snehal Bhikaji	Chavan
6930	Chougule Rohit Anand	Chougule
6931	Dangar Noor Sanaula	Dangar
6932	Desai Pratik Mahesh	Desai
6933	Desai Sejal Anil	Desai
6934	Dhumal Keshav Gajanan	K. Dhumal
6935	Drakshe Pruthvi Prakash	P.D.P.
6936	Fakir Sohel Salim	Sohel
6937	Gadkari Sourav Sharad	Gadkari
6938	Ghadage Pruthviraj Pandurang	Ghadage
6939	Ghatge Shruti Sanjay	Ghatge



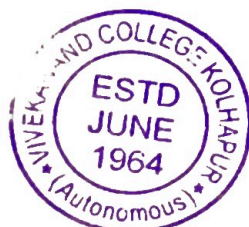
6940	Jadhav Ananya Netaji	Atyankar
6941	Jadhav Prerana Suresh	Jadhav
6942	Jambhekar Akash Sunil	AS Jambhekar
6943	Kadam Darshan Prabhakar	(K)
6946	Kamble Anjali Pradeep	Kamble
6947	Kamble Priyanka Ashok	Kamble
6948	Kolge Rushikesh Abasaheb	(K)
6949	Koli Prajakta Mahesh	Fedi
6950	Kulkarni Sanika Sachin	Sanika
6951	Kumbhar Trupti Arvind	Kumbhar
6954	Nalawade Yash Raju	Nalawade
6955	Patil Aryan Hanmant	Arya
6956	Patil Dipti Dilip	Dipti
6957	Patil Pruthviraj Ravindra	Patil
6958	Patil Shreyas Balwant	Patil
6959	Patil Shreyash Sandip	Spill
6960	Patil Sudarshan Rajaram	Patil
6961	Pawar Shubham Sudhir	Pawar
6962	Pendhari Samir Bakash	S.B.P.
6963	Powar Shridhar Ashok	Powar
6964	Randive Atharav Vikram	Randive
6965	Randive Shivtej Prashant	Shivtej
6966	Savekar Kasturi Deepak	Kasturi
6967	Shaikh Adnan Mohammadyasin	Shaikh
6968	Shinde Ajit Baban	Ashinde
6969	Shinde Shivam Firoj	Sshinde
6970	Swami Yash Anil	Swami
6971	Terani Akshata Sanjay	Ashata
6972	Vadar Snehal Raju	Snehal
6973	Zugar Prem Santosh	Zugar
6974	Aware Malhari Rameshwar	M.R.A.
6975	Barale Pooja Jyotiram	Barale
6976	Bhogane Ankita Appasaheb	Bhogane
6977	Bhosale Prerana Sanjeev	Bhosale
6978	Chavan Archana Mahadev	Chavan
6979	Chetake Asmita Krushnat	Chetake
6980	Chopade Ashish David	Chopade
6981	Chopade Prachi Manoj	Prachi
6982	Chothe Sakshi Nandakumar	Sakshi
6983	Chougale Aditya Narayan	Chougale
6984	Chougale Pratiksha Jaysing	Chougale
6985	Chougale Sakshi Yuvraj	Sakshi
6986	Chougale Snehal Gopal	Snehal
6988	Demanna Shreyashree Shantinath	Demanna
6990	Dhanavade Divya Ramesh	D
6992	Dubey Sakshi Rajkumar	Dubey
6993	Dudhgaonkar Yash Mukund	Y. Dudhgaonkar



