

The Annual Quality Assurance Report (AQAR) of the IQAC
Govt. Holkar (Model, Autonomous) Science College, Indore (M.P.)
(AQAR of Academic Year July 1, 2019 to June 30, 2020)
Part – A

Data of the Institution				
1.	Name of the Institution		Govt. Holkar (Model, Autonomous) Science College, Indore	
•	Name of the Head of the institution		Dr. Suresh T. Silawat	
•	Designation		Principal	
•	Does the institution function from own campus		Yes	
•	Phone no./Alternate phone no.		0731-2446806 / 0731-2464074	
•	Mobile no.		9302100611	
•	Registered Email		principalhsc@rediffmail.com	
•	Alternate Email		--	
•	Address		AB Road, Bhanwarkua	
•	City/Town		Indore	
•	State/UT		M. P.	
•	Pin Code		452001	
2.	Institutional status			
•	Autonomous Status (provide the date of Conformant of Autonomous Status)		01/09/1989	
•	Type of Institution: Co-education/Men/Women		Co-education	
•	Location : Rural/Semi-urban/Urban		Urban	
•	Financial Status		UGC 2f and 12 (B) and Self-financing (Partially)	
•	Name of the IQAC Co-ordinator/Director		Dr. R.K.Sharma	
•	Phone no. /Alternate phone no		0731-2446806 / 0731-2464074	
•	Mobile		9425081367	
•	IQAC e-mail address		IQAC_hsc@rediffmail.com	
•	Alternate Email address		raj_rma@yahoo.co.in	
3	Website address		http://www.collegeholkar.org	
•	Web-link of the AQAR		http://www.collegeholkar.org/AQAR2019-20.doc	
4	Whether Academic Calendar prepared during the year?		Yes	
•	If yes, whether it is uploaded in the Institutional website		Yes (Annexure I)	
•	Web link		http://www.collegeholkar.org	
5.	Accreditation Details			
Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1 st	***	--	2001	from:05.11.2001 to: 04.11.2006
2 nd	B	2.75	2009	from:30.09.2009 to: 29.09.2014
3 rd	A	3.23	2016	from:19.01.2016 to: 18.01.2021
6.	Date of Establishment of IQAC:DD/MM/YYYY			01/11/2003

7. Internal Quality Assurance System					
7.1 Quality initiatives by IQAC during the year for promoting quality culture					
Item /Title of the quality initiative by IQAC		Date & duration		Number of participants/beneficiaries	
Regular meeting of IQAC		20/07/19		15	
Regular meeting of IQAC		25/02/20		15	
College Participated in NIRF		27/01/20		NIRF Ranking 2017(101-150)	
College Participated in AISHE		28/02/20		--	
Feedback from all stakeholders collected, analysed and used for improvements		Collected and analyse and used for improvement at various department level.		--	
8. Provide the list of Special Status conferred by Central/ State Government-UGC/ CSIR/ DST/ DBT/ ICMR/TEQIP/World Bank/CPE of UGC etc.					
Institution/ Department/Faculty		Scheme	Funding agency	Year of award with duration	Amount
Model		--	State Govt.	05/07/85	--
Autonomous		--	UGC	09/07/89 to till now	--
College of Excellence		--	State Govt.	12/07/18 to till now	--
9.	Whether composition of IQAC as per latest NAAC guidelines			Yes	
•	upload latest notification of formation of IQAC			Uploaded on Website (Annexure II)	
10.	No. of IQAC meetings held during the year			02	
•	The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website..... Yes/No(Please upload, minutes of meetings and action taken report)			Yes (Annexure III)	
11.	Whether IQAC received funding from any of the funding agency to support its activities during the year? Yes/No			No	
•	If yes, mention the amount and year			Nil	
12.	Significant contributions made by IQAC during the current year (maximum five bullets)				
❖	National Workshop on Intellectual Property Rights (12-13/03/20); International Conference on “Recent Advances in Life Science for Betterment of Human Health” (ICRALBEH-19) (14-15/12/19); One week workshop on “Qualitative & Quantitative Analysis” (10-15/10/19); One week Workshop on “Research Methodology” (16-20/12/19) and various webinars between April to June 20 were organized during the session through different departments of the college.				
❖	Two workshops: “Hardware & Networking” (15-16/11/19); Internship Programme on “Instrumentation Techniques” (06-18/01/20) were organized during the session through different departments of the college.				
❖	Three training programme/Internship: Short term Tr. On “Advanced Agro Techniques for Entrepreneurship Development” (22/01-14/02/20); Hands on Training Programme on “Mushroom Cultivation for self employment” (10-11/10/19); Short term employment oriented tr. on “Health and Nutrition” (16/09-12/10/19), were organized				

	during the session through different departments of the college.
❖	More than 227 faculties were participated in various seminars/workshops, Approx. 05 papers were presented by the faculties in various seminars, 14 candidates awarded Ph.D. degree under the guidance of faculty members, 01 major project is ongoing, About 82 research papers are published by the faculty member in various peer-reviewed journals/proceedings during the session.
❖	CSIR NET CLASSES: Dept. of Biotech.& Bioinfo. (01/09-01/12/19); Various entrepreneurship development programme and skill oriented programme were organized during the session.
13. Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year	
Plan of Action	Achievements/Outcomes
<p>Academic programmes proposed:</p> <ul style="list-style-type: none"> (i) To start B.Sc.-B.Ed., MBA, B.Sc. (Honours) courses, M.Sc. in Genetics. (ii) To organize academic tours. (iii) To organize Lectures /seminars /workshop/symposium. (iv) To start new certificate courses. (v) To start New award if any. (vi) To motivate faculties for Research activities. (vii) Science Exhibition. (viii) Remedial Classes. 	<p>Academic programmes implemented:</p> <ul style="list-style-type: none"> (i) B.Sc. (Honours) in Mathematics and Physics are under proposal. (ii) Four national /International seminar /conference/Workshops and various webinars were organized during the session through different departments of the college. (iii) Three Training/Internship Programme and various other programmes for students were organized during the session through different departments/Cells of the college during the session. (iv) Bhuvisanwad Programme by Dept. of Geology on 15-16/11/19. (v) More than 227 faculties were participated in various seminars/workshops. Approx. 05 papers were presented by the faculties in various seminars during the session. (vi) 14 candidates awarded Ph.D. degree under the guidance of faculty members during the session. (vii) 01 major project is ongoing during the session. (viii) About 82 research papers were published by the faculty member in various peer-reviewed journals /proceedings. (ix) Switched on annual system at UG level so that all syllabi at UG(B.Sc.)III Year level are revised and introduced. (x) Remedial classes were organized for slow learners.
<p>Infrastructure development proposed:</p> <ul style="list-style-type: none"> (i) To develop separate blocks for each department. (ii) To construct extra classrooms. (iii) To construct new Laboratories (iv) To renovate Playgrounds (v) To enrich the Library. (vi) Up gradation of Canteen Facility. 	<p>Infrastructure development implemented :</p> <ul style="list-style-type: none"> (i) Six new classrooms are under construction. (ii) Fifteen new labs are under construction. (iii) Construction of two buildings for computer science department and examination are in progress. (iv) New canteen and gym buildings are under construction. (v) First floor of on Library is constructed

	<p><i>and Library building renovated during the session.</i></p> <p>(vi) <i>Old classrooms in Red-Building, and in Yashwant Hall, Language lab, Dept. of For. Sc.& Dept. of Pharma Chemistry are renovated during the session.</i></p> <p>(vii) <i>New building construction for Dept. of Geology is under process.</i></p> <p>(viii) <i>Play grounds were renovated during the session.</i></p> <p>(ix) <i>Sheds are installed in front of Office, and back side of the office and on front of departments during the session.</i></p> <p>(x) <i>NSS wing is renovated during the session.</i></p> <p>(xi) <i>One store/workshop hall is constructed during the session.</i></p>
<p>Extension/Value added programmes proposed:</p> <p>(i) <i>To start cleanliness drive in the college and to make it a polythene free zone.</i></p> <p>(ii) <i>Yoga Karyakram for students.</i></p> <p>(iii) <i>Gender equality programmes, self-defence programmes etc</i></p> <p>(iv) <i>Subject like Moral Values should be incorporated as compulsory subject in the curriculum.</i></p> <p>(v) <i>To organize lecturers related to Moral values, spirituality, national integration, Indian tradition and culture etc.</i></p> <p>(vi) <i>Social Welfare Activities: Blood donation camp, Organs/Body donation programme, Awareness about disease/health like: AIDS, Personal hygiene pr. Health check up camps-Eye testing, Bone density, Lipid profile etc., Vector born disease awareness camp, clean environment programme, Eradication of child labourers, differentially able Day, Women's Day & "World Diabetes Day" and awareness campaign, programmes for women empowerment, cancer/ Breast Cancer awareness programme, workshop on violence against women, tree plantation.</i></p> <p>(vii) <i>Civic Development Activities: Road safety programmes-Traffic rule, Awareness about RTI, Awareness about Gender sensitivity. Voting awareness campaign</i></p>	<p>Extension/Value added programmes implemented:</p> <p>(i) <i>The students participated in the various programmes held on the occasion of Independence Day, Republic day and Gandhi Jayanti.</i></p> <p>(ii) <i>The NCC cadets of the college performed various activities like Tree plantation, Nukkad Natak etc during the session.</i></p> <p>(iii) <i>The NSS units organized various programmes like: Sadbhavana Divas (20/08/19), Plantation-Hariyali Mahotsav (11/08/19), Rally against "Food Adulteration" (24/08/19) Women Empowerment Session JUDO/Karate (07/09/19), "Kaumi Ekta" Shapath" (19/11/19), Programmes on AIDs awareness (20/11/19, 21/11/19, 28-30/12/19), Rastriya YUVA Diwas celebration (12/01/20), Blood donation camp (01/12/19 at MY Hospital & 30/12/19 in college campus.), Eye Checkup camp (17/11/19), NSS camp (21-27/11/19) etc during the session.</i></p> <p>(iv) <i>The NCC units organized various programmes like: Polio Abhiyaan (16/10/19), Kagil Vijay Divas (26/07/19), Painting Programme by cadets: on Gandhi Jayanti (11/07/19), Traffic Control Programme (15/07/19), Tikakaran motivation to people, Assist to Medical Staff, Cleanliness Drive(Sawccha Bharat) (14/12/19), Awarding Ceremony (24/11/19), Visit to Heritage (Kastoorba Gram) (29/11/19) etc.</i></p> <p>(v) <i>The Red Cross Society organized: Plantation on Kargil Martyr (31/07/19), Blood Donation Camp (30/12/19), Polythene Free Campus Prog. (26/01/20), Lecture on scientific basis of cancer awareness and training on CPR (07/02/20), Health Checkup camp on women day (07/03/20), Poster</i></p>