6994	Gavade Ankita Ramchandra	AT Ankita
6995	Gavali Nikita Sarjerao	Nikita
6996	Gore Indraja Vitthal	Indraja
6997	Gosavi Pradnya Sakharam	Pradnya
6998	Gurav Akanksha Anil	Akanksha
6999	Gurav Smita Rajendra	Smita
7000	Ingale Parth Uday	Parth
7001	Jadhav Jyoti Hanumant	Jadhav
7002	Jadhav Sanika Vijay	Sanika
7003	Jadhav Tejas Sujay	Tejas
7004	Joshi Ritesh Narasu	Ritesh
7005	Kalkutki Shubham Sanjay	Shubham
7006	Kamble Abhishek Kishor	Abhishek
7007	Kamble Anushka Amar	Anushka
7008	Kamble Deepali Ravindra	Deepali
7009	Kamble Devdas Ananda	Devdas
7010	Kamble Prathmesh Shrirang	Prathmesh
7012	Kamble Rohan Bhagwan	Rohan
7013	Kamble Shrushti Prakash	Shrushti
7014	Kamble Shrutika Sunil	Shrutika
7016	Kapase Raturaj Ravindra	Raturaj
7018	Katake Sayali Kiran	Sayali
7020	Kharade Kedar Sanjay	Kedar
7021	Khot Shrutika Sambhaji	Shrutika
7022	Kodnaik Abhishek Lenin	Abhishek
7023	Koli Mayur Lahu	Mayur
7024	Koli Nikita Uttam	Nikita
7025	Koli Sakshi Sushant	Sakshi
7026	Koli Trupti Sanjay	Trupti
7027	Koregave Sammed Mahavir	Sammed
7028	Koundade Aditya Tanaji	Aditya
7029	Kuchakoravi Asmita Anil	Asmita
7030	Kumbhar Gouri Shrirang	Gouri
7031	Kumbhar Rasika Annaso	Rasika
7032	Kumbhar Sanika Sanjay	Sanika
7033	Kumbhar Shruti Ramchandra	Shruti
7034	Kumbhar Shweta Prakash	Shweta
7036	Lohar Shubham Bhaskar	Shubham
7037	Lokhande Yash Amol	Yash
7038	Lonkar Pradnya Dnyanoba	Pradnya
7039	Mahadik Disha Kailas	Disha
7040	Malavi Janhavi Prakash	Janhavi
7041	Mane Aman Pralhad	Aman
7042	Mane Anuradha Avinash	Anuradha
7043	Mane Ganesh Shivaji	Ganesh
7044	Mane Shweta Dattatray	Shweta
7045	Matwal Mohdsaiif Rafik	Mohdsaiif



7046	Miraje Manoj Arunkumar	MAR
7047	Mohite Avadhoot Vijayanand	Mohite
7048	More Sayali Sandeep	More
7049	Mujumdar Sanika Prasad	Sanjali
7050	Muthe Aditya Dnyaneshwar	Amruta
7051	Nadaf Suzan Sadik	Suzan
7052	Nagaonkar Akash Uday	Nagaonkar
7054	Pakhali Abusufiyan Salim	Pakhli
7055	Parit Sanika Ramchandra	Parit
7056	Pathrut Ganesh Bhimrao	Ganesh
7058	Patil Dhanshree Madhusudhan	Dhanshree
7059	Patil Janhavi Jagdish	Patil
7060	Patil Neeraj Deepak	N.D. Patil
7061	Patil Pranoti Bahubali	Patil
7062	Patil Purva Jaysing	P.T. Patil
7063	Patil Rushikesh Balaso	Patil
7065	Patil Sanika Bhivaji	Patil
7066	Patil Sayali Sarjerao	Sayali
7067	Patil Snehal Yalgonda	Snehal
7069	Patil Tejas Sunil	Patil
7070	Patil Vaishnavi Vikramsinh	Patil
7071	Pawar Galaxy Sunil	Galaxy
7072	Pirai Kartiki Baban	K.P. Baban
7073	Powar Avantika Balaso	Avantika
7074	Puribuva Namrata Ganesh	Namrata
7075	Rajge Vaishali Dhanaji	Vaishali
7076	Rajput Yadnya Dhanrajsingh	Rajput
7077	Rathod Sonali Ramsh	Sonali
7078	Redekar Gayatri Madan	Gayatri
7079	Redekar Siddhika Madan	Siddhika
7080	Renadive Parshwa Rakesh	Parshwa
7081	Rokade Patil Anant Prakash	Anant
7082	Sadolkar Soham Satish	Sadolkar
7083	Sanadi Javed Imam	Javed
7084	Savairam Arpita Sanjay	Arpita
7085	Shaikh Naeem Mahamadhanif	Naeem
7086	Shinde Adityaraj Sachin	Ashinde
7087	Shinde Samiksha Maruti	Samiksha
7088	Shinde Shruti Ravindra	Shinde
7089	Suryawanshi Sneha Suryakant	Sneha
7090	Thorat Aishwarya Bhaskar	Aishwarya
7091	Thorat Isha Manohar	Isha
7092	Tope Gayatri Chandrakant	Tope
7093	Vhannure Abhishek Krushna	Abhishek
7094	Wadar Rushikesh Vijay	Wadar
7095	Attar Musaeb Zakir	Mattar
7097	Birje Rutuja Jaywant	R.J. Birje



7098	Birnale Sanket Dilip	Birnale
7099	Chindage Vaishnavi Rangrao	Chindage
7100	Gaikwad Divya Arvind	Gaikwad
7101	Jadhav Prachi Sanjay	Jadhav
7102	Kamble Arpita Laxman	Kamble
7103	Kamble Payal Varun	Kamble
7104	Khopade Vaishnavi Prakash	Khopade
7105	Koneri Priya Shivling	Koneri
7106	Korgaonkar Sakshi Shivraj	Korgaonkar
7107	Kumbhar Supriya Krishnat	Kumbhar
7108	Mali Pradnya Arun	Mali
7109	Nandudkar Pradnya Nandkumar	Nandudkar
7110	Nikam Harshavardhan Ashok	Nikam
7111	Patil Mrunali Maruti	Patil
7112	Patil Shivam Vinaykumar	Patil
7113	Patil Shruti Sandip	Patil
7114	Patil Trupti Vijay	T.V. Patil
7115	Sathe Samiksha Sarjerao	Sathe
7116	Shinde Shloka Shripati	Shinde
7117	Sutar Sushant Vilas	Sutar
7118	Tanugade Gauri Bhauso	Tanugade
7119	Berad Rohit Bhalchandra	R.B.B
7120	Bhapkar Sai Santosh	Bhapkar
7121	Bhosake Aditya Ajit	Bhosake
7122	Bhosale Asleshiya Dhanawant	A.D.B.
7123	Chougule Siddhesh Suresh	Chougule
7124	Jadhav Rajdeep Uday	Jadhav
7125	Jadhav Rutuja Sunil	Jadhav
7126	Kadam Prem Babasaheb	Kadam
7127	Kagude Darshan Sanjay	Kagude
7128	Kamble Parag Manesh	Kamble
7129	Khetal Shailesh Vitthal	S.V. Khetal
7130	Khodbale Harshada Suresh	Khodbale
7131	Maner Mohammed Taquee Mohammed Shafi	Maner
7132	Modak Mussaddique Firoz	Modak
7133	Nadaf Pinjari Sana Nabilal	Nadaf
7134	Panhalkar Sanket Dattatray	Panhalkar
7135	Patil Akshata Ashok	Akshata
7136	Patil Athrav Shivaji	Patil
7137	Patil Omkar Sanjay	Omkar
7138	Patil Parth Pravin	Patil
7139	Patil Pratik Suresh	Patil
7140	Patil Sakshi Rangrao	Patil
7141	Patil Sanika Ananda	Patil
7142	Patil Sayali Sampat	Patil
7143	Patil Shakti Prakash	Shakti
7144	Patil Shubham Hanardhan	Shubham



7145	Patil Vaishnavi Kalgonda	Vaishnavi
7146	Patil Vaishnavi Krishnat	Patil
7147	Patil Vipul Ashok	Patil
7148	Pawar Vaishnavi Subhash	Pawar
7149	Rathod Snehal Ramesh	Snehal
7150	Savaratkar Onkar Haribhau	Savaratkar
7151	Shinde Aary Anil	Aary
7153	Sutar Shradha Nagesh	Sutar
7154	Upadhye Suyash Bahubali	Suyash
7155	Vadar Kiran Rajendra	Vadar
7156	Waware Shivanjali Sanjay	Waware

Internal Examiner.....