	<p><i>competition on AIDS Awareness (17/01/20), Poster competition on cancer Awareness (04/02/20), Visit to Musakhedi Slum area and Nutrition Awareness (08/08/19), Vigilance Awareness Week (29/10-03/11/19 etc during the session.</i></p> <p>(vi) <i>Dept. of Botany organized: National AIDS Control Program, Environment Awareness programme on air pollution (30/07/19), Plantation Activities: Botanical Garden (30/08/19), Tagging of Plant (22/09/19), Visit to Jyoti Niwas old age home (14/01/20), Vermi compost Training: Kasturba Gram (25/01/20)etc.</i></p> <p>(vii) <i>Dept. of Pharma organized: Poster competition: Route of drug Administration and dosage form (30/12/19), Quiz Competition (14/01/20), Astha Old Age Home Visit (14/11/19), Alumni Meet (02/11/19) etc</i></p> <p>(viii) <i>Dept. of Microbiology organized: Research Studies on Unknown Foul Odour of Indore City” (Nov.-Dec. 19), Excursion trip: “Parenteral drugs pvt. Ltd., Mandlehwar” (22/01/20), PTA (04/03/20), Covid-19 Awareness Programme (04-06/06/20)etc.</i></p> <p>(ix) <i>Dept. of Biochemistry organized: Kargil Divas Calibration: Basket Ball Complex, Indore (28/07/19), Programme on Health and Nutrition (16/09 – 12/10/19), Alumni Meet (03/11/19, PTA (15/02/20), Mushroom Cultivation training (06/03/20), Online Quiz : (Nutrition and Immunology) (03/06-09/06/20) etc.</i></p> <p>(x) <i>Dept. of Geology organized: Gosthi-Jal Evam Paryavaran Sankat, Samadhan and Upay (06/08/19).</i></p> <p>(xi) <i>Dept. of Biotech & Bioinfo. Organized: Plantation: 01/08/19, CSIR NET Classes: 01/09-30/11/19, Parents Teacher meeting: 02/11/19, A visit to Jeevan Shala Visharjan Ashram (slum area):02/11/19, Science Olympiad: 29/02/20 etc.</i></p> <p>(xii) <i>For drinking water “Microbial analysis of Water samples from different locations on GHSC campus” is conducted by Department of Microbiology during the session.</i></p> <p>(xiii) <i>Various programmes organized by Eco Club & Dept. of See & Horticulture.</i></p>
<p>Skill oriented and student mentoring programmes proposed:</p> <p>(i) <i>To organize lectures on entrepreneurship skill development.</i></p> <p>(ii) <i>To organize lectures on personal grooming, personality development and attitude building. This will help the students to face</i></p>	<p>Skill oriented and student mentoring programmes implemented:</p> <p>(i) <i>Entrepreneurship development programme is taught at the UG level as a separate course.</i></p> <p>(ii) <i>Carrier Guidance Cell organized various</i></p>

<p>placement agencies coming to the institution.</p> <p>(iii) To organize career fair in the college.</p> <p>(iv) To organize lectures on the use of social networking sites and on awareness for cyber crime.</p> <p>(v) Job oriented projects.</p> <p>(vi) Entrepreneurship development programme for self employment.</p> <p>(vii) To organize Workshop for improving "Communication Skill".</p> <p>(viii) Organize Zero hour classes and Bridge classes.</p> <p>(ix) To organize Remedial classes.</p> <p>(x) To organize Classes for the preparation of competitive examinations.</p> <p>(xi) To organize talent search examinations.</p>	<p>programmes: 'SWOT' (29/07/2019); Lecture on 'C.V. Writing' (30/09/2019); Lecture on 'Mock Interview (Practical) (04/10/2019); (व्याख्यान) "राजीव गाँधी का सपना" आई.टी. – कम्प्यूटर में अग्रणी देश हो अपना (निबंध) छात्रों में आई.टी. से संबंधित कार्य क्षेत्र पर चर्चा (परिचर्चा)(11/11/2019); Lecture on "Career Aspects of Bio Sciences Students in Conservation of National Parks" (12/12/2019); Lectures on "Career Opportunities in Govt. Sector" & "Assessment of Aptitude through hand writing" (30/01/2020); Yoga & Meditation (23/09-14/10/19); Lecture on नैतिक मूल्य और विद्यार्थी जीवन" (07/11/2019); Personal Counseling and Mentoring (23/09-14/10/19) etc.</p> <p>(iii) Personality Development Cell organized: Rashtriya Aandolan (21/08/2019); Aatankvad Samasya Evam Samadhan (09/09/2019); Gandhi Evam Aatmnirbharta (10/10/2019); Gurunanak ke Vichar (27/11/2019); Bangladesh Ke Kranti (28/01/2020) etc.</p> <p>(iv) Various skill oriented course organized by various departments: Hands on Training on "Programme on Mushroom Cultivation" for self employment (10 - 11/10/19) by Dept. of Horticulture & Seed Technology; Tr. Prog. on "Advanced Agro Techniques for Entrepreneurship Development" (22/01-14/02/20) by Dept. of Botany & Carrier Guidance Cell; Tr. Prog. on "Organic Farming for Sustainable. Development and Conservation of Environment" (Carrier Guidance Cell & Dept of Seed & Hort.)(28/02-03/03/2020); Lectures on "Bio Diversity Conservation Through a lens of a Forester", "Technology for Avian Studies", "Wild Life Sustainability and Management", "Zoo Management", "Biodiversity by (Biochem & Carrier Guidance Cell)(02/03/2020); Short term employment oriented Tr. On "Health and Nutrition" (16/09-12/10/19 & 02-31/12/19) by Dept. of Biochem. & Career Guidance Cell; Lecture on career opportunities in Geology (Carrier Guidance Cell & Dept of Geology)(26/11/2019); Lectures on "Job Opportunities in Questioned Documents" & "Forensic Examination of Blood, Bloodstains and Blood Grouping System" (Carrier Guidance Cell & Dept of For. Sc.)(15/01/2020); Personality Development & Communication Programme (Career Guidance Cell &</p>
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	<p>Dept. of Chemistry)(23/09-14/10/19); Language Lab (Career Guidance Cell & Dept. of Chemistry)(23/09-14/10/19); Computer Hardware, Equipment Repairing & fabrication training Workshop (Career Guidance Cell & Dept. of Electronics)(18/11-16/12/19); Tr. On Basic Programming with Python(Career Guidance Cell & Dept. of Electronics)(2019-20); Tr. On Embedded System Design based on Aurdino (Career Guidance Cell & Dept. of Electronics)(2019-20) etc.</p> <p>(v) Remedial Classes organized by Dept. of Zoology, Pharma Chemistry, Chemistry and English for slow learners during the session.</p> <p>(vi) Placement cell organized Meetings with HR's of Various Companies.</p> <p>(vii) 1605 UG and 248 PG students of last semester have carried out 60 hours job oriented projects/internship.</p> <p>(viii) Total eight companies visited for campus placement and 64 students are placed, while 01 students placed off campus and 20 students cleared various competitive exams during the session.</p>
<p>Co-curricular/community extension programmes proposed:</p> <p>(i) Physical Activities: YOGA, Judo Karate , sports activities: Institutional/ Division/ state/National/International sport competitions.</p> <p>(ii) Aesthetic and Cultural Activities: On the spot drawing & painting competition, Group singing, Solo singing/ rhymes. Rangoli competitions.</p> <p>(iii) Literary Activities: Inter-House competitions, House meetings, English recitation, Hindi calligraphy, English calligraphy, Hindi & English elocution (pronunciation).</p> <p>(iv) Annual functions and Youth festivals.</p>	<p>Co-curricular/community extension programmes implemented:</p> <p>(i) Dept. of sports organized various competition during the session: Basketball(W) (08-09/11/19) (Division Level), Tennis(M)(21/12/19) (Division Level), Tennis(M)(Jan. 20) (Division Level), Teachers/Employee Sports(Feb. 20) (Division Level), Volleyball(M) (09-10/11/19) (District Level), Volleyball(W) (14-15/10/19) (District Level), Football(M) (02-05/11/19) (District Level), Borans Cup: Cricket(District Level)</p> <p>(ii) Dept. of sport organized Training camp of various games: Volleyball, Basketball, Softball, Chess, Table-Tennis etc during the session.</p> <p>(iii) Department of sport organized Judo Karate training camp for girls in self defence. Yoga training camp during the session.</p> <p>(iv) Yoga Karyakram Surya Namaskar on Vivekanand Jayanti was organized by sports Department.</p> <p>(v) On the occasion of annual function various sports activities organized by the department of sports.</p> <p>(vi) <i>Many cultural and literacy activities organized by the institution during the session.</i></p>

	(vii) Annual functions and youth festival were organized during the session.
	(viii) Many students achieve awards/Medals during the session (Listed in 5.3.1)
14. Whether the AQAR was placed before statutory body? Yes /No	No
Name of the statutory body: Nil	Date of meeting(s): Nil
15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning? Yes/No: Yes	
NAAC	Date: 07 - 09/12/2015
Autonomy Team	Date: 12 - 13/05/2017
16. Whether institutional data submitted to AISHE	Yes
Year: 2019-20	Date of Submission: 28/02/2020
17. Does the Institution have Management Information System?	Yes (Partially)
If yes, give a brief description and a list of modules currently operational. (Maximum 500 words):	
<p>Management information system is a system formed and developed by the institution for updating, co-ordinating, analysing and controlling various information in the organization. College has Partially Management Information System.</p> <p>In Govt. Holkar Science College the IT cell of the examination department manages and uploads news and information from time to time on the college website. The IT cell has created student's profile where all the details of the students seeking admission in the college are readily available. The students can see their results, fill the examination form can print out their admit cards etc. online. In addition to this the IT cell also update the details given to it by various Departments like - information regarding workshops, seminars and conferences etc. organized and also those which will be organized in future. The IT cell displays and uploads all the official notices on the website. In a nutshell the objective of MIS is to share notices, results, admission process, ongoing activities etc. with the students, faculty members and all those who want to seek information about the college.</p> <p>The college has a well-defined administrative set up for the smooth functioning of the institution. The administrative procedure and fee structure are given in the college brochure and they are also displayed on the college website- www.collegeholkar.org. This information can also be sought directly from the college inquiry office. While the principal as the head of the institution remains at the helm of all the academic and administrative affairs in the college, the administrative officer serving as a link between the principal and the other staff members facilitates day to day administration of the institution. Every teaching department is headed by a senior professor entrusted with the administrative and academic responsibilities of that particular department. There are formed various committees comprising senior and experienced members of the staff for a number of activities taking place on the campus through the year. Constant monitoring is done to avoid any slackness in the administration.</p> <p>Being an autonomous institution the college has its own examination department. All the activities related to the exam are carried out by this department. The administrative staff of the examination department comprises controller, deputy controller, several clerks and the peons. Students can seek information regarding their examination queries from the exam department directly. All information regarding examinations the student can seek from college website. Fee collection is online through SBI collect. Student can submit their form online, can see their results and download provisional mark sheets online from college website.</p> <p>Admission to the college is based on merit basis is done online through a central agency appointed by the Dept. of Higher Education Govt. of MP.</p>	

The student's record is maintained in the office of the principal as well as in the exam department. The statistics related to the students is also uploaded on the college website. This information is updated on the portal of AISHE also.

Every teaching departments of the college has been equipped with internet/Wi-Fi in order to facilitate research activities. The college website is regularly updated.

The students passing out from the college have to fill a feedback form. It helps to trace the location and to keep the data of the students as they give their details regarding the college they have taken admission or sought jobs at various companies.

CRITERION I–CURRICULAR ASPECTS		
1.1 Curriculum Design and Development		
1.1.1 Programmes for which syllabus revision was carried out during the Academic year		
Name of programme	Programme Code	Dates of revision
UG - B.Sc.	U001	Chemistry(20/06/19), Biotechnology(03/06/19), Computer Sc.(12/07/19), Zoology(18/10/19), Botany(22/06/19), Bioinformatics(03/06/19), Bio Chemistry(06/07/19), Microbiology(25/06/19), Pharma Chemistry(17/07/19), Horticulture(05/07/19), Seed Tech.(06/07/19), Forensic Sc. (06/08/19), Geography(27/06/19), Fisheries(28/05/19), Geology(21/06/19), Physics(05/07/19), Electronics(24/06/19), Mathematics(08/07/19), Statistics(31/07/19), Economics(31/07/19), English Lang. (20/07/19), Entr. Dev.(20/07/19), Hindi Lang. & Moral Value(10/07/19).
UG – BCA	U002	12/07/19
PG - M.Sc. – Bio Chemistry	P003	06/07/19
PG - M.Sc. – Bio Technology	-do-	03/06/19
PG - M.Sc. – Botany	-do-	26/06/19
PG - M.Sc. – Chemistry	-do-	20/06/19
PG - M.Sc. – Computer Sc.	-do-	12/07/19
PG - M.Sc. – Fisheries	-do-	28/05/19
PG - M.Sc. – Forensic Sc.	-do-	06/08/19
PG - M.Sc. – Geology	-do-	21/06/19
PG - M.Sc. – Mathematics	-do-	08/07/19
PG - M.Sc. – Microbiology	-do-	25/06/19
PG - M.Sc. – Pharma. Chemistry	-do-	17/07/19
PG - M.Sc. – Physics	-do-	05/07/19
PG - M.Sc. – Statistics	-do-	31/07/19
PG - M.Sc. – Zoology	-do-	18/10/19
M.Phil. – Bio Chemistry	P004	06/07/19
M.Phil. – Bio Technology	-do-	03/06/19
M.Phil. – Botany	-do-	26/06/19
M.Phil. – Chemistry	-do-	20/06/19
M.Phil. – Comp. Sc.	-do-	12/07/19
M.Phil. – Zoology	-do-	18/10/19

1.1.2 Programmes/ courses focused on employability/ entrepreneurship/ skill development during the Academic year			
Programme with Code	Date of Introduction	Course with Code	Date of Introduction
All programmes listed in 1.1.1 are employable	July 19	All courses are employable. Some of them are listed below. For detailed nomenclature of courses visit our website www.collegeholkar.org (Annexure IV)	July 2019
		Biochemistry at UG(101-301)	July 2019
		Bioinformatics at UG(102-302)	July 2019
		Biotechnology at UG(103-303)	July 2019
		Computer Sc. at UG(106-306)(153-155, 253-255, 352-355, 451-456, 552-554, 651-654), 310	July 2019
		Electronics at UG(107-307)	July 2019
		English Lang. at UG(108-308),156	July 2019
		Hindi Lang. at UG(109-309),256	July 2019
		Geology at UG(111-311)	July 2019
		Horticulture at UG (112-312)	July 2019
		Fisheries at UG(113-313)	July 2019
		Mathematics at UG(114-314) (151,251,351,451,551)	July 2019
		Microbiology at UG(115-315)	July 2019
		Pharma Chemistry at UG(116-316)	July 2019
		Seed Tech. at UG(118-318)	July 2019
		Statistics at UG(119-319)(152,252)	July 2019
		Forensic Sc. at UG(122-322)	July 2019
		Entrepreneurship Development at UG (110,356,456)	July 2019
		Biochemistry at PG(BC11-14,21-24,31-34,41-44)	July 2019
		Biotechnology at PG(BT11-14,21-24,31-34,41-44)	July 2019
		Botany at PG(BO11-14,21-24,31-34,41-44)	July 2019
		Chemistry at PG(CH11-14,21-24,31-34,41-44)	July 2019
		Computer Sc. at PG(CS11-14,21-24,31-34,41-44)	July 2019
		Fisheries at PG(F11-14,21-24,31-34,41-44)	July 2019
		Forensic Sc. at PG(FS11-14,21-24,31-34,41-44)	July 2019
		Geology at PG(G11-14,21-24,31-34,41-44)	July 2019
		Mathematics at PG(M11-15,21-25,31-35,41-45)	July 2019
		Microbiology at PG(MB11-14,21-24,31-34,41-44)	July 2019
		Pharma Chem. at PG(PC11-14,21-24,31-34,41-44)	July 2019
		Physics at PG(P11-14,21-24,31-34,41-44)	July 2019
		Statistics at PG(S11-14,21-24,31-34,41-44)	July 2019
		Zoology at PG(Z11-14,21-24,31-34,41-44)	July 2019
		60 hours job oriented project/internship is mandatory for the students of last semester/year at UG and PG level.	July 2019
1.2 Academic Flexibility			
1.2.1 New programmes/courses introduced during the Academic year.			
Programme/Course			Date of Introduction
Molecular Biology (Paper-I) UGIII			06/07/19
Nutritional, Clinical and Environmental Biochemistry (Paper-II) UGIII			06/07/19