[Handwritten Signature]



Vivekanand College, Kolhapur (Autonomous).
Department of Physics

B.Sc. Part-I SEM I Internal Examination (2021-22)
Mechanics I and II
(Paper code: DSC-1001A)

Roll No - 6861

Date :
Day :

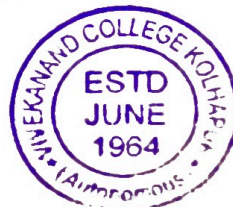
Total Marks: 30
Time :-

Q.1) Attempt the following

A) Choose the correct alternative

(5)

1. The scalar product of $5\hat{i} + \hat{j} - 3\hat{k}$ and $3\hat{i} - 4\hat{j} + 7\hat{k}$ is-----
a. 10 b. -10 c. 15 d. -15
2. The triangular law of vector addition is used to find the resultant of ----
a. only two vectors b. parallel vector
c. unit vectors only d. more than two vectors
3. The number of independent variables in the general solution of differential equation of second order is
a. 1 b. 0 c. 3 d. 4
4. An equation involving variables and Their derivatives Is called -----
a. differential equation b. second order equation
c. first order equation d. non-differential equation
5. The general solution of First order differential equation Second has ----
a. Only one arbitrary constant b. Two arbitrary constant
c. 0 d. 3 arbitrary constants
6. The order of ----Order derivatives in the differential equation is the order of differential equation -----
a. Higher b. Lower
c. Highest to lowest d. Lowest to highest
7. A non-inertial reference frame is a frame of reference that undergoes ----- with respect to an inertial frame.
a. displacement b. velocity
c. acceleration d. momentum
8. An object of----- mass requires the force of 90 N to accelerate at rate of 2.6 m/s^2 -----
a. 25.7 b. 33.8
c. 34.6 d. 28.9
9. A girl getting down from running train falls Forward because of ----
a. inertia of rest b. inertia of motion
c. inertia of direction the combined d. effect of the three stated in above options



10. If M.I. of a rotating solid cylinder is increased, then its angular velocity will be----

- a. constant b. increases c. decreases d. zero

11. The torque is the product of ----

- a. mass and acceleration b. M.I. and angular acceleration
 c. force and displacement d. force and angular acceleration

12. The cause of couple is----

- a. body at rest b. Purely rotational motion
c. Linear and rotational motion d. Purely linear motion

13. The M.I. of a body is independent on -----

- a. mass b. position of the axis of rotation
c. distribution of the mass about axis of rotation d. angular acceleration of the body

14. If the external torque acting on a body is zero, then its _____

- a. angular momentum is zero b. angular momentum is conserved
c. angular momentum is maximum d. angular acceleration is maximum

15. If there is Increase in torque --- Will be increases

- a. Force b. Linear momentum c. angular momentum d. Torque

16. When work is done on a body by an external force, its-----

- a. kinetic energy increases
b. potential energy increases
 c. Both kinetic energy and potential energy increases
d. Sum of the kinetic energy and potential energy remains constant

17. While walking in desert, the camel possesses---- energy

- a. kinetic energy increases
b. potential energy increases
c. Both kinetic energy and potential energy increases
 d. Sum of the kinetic energy and potential energy remains constant

18. The momentum of bullet in the gun before firing is ----

- a. Zero b. maximum c. minimum d. one

19. An object mass 200KG is observed to accelerate at the rate of four meters per second square then force required to produce acceleration is ----

- a. 50N b. 800N c. 204N d. 300N

20. The following statement is true in case of particle has zero acceleration-----

- a. Particle is at the state of rest b. Particle is in uniform motion
c. Both A and B d. Particle has fast speed