Biostatistics (Paper-I) UGIII	03/06/19				
Mathematics for Biological Science (Paper-II) UGIII	03/06/19				
Molecular biology and Genetic Engineering (Paper-I) UGIII	03/06/19				
Applied Biotechnology (Paper-II) UGIII	03/06/19				
Plant Physiology & Biochemistry (Paper-I) UGIII	22/06/19				
Cell Biology Genetics & Biotechnology (Paper-II) UGIII	22/06/19				
Physical Chemistry (Paper-I) UGIII	20/06/19				
Inorganic Chemistry (Paper-II) UGIII	20/06/19				
Organic Chemistry (Paper-III) UGIII	20/06/19				
Database Management System (Paper-I) UGIII	12/07/19				
Operating System Concept (Paper-II) UGIII	12/07/19				
Thyristors, IC technology, Microprocessor & Electrical Motors (Paper-I) UGIII	24/06/19				
Communication Electronics (Paper-II) UGIII	24/06/19				
English Language (Paper-I) UGIII	20/07/19				
Hindi Language (Paper-II) UGIII	10/07/19				
Computer Concept (Paper-III) UGIII	12/07/19				
Palaeontology and Stratigraphy (Paper-I) UGIII	21/06/19				
Earth resources and Applied Geology (Paper-II) UGIII	21/06/19				
Soil Productivity & Agro Forestry (Paper-I) UGIII	05/07/19				
Processing of Horticultural Crops & Value addition (Paper-II) UGIII	05/07/19				
Fishery Economics & Extension Education (Paper-I) UGIII	28/05/19				
Limnology and Fish Productivity (Paper-II) UGIII	28/05/19				
Linear Algebra & Numerical Analysis (Paper-I) UGIII	08/07/19				
Real and Complex Analysis (Paper-II) UGIII	08/07/19				
Optional (Paper-III) UGIII	08/07/19				
Applied & Environmental Microbiology (Paper-I) UGIII	25/06/19				
Immunology & Medical Microbiology (Paper-II) UGIII	25/06/19				
Medical Chemistry - II (Paper-I) UGIII	17/07/19				
Instrumental Analysis (Paper-II) UGIII	17/07/19				
Quantum mechanics & Spectroscopy (Paper-I) UGIII	05/07/19				
Solid State Physics, Semiconductor (Paper-II) UGIII	05/07/19				
Seed Pathology & Entomology (Paper-I) UGIII	06/07/19				
Seed Processing, Storage & Marketing (Paper-II) UGIII	06/07/19				
Applied Statistics (Paper-I) UGIII	31/07/19				
SQC & Design of Experiments (Paper-II) UGIII	31/07/19				
Genetics (Paper-I) UGIII	18/10/19				
Ecology and Applied Zoology (Paper-II) UGIII	18/10/19				
Development & Environment Economics (Paper-I) UGIII	31/07/19				
Statistics (Paper-II) UGIII	31/07/19				
Forensic Medicine & Toxicology (Paper-I) UGIII	06/08/19				
Detective Tools & Techniques (Paper-II) UGIII	06/08/19				
Geography & India (Paper-I) UGIII	27/06/19				
Environment & Resources (Paper-II) UGIII	27/06/19				
Forensic Sc. PG - Computer & Cyber Forensic	06/08/19				
Chemistry PG - Chem-Informatics	20/06/19				
1.2.2 Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the College level during the Academic year.					
Name of Programmes	UG		Date of implementation of CBCS /	UG	PG

adopting CBCS		PG	Elective Course System		
Already adopted (mention the year)				Nil	2015-16
1.3 Curriculum Enrichment					
1.3.1 Value-added courses imparting transferable and life skills offered during the year					
Value added courses			Date of introduction	Number of students enrolled	
Hardware/ Networking workshop: Dept. of Comp. Sc. & Astha Mishra, Amit Pandit			15-16/11/19	250	
Computer Hardware, Equipment Repairing & Fabrication Tanning Workshop			18/11/19	36	
Certificate Course on Basic Programming with Python: Dept. of Electronics			24/01/2020	36	
Certificate course on Embedded System Design using Arduino: Dept. of Electronics			24/01/2020	20	
Personality Development & Communication Skill for M.Sc. Student: Dept. of Chemistry & Carrier Guidance Cell			23/09-13/10/19	88	
Psychological counseling center is started for UG and PG Students : Dept. of Chemistry & Carrier Guidance Cell			23/09-13/10/19	80	
Internship Programme on “Instrumentation Techniques”: Dept. of Chemistry & Pharma. Chem.			06-18/01/20	48	
Short term Tr. On “Advanced Agro Techniques for Entrepreneurship Development”(student’s): Dept. of Botany			22/01-14/02/20	25	
Hands on Training Programme on Mushroom Cultivation for self employment (student’s)(Dept. of Hort. & Seed)			10 -11/10/19	30	
Bio Diversity (Students)(Dept. of Zoology & Fisheries)			02/03/20	25	
Short term employment oriented tr. On “Health and Nutrition” (Students)(Dept. of Biochem. & Career Guidance Cell)			16/09-12/10/19	40	
CSIR NET CLASSES: Dept. of Biotech.& Bioinfo.			01/09-01/12/19	35	
1.3.2 Field Projects / Internships under taken during the year					
Project/Programme Title			No. of students enrolled for Field Projects / Internships		
60 hours job oriented project/internship is mandatory for each student at UG level at in the last year/semester: Teaching and school management, Pathology, Forestry, Vermicompost, Cow manure and Management, Fish Farm; Instrumental Techniques;Computer software & Hardware, Zoo management, Pathology & Pharmaceutical Lab, Museum Management; Nursery, Fruit Preservation; Basic Computer, Library Management, Nursery Management, Cyber Café, HTML etc.; Geological field study; Mushroom Culture, Trees of Zoo, Plant Tissue Culture, Forest Nursery, Flora in Zoo, Horticulture, Vermicomposting, Food Preservation, Floriculture, Organic Forming, Soil Analysis, Bonsai Techniques. Crime scene management, Pathology and Impression marks, NGO etc.			1605		
60 hours job oriented project/internship is mandatory for each student at PG level at in the last semester : Instrumental Techniques; Pollution, Laboratory, Computer hardware and networking, Pathology, Veterinary Medical:Printing Press.			248		

Media Work, Cyber Security, DTP, Fisheries; Geological field study; Bio Fertilizer, Cow pat pit biodynamic compost, Questioned Document, Anthropology, Crime Scene, Investigation, DNA, Profiling and Serology, Wheat crop improvement, Wheat breeding.				
1.4 Feedback System				
1.4.1 Whether structured feedback received from all the stakeholders. Feedback Taken by Various department at department level.				
1) Students	2) Teachers	3) Employers	4) Alumni	5) Parents
Yes	Yes	No	Yes	Yes
1.4.2 How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)				
<p>Due to Corona pandemic the feedback of students are taken on the impact of covid-19: On Impact of Covid – 19 on mental status of students.</p> <p>Most government around the world has temporally closed education institution in an attempt to reduce the spread Covid-19. In our opinion this lockdown has many adverse effect on the college students. Looking to this we have studied the impact of Covid -19 on the students of Holkar Science College, Indore (M.P.), which is leading science institution of central India and catering students of various district of Madhya Pradesh.</p> <p>For this study a survey was designed to assess initial psychological impact of Covid-19 among college students (fears, worries and impairment in sleep etc.). We collected data using an online survey platform (Google form) to minimize face-to-face or physical interaction as students continued to isolate themselves at home. Students were invited through a text message, which lead them to a Google form page designed by authors. All students who have enrolled to Holkar College were sent the message for participation in this Covid study survey. The period of Goggle form submission was between 22 May, 2020 to 07 June, 2020. has</p> <p>The goggle form has some questions regarding their psychological state. The questions in the survey were closed questions wherein respondents were requested to choose between certain options. We receive 2484 response from students of different classes (UG and PG). We have analysis the all 2484 responses. The outcome on various parameters is given below:</p>				
Q. No.	Question	YES	MAYBE	NO
1	Are you feeling more nervous, anxious or on edge?	1774	327	265
2	Are you worrying too much about its effect on your health and safety?	1563	321	257
3	Are you worrying too much about its effect on your family's health and safety?	1756	239	167
4	Are you worrying too much about its effect on your studies	2332	157	131
5	Are you becoming so restless that it is hard to sit still?	1237	676	420
6	Are you losing interest or pleasure in doing things? 522919	1217	679	444
7	Are you facing trouble falling asleep or staying asleep, or sleeping too much?	1001	970	0
8	Are you feeling tired or having little energy?	963	969	0
9	Are you struggling in keeping your Schedule while you are at home during lock down ? 661618	1545	374	421
10	Has COVID 19 disturbed your future plan 681220	1592	281	468
On the basis of results obtained in the present study we can conclude that students were more nervous, anxious, tired and less energetic during lockdown period and were worried about health and future				
Apart from this feedback, various departments have been taken feedback at departmental level from various stakeholders. The feedback is analysis and the step taken as per the analysis.				

CRITERION II -TEACHING-LEARNING AND EVALUATION					
2.1 Student Enrolment and Profile					
2.1. 1 Demand Ratio during the year					
Name of the Programme		Number of seats available	Number of applications received		Students Enrolled
UG - B.Sc.		2610	Not Available (Online Admission done centrally by Dept. of Higher education Govt. of M.P.)		2601
UG - BCA		120	-do-		120
PG -M.Sc.–BioChemistry		40	-do-		31
PG-M.Sc.–Bioechnology		20	-do-		20
PG - M.Sc. – Botany		30	-do-		28
PG - M.Sc. – Chemistry		60	-do-		55
PG - M.Sc.– Computer Sc.		30	-do-		29
PG - M.Sc. – Fisheries		20	-do-		11
PG - M.Sc. – Forensic Sc.		40	-do-		38
PG - M.Sc. – Geology		40	-do-		35
PG - M.Sc. – Mathematics		75	-do-		74
PG -M.Sc. – Microbiology		30	-do-		29
PG -M.Sc.–Pharma. Chem.		25	-do-		22
PG - M.Sc. – Physics		35	-do-		34
PG - M.Sc. – Statistics		25	-do-		18
PG – M.Sc. – Zoology		25			25
M.Phil. – Bio Chemistry		05			00
M.Phil. – Bio Technology		05			01
M.Phil. – Botany		10			00
M.Phil. – Chemistry		10			02
M.Phil. – Comp. Sc.		10			02
M.Phil. – Zoology		10			03
2.2 Catering to Student Diversity					
2.2.1. Student – Full time teacher ratio (current year data)					
Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of full time teachers available in the institution teaching only UG courses	Number of full time teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2019-20	5896	697	195	102	195
2.3 Teaching - Learning Process					
2.3.1 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)					
Number of teachers on roll	Number of teachers using ICT (LMS, e-Resources)	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms	E-resources and techniques used
195	125	Available	23	13	Over Head Projector, Power Point Presentation, e-Library (del-net

					Infibnet), e-book, online videos & animation, Internet, etc.
2.3.2 Students mentoring system available in the institution? Give details. (maximum 500 words)					
<i>For mentoring of the students proctors are assigned for every class and section of UG and PG classes by the institute. The proctor acts as a mentor for the students of his section and he guides the students throughout the session. Mentor/proctor periodically meets the students to solve their problems. Proctors continuously monitor, counsel and motivate students and help him in academic matters. Students are also free to meet the proctor at any time to discuss their problems, if they have any. The proctor also meets the parents/ guardians of the students if required. Activities like seminars and open sessions are organized for helping the students to choose the correct career path. Mentors acts as a link between the students and the institution and perform following functions:</i>					
<ul style="list-style-type: none"><i>• Sign Identity card of the student and conform admission of student in the binging of the session.</i><i>• Meet the students regularly throughout the session.</i><i>• Continuously monitor, counsel, guide and motivate the students in all academic matters.</i><i>• Advice students regarding choice of electives, projects, summer training in industries etc.</i><i>• Contact parents/ guardians occasionally.</i><i>• Advice student in their carrier development.</i>					
Number of students enrolled in the institution			Number of fulltime teachers		Mentor: Mentee Ratio
6593			195		1:34
2.4 Teacher Profile and Quality					
2.4.1 Number of full time teachers appointed during the year					
No. of sanctioned positions	No. of filled positions	Vacant positions		Positions filled during the current year	No. of faculty with Ph.D.
Regular: 107	87	20		Recruitment done by Govt.	74
Guest Faculty (Govt.)	14	0		14	06
Guest Faculty:94	94	0		94	19
2.4.2 Honours and recognitions received by teachers					
<i>(received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)</i>					
Year of award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies		
2019-20	Dr. Kislaya Pancholi	Professor	1. Shikshak Patra(Denik Bhaskar):National Level 2. KDP Pen to publish Contest award: International, Amazon.in		
2019 -20	Dr. Seemavati Sisodiya	Asst. Prof.	National level certificate of recognition by National AIDS control organization.		
2019-20	Dr. A. Bafna	Asst. Prof.	Best Paper Presentation		

2019-20	Tasneem Rangwala	Asst. Prof.	1. Young Scientist Award 2. Best Paper Presentation
2019-20	Dr. Shweta Hardiya	Guest Faculty	Senior Scientist award
2019-20	Anuja Sharma	Guest Faculty	Young Scientist Award
2019-20	Dr. Sanjay Vyas	Professor	Appreciation award for research: GHSC
2019-20	Dr. Deepti Khare	Guest Faculty	Appreciation award for research: GHSC

2.5 Evaluation Process and Reforms

2.5.1 Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
B.Sc.	U001	Year	05.09.20	20.10.20
B.C.A.	U002	Semester	05.09.20	20.10.20
M.Sc.	P003	Semester	05.09.20	20.10.20

2.5.2 Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year ***Do not include re-evaluation/ re-totalling**

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	Percentage
29	1400	2.07%

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

(Annexure V)

2.6.2 Pass percentage of students

Programme Code	Programme name	Number of students appeared in the final year examination	Number of students passed in final Semester /year examination	Pass Percentage
U001	B.Sc.	1522	1519	99.8%
U002	B.C.A.	83	83	100%
P003	M.Sc.	248	248	100%

2.7 Student Satisfaction Survey

2.7.1 Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink) **Yes (Annexure VA)**

Student Satisfaction Survey has been conducted during the session. The output is as follows:

Q. No.	Questions	Parameters					
01	How much of the syllabus was covered in the class?	85 to 100%	70 -84	55-69	30-54	Below 30	
		61.1	29.8	9			
02	How well did the teachers prepare for the classes?	Thoroughly	Satisfactory	Poorly	Indifferently	wont teach at all	
		38.4	53.5	2	1	1	
03	How well were the teachers able to communicate.	Always effective	Some time effective	Just satisfactory	Generally ineffective		Very poor
		65.3	21.2	10			
04	The teacher's approach to teaching can best be described as	Excellent	Very good	Good	Fair	Poor	
			45.6	32.4	17.9		
05	Fairness of the internal evaluation process by the teachers	Always fair	Usually	Sometimes unfair	Usually unfair	Unfair	
		62.6	37.7				
06	The institute takes active interest in	Regularly	Often	Sometimes	Rarely	Never	I am not

	promoting internship, field visit opportunities for students			unfair			final
		438	10.9	13.1			25.9
07	The institution provides multiple opportunities to learn and grow	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
		20.2	6	15.4	40.9	17.5	
08	Your mentor/ proctor does a necessary follow-up with an assigned task to you.	Every time	Usually	Occasionally	Rarely	I don't have mentor	
		54.2	27.2	11.2			
09	The teachers illustrate the concepts through examples and applications.	Every time	Usually	Occasionally	Rarely	I don't have mentor	
		60.3	27.6				
10	The teachers identify your strengths and encourage you with providing right level of challenges.	Fully	Reasonably	Partially	Slightly	Unable	
		58.1	21.9	9.1			
11	Teachers are able to identify your weaknesses and help you to overcome them	Every time	Usually	Occasionally	Rarely	Never	
		54.3	21.1	12.7	7		
12	The institution makes effort to engage students in the monitoring, review and continuous quality improvement of the teaching learning process.	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	
		40.7	42.2	12.2			
13	The institute/ teachers use student centric methods, such as experiential learning, participative learning and problem solving methodologies for enhancing learning experiences.	To a great extent	Moderate	Some what	Very little	Not at all	
		51.7	31.2				
14	Teachers encourage you to participate in extracurricular activities.	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	
		44.3	42.8				
15	Efforts are made by the institute/ teachers to inculcate soft skills, life skills, personality development and employability skills to make you ready for the world of work	To a great extent	Moderate	Some what	Very little	Not at all	
		51.6	29.1	1	1	1	
16	What percentage of teachers use ICT tools such as LCD projector, Multimedia etc. while teaching and practical	Above 90	70-89	50-69	30-49	Below 29	
		20.3	35.8	21.6		14.1	
17	The overall quality of teaching-learning process in your institute is very good.	Strongly agree	Neutral	Disagree	Strongly disagree		
		63.9	31.3				
18	Percentage of classes attended	81-100	61-80	41-60	21-40	0-20	
		30.4	51.1	11.7			
19	Number of hours per week spent on the course (Other than lecture hours)	2 to 4	4 to 6	6 to 8	8 to 10		
		35	36.3	21.2	7.6		
Question 20 and 21 are related to Preparation for the course by the student							
20	Have done part of this course earlier	Yes	No				
		78.3	21.7				
21	Has adequate prior exposure to the prerequisites	Yes	No				
		83.4	16.6				
Question 22 to 26 are related with The expectations for taking the course by the student							
22	Enhance by skill base in the area of specializations	Yes	No				
		93.6					
23	Get exposed to a relevant subject	Yes	No				
		92.6	7.4				
24	Curiosity	Yes	No				
		96.9					
25	Better Employment Opportunity	yes	no				
		84.5	15.5				

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION				
3.1 Promotion of Research and Facilities				
3.1.1 The institution provides seed money to its teachers for research				
Yes..... No. if yes give details				
Name of the teacher getting seed money	The amount of seed money	Year of receiving grant	Duration of the grant	
Nil	Nil	Nil	Nil	
3.1.2 Teachers awarded National/International fellowship for advanced studies/ research during the year				
	Name of the teacher awarded the fellowship	Name of the Award	Date of Award	Awarding Agency
National	Nil	Nil	Nil	Nil
International	Nil	Nil	Nil	Nil
3.2 Resource Mobilization for Research				
3.2.1 Research funds sanctioned and received from various agencies, industry and other organizations				
Nature of the Project	Duration	Name of the funding Agency	Total grant sanctioned	Amount received during the year
Major projects	3	UGCDAECSR	1527879	453999(Physics)
Minor Projects	--	--	--	--
Interdisciplinary Projects	--	--	--	--
Industry sponsored Projects	--	--	--	--
Projects sponsored by the University/ College	--	--	--	--
Students Research Projects (other than compulsory by the College) “Water Analysis Project”& Temporal Study of Water bodies of Indore Using Remote sensing and GIS Technologies.	2019 - 20	Govt. Holkar Sc. College, Indore	Microbiology Geology	5000 5000
International Projects	--	--	--	--
Any other(Specify)	--	--	--	--
Total	--	03	--	463999
3.2.2 Number of ongoing research projects per teacher funded by government and non-government agencies during the years				
1 - Major Project (Physics)				
3.3 Innovation Ecosystem				
3.3.1 Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year				
Title of Workshop/Seminar		Name of the Dept.		Date(s)
One day Symposium on IPR		Dept. of Botany		05/11/19
Webinar on “A Future Diagnostic Challenges”		Dept. of Botany & Environment		13-14/06/20
National Webinar on “Utility of Kitchen Garden and Hydroponic Techniques in the Pandemic Time”		Dept. of Horticulture & Seed Technology		19-20/06/20

National Webinar on “Environmental Imbalance and Corona – Havoc”	Department of Chemistry & Pharma Chem.	05/06/20
International Webinar on “Challenges in Science and Technology for tackling Covid-19”	Department of Bio Chemistry	11-14/06/20
National Workshop on Intellectual Property Rights	Dept. of Physics, Electronics	12-13/03/20
Webinar on “Modern Physics and Material Science”	Dept of Physics	26-30/05/20
National Symposium on Mathematics (Ramanujan Day)	Dept. of Mathematics	24/12/19
Webinar on “Recent Trends in Mathematics”	Dept. of Mathematics	11/06/20
International Webinar on “Covi-19 Pandemic: Prevention & Management”	Dept. of Microbiology	04-06/06/20
Webinar on “To Improve Immunity & Peace by Meditation” (International Day of Yoga)	Dept. of Sports	21/06/20
International Conference on “Recent Advances in Life Science for Betterment of Human Health” (ICRALBEH-19)	Dept. of Zoology	14-15/12/19
National webinar on “Zoology for Human Health”	Dept. of Zoology	17-18/06/20
One week workshop on “Qualitative & Quantitative Analysis	Dept. of Pharma Chem. & PG Tech. Research Inst. Indore	10-15/10/19
Application of Advanced Scientific Instrumentation with entrepreneurship guidance	Dept. of Pharma Chem. & PG Tech. Research Inst. Indore	08-15/06/20
Webinar on “Immunity Through Ayurveda in Present Scenario”	Dept. of Pharma Chem.	16/06/20
One week Workshop on “Research Methodology”	Dept. of Comp. Science	16-20/12/19
National webinar on “Python Programming & Computer Vision”	Dept. of Comp. Science	25-26/05/20
National Webinar on “Future opportunities in Information Technology”	Dept. of Comp. Science & ISROSET	15-16/06/20
Webinar on “Advanced Computer Hardware & Networking”	Dept. of Comp. Science	25/05/20
Webinar on “Cyber Security”	Dept. of Comp. Science	27/03/20
National Webinar on “Water Management and Career Opportunities in Geosciences”	Dept. of Geology	12-13/06/20
Conference on “Water and environmental crisis of Indore City” (Social workers, Scientist Environmental & Pollution Control Board)	Dept. of Geology	??
Bhuvisanwad (Academic Interaction Programme)	Dept. of Geology and Geological Survey of India	15-16/11/19
National Webinar on “A Healthy Approach Towards Future: Ayurveda vis a vis Modern Research”	Dept. of Bio. Tech. & Bio. Info.	21-22/06/20
Webinar on “Positive Aspects of Corona”	Dept. of Bio. Tech. & Bio. Info.	08-09/06/20
Online Certificate course on “Molecular & Computational Biology”	Dept. of Bio. Tech. & Bio. Info.	15-28/10/20
Webinar on “Mental Health & Covid-19”	Red cross & Women Empowerment cell	21/07/20
National Webinar on “ Teaching- Learning and Evaluation”	IQAC HSC, Indore	19-20/06/20
Webinar on “Concept and Applications of Statistical Methods in Research”	Dept. of Statistics	21-22/06/20
Webinar on “Fundamentals of Modern electronics”	Dept. of Electronics	08-10/06/20

National Webinar on “The Scenario of Teaching/ Learning English Language: Problems & possibilities”		Dept. of English		16-16/06/20
National webinar on “Badalte Pridrashya me Naitik Mulyon ki Bhumika”		Dept. of Hindi		19-20/06/20
Online Lecture Series on ”New Technologies & Instrumentation in Criminology”		Dept. of Forensic science		23/04-27/05/20
National Webinar on “ Recent Innovation in Forensic science and other applications in Criminal Investigation”		Dept. of Forensic science		17-20/06/20
3.3.2 Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year				
Title of the innovation	Name of the Awardee	Awarding Agency	Date of Award	Category
Eco friendly Dyeing	Taiyaba Naim Ansari (Botany)	ICRALEH	15-12-2019	Yong Scientist Award
Way reduced Agri. waste by dying process	Taiyaba Naim Ansari (Botany)	MPCST	28-02-2020	Fellowship of training young Scientist
3.3.3 No. of Incubation centre created, start-ups incubated on campus during the year				
Incubation Centre	Name		Sponsored by	
Nil	Nil		Nil	
Name of the Start-up	Nature of Start-up		Date of commencement	
Nil	Nil		Nil	
3.4 Research Publications and Awards				
3.4.1 Ph. Ds awarded during the year				
Name of the Department		No. of Ph. Ds Awarded		
Bio chem.		01		
Zoology		05		
Chemistry		03		
Physics		05		
Total		14		
3.4.2 Research Publications in the Journals notified on UGC website during the year				
	Department	No. of Publication	Average Impact Factor, if any	
National	Bio Chem.	01	--	
	Bio Tech. & Bio Info.	01	--	
	Chemistry	03	--	
	Total	05		
International	Botany	09	5.69	
	Chemistry	13	5.33	
	Comp. Sc.	03	1	
	For. Sc.	01	--	
	Mathematics	08	--	
	Physics	14	05	
	Statistics	02	--	

	Zoology	27	--
	Total	77	4.25
	Total	82	4.25

3.4.3 Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	No. of publication
For. Sc.	01 (International Conference on Recent Advances in Life Sciences for Betterment of Environment and Human Health held on Dec. 14-15, 2019)
Bio Tech. & Bio Info.	01
Chemistry	01 proceeding (2019), 02 Books and Chapters Published

3.4.4 Patents published/awarded during the year

Patent Details	Patent status Published/ Filed	Patent Number	Date of Award
Nil	Nil	Nil	Nil

3.4.5 Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or Pub Med/ Indian Citation Index

Title of the paper	Name of the author	Title of the journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citations
Beneficial Role of Soluble Silica in enhancing chlorophyll contained in Onion leaves	T. Rangwala, A. Bafna., N. Vyas and R. Gupta	Current Agricultural research Journal	2019	Nil	Dept. of Biochemistry, Holkar Science College, Indore	Nil
Youth inclination towards Higher Education	Namrata Khurana	International journal of scientific research and review.	2019	NIL	Dept. of Biotech., Holkar Sc. College, Indore	NIL
Viriation in range of Colours Obtained by Application of Natural Dyes and Mordants on Silk Fabric	Sanjeeda Iqbal and Arif Patel	International Journal of Advance and Innovative Research	2019	Nil	Dept. of Botany, Holkar Sc. College, Indore	Nil
The Effect of Agro-meteorological Indices and Planting Date on the Growth, Development and Productivity of Soybean Grown in Vertisols	H. L. Khapediya, Snjeeda Iqbal, S. K. Sharma, Ranjeet, G. R. Ambawatia and K. K. Singh	International Journal of Current Microbiology and Applied Sciences	2019	Nil	Dept. of Botany, Holkar Sc. College, Indore	Nil

Noise Level Near Educational Institutions at Indore, Madhya Pradesh	Chitnis S., Chitnis U. and Nirgude V.	Various Aspect for Sustainable Development	2019	Nil	Dept. of Botany, Holkar Sc. College, Indore	Nil
Isolation and identification of keratinophilic fungi from regional park of Indore, (M.P.)	Dr. Sanjay Vyas	Journal of emerging technology and innovative research (Jetir)	2019	Nil	Dept. of Botany, Holkar Sc. College, Indore	Nil
ANTIFUNGAL ACTIVITY OF WEED'S EXTRACTS AGAINST IMPORTANT PHYTOPATHOGENS	Deepti Khare, Sanjay Vyas, Neha Sharma	Journal of Emerging Technologies and Innovative Research (JETIR)	2019	Nil	Dept. of Botany, Holkar Sc. College, Indore	Nil
Comparison of nodule formation in desi and kabuli varieties of chick pea (<i>Cicer arietinum</i> L.) under irrigated and rain fed conditions	Sanjay Vyas	Indian Research Communication	2019	Nil	Dept. of Botany, Holkar Sc. College, Indore	Nil
THE COMPARITIVE STUDY OF SEED YIELD IN DESI AND KABULI VARIETIES OF CHIKPEA (<i>Cicer arietinum</i> L.) UNDER MOISTURE STRESS AND NON-MOISTURE STRESS ENVIRONMENT.	Sanjay Vyas	Indian Research Communication	2019	Nil	Dept. of Botany, Holkar Sc. College, Indore	Nil
WOODY PHYTO-RESOURCES OF MEDICINAL IMPORTANCE USED BY THE TRIBAL POPULATIONS BETWEEN SATPURA AND VINDYAN HILLS, MADHYA PRADESH, INDIA	Seemavati Sisodiya and Harish Chander Dutt	Plant Archives	2020	Nil	Dept. of Botany, Holkar Sc. College, Indore	Nil
ASSESSMENT OF PREVALENCE OF DRUG RESISTANT <i>Escherichia coli</i> IN	A. Mukati, S. Vyas, S. Hardia, D. Khare and	Journal of Emerging Technologies and Innovative	2020	Nil	Dept. of Botany, Holkar Sc. College,	Nil

KHAN RIVER, INDORE	A. Sharma,	Research			Indore	
STUDY OF COMPARISON OF FRESH AND DRAINAGE WATER CONDUCTOMETRY CALLY OF LABS FROM GOVT.HOLKAR SCIENCE COLLEGE, INDORE	Nameeta Bende	World Journal of Pharmaceutical Research	2019	Nil	Dept. of Chemistry, Holkar Sc. College, Indore	Nil
Analysis of Water of River Kshipra during Kumbh Mela 2016 Ujjain, Madhya Pradesh	S. K. Gohar, P. Solanki., A. Barua	IJRTI	2019	Nil	Dept. of Chemistry, Holkar Sc. College, Indore	Nil
ANALYSIS OF PHYSICO- CHEMICAL AND BACTERIOLOGICA L STUDIES OF WATER SAMPLES FROM THE SUB- URBAN AREAS OF SANWER TEHSIL, MADHYA PRADESH	Ashok Barua, Prakash Solanki, Sandeep Kumar Gohar	IJS DR	2019	Nil	Dept. of Chemistry, Holkar Sc. College, Indore	Nil
Review Of Research	P. Solanki , S. K. Gohar and A. Barua	Review Of Research	2019	Nil	Dept. of Chemistry, Holkar Sc. College, Indore	Nil
Removal of Methylene Blue Dye from Wastewater using Zeolite Synthesized from Coal Fly Ash	M. K. Dwivedi, I.P. Tripathi, C. Alawa &P. Shrivastava	IOSR Journal of Applied Chemistry (IOSR- JAC)	2019	Nil	Dept. of Chemistry, Holkar Sc. College, Indore	Nil
Adsorptive Removal of Brilliant Green Dye from Wastewater by Zeolite Synthesized from Coal Fly Ash	M. K. Dwivedi, I.P. Tripathi, C. Alawa, P. Shrivastava, V. Malviya	IJRAR	2019	Nil	Dept. of Chemistry, Holkar Sc. College, Indore	Nil
PHYSICOCHEMICA L ANALYSIS OF WATER AND SOIL SAMPLES	Richa Pathak, Payal Jain, S. L. Garg,	IJRAR	2019	Nil	Dept. of Chemistry, Holkar Sc. College,	Nil

COLLECTED FROM DIFFERENT SITES OF PITHAMPUR INDUSTRIAL AREA, INDORE MP	and M. K. Dwivedi				Indore	
QSAR studies of β -Carboline derivatives as potent antiviral agents	P. D. Soni, I.P. Tripathi, M.K. Dwivedi	International Journal of Advanced Scientific Research and Management	2019	Nil	Dept. of Chemistry, Holkar Sc. College, Indore	Nil
A Kinetic study on solubilization of Sudan I dye by Sodium dodecylsulphate	M. Khandelwal Ampily. J.S and Geetha Sarasan	Journal Of Engineering sciences	2020	Nil	Dept. of Chemistry, Holkar Sc. College, Indore	Nil
Antimicrobial Activity and Phytochemical Analysis of Citrus Sinensis Leaves Extracts	Pramila Kori	International Journal of Science and Research	2020	Nil	Dept. of Chemistry, Holkar Sc. College, Indore	Nil
ASSESSMENT OF HEAVY METALS TOXICITY ON BIOCHEMICAL & PHYSIOLOGICAL CHANGES IN PULSES	Bijendra Rai and Pramod Singh	Juni Khyat	2020	Nil	Dept. of Chemistry, Holkar Sc. College, Indore	Nil
BREAST CANCER: MOLECULAR MECHANISM	Bijendra Rai	WORLD JOURNAL OF PHARMACY AND PHARMACEUTICAL SCIENCES	2020	Nil	Dept. of Chemistry, Holkar Sc. College, Indore	Nil
Adsorptive Removal of Brilliant Green Dye from Wastewater by Zeolite Synthesized from Coal Fly Ash	M. K. Dwivedi, I.P. Tripathi, C. Alawa, P. Shrivastava, V. Malviya	2020 IJRAR	2020	Nil	Dept. of Chemistry, Holkar Sc. College, Indore	Nil
CADMIUM REMOVAL FROM AQUEOUS SOLUTION BY NA-P ZEOLITE SYNTHESIZED FROM COAL FLY ASH	Payal Jain, Suresh Jain and M.K. Dwivedi	UGC Care Group I Listed Journal	2020	Nil	Dept. of Chemistry, Holkar Sc. College, Indore	Nil
Synthesis, characterization and	Anamika Jain	AIP Conference Proceedings 2100	2019	Nil	Dept. of Chemistry,	Nil

biological activity of flavonoid derivatives with amine					Holkar Sc. College, Indore	
Polarographic determination of stability constant of Zn (II) complexes with antibiotics – Clindamycin complexes in aqueous medium	Laxmi Tantuvay	AIP Conference Proceedings 2100	2019	Nil	Dept. of Chemistry, Holkar Sc. College, Indore	Nil
Comparative Invetigation of SKC Algorithm for Secure Information with different Parameters	Shiv Lal Mewada & Praeep Sharma	International Journal of Future Generation Communication and Networking	2020	Web of Science	Dept. of Comp. Sc., Holkar Science College, Indore	Nil
Agricultural Informatics as a Branch of Study in Information Sciences and Technology Domain—A Proposal towards Digital Agriculture	Shivlaal Mewada	Academic Research Publishing Group	2020	Nil	Dept. of Comp. Sc., Holkar Science College, Indore	Nil
Artificial Bee Colony-Based Approach for Privacy Preservation of Medical Data	Shivlaal Mewada, Pradeep Sharma	International Journal of Information System Modeling and Design Volume 11, Issue 3	2020	Nil	Dept. of Comp. Sc., Holkar Science College, Indore	Nil
DIFFERENTIAL CELL VIABILITY IN NITZSCHIA PALEA ON EXPOSURE TO DIFFERENT ORGANIC AND INORGANIC ENVIRONMENTAL EFFLUENTS	A. AHIRWAR S.GUPTA, M. KASHYAP & P. SHUKLA, V.A. VINAYAK	INTERNATION AL JOURNAL OF ENVIRONMENT AL SCIENCE AND TECHNOLOGY	2019	Nil	Dept. of For. Sc., Holkar Sc. College, Indore	Nil
Compatibility of maps and common fixed point theorems in Complex valued Metric Spaces	R.K. Sharma, G. Yadav	Jour. Ind. Acad. Math. 41(2), 195-218, 2019	2019	Nil	Dept. of Mathematics, Holkar Sc. College, Indore	Nil
Takagi Sugeno Inference for Single Slope Single Basin Solar Still	Raich, V.; Yadav, N.	Journal of Computer and Mathematical Sciences	2019	Nil	Dept. of Mathematics, Holkar Sc. College,	Nil

					Indore	
CONTRACTION PRINCIPLE IN RECTANGULAR M-METRIC SPACES WITH A BINARY RELATION	SHISHIR JAIN AND POOJA CHAUBEY	Advances in Mathematics: Scientific Journal	2020	Nil	Dept. of Mathematics, Holkar Sc. College, Indore	Nil
NEW RESULTS IN CONE PENTAGONAL METRIC SPACES	SHISHIR JAIN AND POOJA CHAUBEY	South East Asian Journal of Mathematics and Mathematical Sciences	2020	Nil	Dept. of Mathematics, Holkar Sc. College, Indore	Nil
RELATION-THEORETIC ψ -CONTRACTIVE MAPPINGS IN CONE PENTAGONAL METRIC SPACES	SHISHIR JAIN AND POOJA CHAUBEY	J. Math. Comput. Sci.	2020	Nil	Dept. of Mathematics, Holkar Sc. College, Indore	Nil
Stability Analysis of a Deterministic Vaccination Model with non-monotonic Incidence Rate	Harish Joshi G.L. Prajapati, R.K. Sharma	J. Math. Comput. Sci. 10(1), 2020, 51 - 67	2020	Nil	Dept. of Mathematics, Holkar Sc. College, Indore	Nil
Global Dynamics of an SIR Epidemic Model with Specific Non-linear Incidence rate with treatment	R.K. Sharma, Garima Saxena, Ankit Agrawal	Bul. Cal. Math Soc. 112, (4), 371 – 388, 2020	2020	Nil	Dept. of Mathematics, Holkar Sc. College, Indore	Nil
Dynamical Analysis of Hyper-Susceptible Population over Susceptible Population in an Epidemic Model	Harish Joshi G.L. Prajapati, R.K. Sharma	Bul. Cal. Math Soc. 112, (2), 169 – 186, 2020	2020	Nil	Dept. of Mathematics, Holkar Sc. College, Indore	Nil
Measurement and Analysis of Normal-State Transport Properties of FeSe Superconductor	P. D. Lodhi, N. Kaurav, K. K. Choudhary, Y. K. Kuo	Journal of Low Temperature Physics (Springer)	2019	Nil	Dept. of Physics., Holkar Sc. College, Indore	Nil
Temperature-dependent transport properties of a FeTe compound	P. D. Lodhi, N. Kaurav, K. K. Choudhary, and Y K Kuo	Bull. Mater. Sci.(Indian Academy of Sciences: In association with Springer)	2019	Nil	Dept. of Physics., Holkar Sc. College, Indore	Nil
High pressure structural phase transition and elastic properties of	S. Verma, A. Jain, K. K. Choudhary	International Journal of Modern Physics B (World Scientific)	2019	Nil	Dept. of Physics., Holkar Sc. College,	Nil

Zn _{Se} Te _{1-x} semiconducting compounds	and N. Kaurav				Indore	
Structural, photoluminescent and thermoluminescent studies of rare earth ion (RE = Eu ³⁺) doped Sr ₂ SiO ₄ phosphor	Monika Somania,, M. Saleemb , M. Mittala , P.K. Sharmaa	Optik	2019	Nil	Dept. of Physics., Holkar Sc. College, Indore	Nil
BARIUM (BA ²⁺) DOPED CU-ZN FERRITE: ELUCIDATION OF STRUCTURAL AND DIELECTRIC PROPERTIES	Vishal Tandon	jetir	2019	Nil	Dept. of Physics., Holkar Sc. College, Indore	Nil
Synthesis and characterization of ZnO nanoparticles by thermal decomposition method	Netram Kaurav	Prof. Dinesh Varshney memorial National Conference on Physics and Chemistry of Materials	2019	Nil	Dept. of Physics., Holkar Sc. College, Indore	Nil
Interpretation of Raman modes in FeTe and FeTe _{0.9} Se _{0.1} compounds	Netram Kaurav	Prof. Dinesh Varshney memorial National Conference on Physics and Chemistry of Materials	2019	Nil	Dept. of Physics., Holkar Sc. College, Indore	Nil
Effect of sintering temperature on the dielectric properties of non-stoichiometric nickel oxide	Netram Kaurav	Prof. Dinesh Varshney memorial National Conference on Physics and Chemistry of Materials	2019	Nil	Dept. of Physics., Holkar Sc. College, Indore	Nil
Structural and Raman analysis of double perovskite La ₂ CoTi _{0.7} Ni _{0.3} O ₆	Netram Kaurav	Prof. Dinesh Varshney memorial National Conference on Physics and Chemistry of Materials	2019	Nil	Dept. of Physics., Holkar Sc. College, Indore	Nil
Comparative	Netram	Prof. Dinesh	2019	Nil	Dept. of	Nil

crystallographic study of La ₂ NiTiO ₆ double pervoskite structure using crystallographic software's	Kaurav	Varshney memorial National Conference on Physics and Chemistry of Materials			Physics., Holkar Sc. College, Indore	
Structural and optical properties of La ₂ NiTiO ₆ double pervoskite	Netram Kaurav	Prof. Dinesh Varshney memorial National Conference on Physics and Chemistry of Materials	2019	Nil	Dept. of Physics., Holkar Sc. College, Indore	Nil
Theoretical analysis of the structural phase transition in alkaline earth oxides	Saligram Verma	Prof. Dinesh Varshney memorial National Conference on Physics and Chemistry of Materials	2019	Nil	Dept. of Physics., Holkar Sc. College, Indore	Nil
XRD and FTIR studies of zinc doped nickel oxide compounds	R. C. Dixit	Prof. Dinesh Varshney memorial National Conference on Physics and Chemistry of Materials	2019	Nil	Dept. of Physics., Holkar Sc. College, Indore	Nil
Thermoluminescence studies of Ce ³⁺ doped Sr ₂ SiO ₄ phosphor	Pradeep Sharma	Prof. Dinesh Varshney memorial National Conference on Physics and Chemistry of Materials	2019	Nil	Dept. of Physics., Holkar Sc. College, Indore	Nil
Statistics Construction of ALPHA Resvabe Z-Associates PBIB Designs	R. Awad, B. Agrawal, S. Banerjee	International Journal of Applied social Science	2019	Nil	Dept. of Statistics, Holkar Sc. College, Indore	Nil
Construction of universally optimal design using 3 ⁿ – factorial designs	R. Awad, S. Banerjee	International Research Journal of Agricultural Economics and Statistics	2019	Nil	Dept. of Statistics, Holkar Sc. College, Indore	Nil
Haematological	Santosh	International	2019	Nil	Dept. of	Nil

Changes in Clarias Batrachus Due to Cypermethrin Insecticide	Gaherwal	Journal of Scientific Research & Reviews			Zoology, Holkar Sc. College, Indore	
Hepatoprotective and antioxidative potential of Zingiber officinale extract in 7, 12 dimethylbenz(A) anthracene oral carcinogenesis in rodent model	Amita Shukla and V K Sharma	Life Science Bulletin	2019	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Histopathological investigation of Fasciola Hepatica infected liver of Goats of Indore Region	Santosh Gaherwal	Indian Research Communication Society	2019	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Impact of Thiadiazole as Bombyx Mori Growth Enhancer	Santosh Gaherwal	International Journal of Scientific Research in Biological Sciences	2019	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Narmada Nadi ki Jaliya Gunwataa ka Adhayan	Abida Qureshi	Peer-Reviewed international Journal	2019	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Narmada Nadi me Matasya Prajatiyo ki vividhata, Vartman isthati tatha Unka Sanrakshan	Abida Qureshi	Review of Research	2019	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Seasonal Prevalence & Incidence of Gastrointestinal Nematodes in Goats of Barwani Region (MP)	Santosh Gaherwal, MMP Shrivastava	International Journal of Current Advance Research	2019	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Spatial Variation in Avifaunal Diversity from Various Green Spaces of Indore City, MP	Santosh Gaherwal	International Journal of Current Research & Review	2019	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Study and estimation of species richness of Avian Fauna in Selected sites of Indore City (MP)	Santosh Gaherwal	International Journal of Current Advance Research	2019	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Study of Sodium Arsenate Induced	Santosh Gaherwal	International Journal of	2019	Nil	Dept. of Zoology,	Nil

haematological Changes in Catfish, Clarias Batrachus		Biological & Medical Research			Holkar Sc. College, Indore	
Toxic effect of Arsenic Trioxide on Biochemical Response in Catfish Clarias Batrachus	Santosh Gaherwal	International Journal of Recent Scientific Research	2019	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Toxicological effects of Arsenic Trioxide Exposure on Haematological profile in Catfish, Clarias Batrachus	Santosh Gaherwal	International Journal of Current Research & Review	2019	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
2, 4-Dichlorophenoxy acetic acid induced Histopathological changes in kidney of Clarias Batrachus	Santosh Gaherwal	Journal of Xidian University	2020	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Acute toxicity study on biochemical parameter of catfish, Clarias batrachus exposed to sodium arsenate	Santosh Gaherwal	Eco. Env. & Cons. EM International	2020	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Assessment of Heavy Metal, Arsenic in Chhilpura Pond Water & its Effect on Haematological & Biochemical Parameters of Catfish, Clarias Batrachus	Santosh Gaherwal	Nature Environment and Pollution Technology	2020	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Assessment of Physico-Chemical Parameters and Water Quality Index (WQI) of Dilawara Reservoir of Dhar, M.P., India	Rekha Sharma	International Journal of Life Sciences	2020	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Assessment of Shannon Wiener Index of Birds in Various regions of Indore City, Indore, MP	Santosh Gaherwal	Eco. Env. & Cons.	2020	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Assessments of trace metal bio- accumulation in Lamellidens marginalis bivalve of Sirpur and	Rekha Sharma	International Journal of Research and Analytical Reviews	2020	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil

Bilawali Lakes of Indore (M.P.) India						
Blood Biochemistry of Goat Infected with Nematodes from the Barwani Tehsil, District Barwani (MP), India	Santosh Gaherwal	Journal of Xidian University	2020	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Comparative Assesment of Acute Toxicity of two Organophosphates(Mo nocrotophos 36 % SL and Dimethoate 30% EC) to fresh water fish Poecilla reticulate(Peters) at two different selected level of pH	M.M.P. Shrivastava	World Applied Science Journal	2020	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Effect ofn lipid frofile in mice experimentally infected and vaccinated with Aspicularistetraptera	M.M.P. Shrivastava, Santosh Gaherwal	Int. J. Research	2020	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Factors Influencing the Population of Odonates in Pond Habitat of Indore	D. Mishra, V.K.Sharma , Asha Pal	Life Science Bulletin	2020	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Haematological Analysis of Nematode infected Goats from the Urban area of Barwani Dist. MP	Santosh Gaherwal, MMP Shrivastava	Strad Research	2020	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Haematological analysisi of nematode infected goats from the urban area of Barwani District (M.P.)	Santosh Gaherwal	Journal of Xidian University	2020	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
haematological values of nematode (Aspicularistetraptera) infected mice vaccinated with somatic antigen	M.M.P. Shrivastava, Santosh Gherwal	Journal of Xidan University	2020	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
Histological Alteration Caused by Arsenic Trioxide in Catfish Clarias Batrachus	Santosh Gaherwal	Journal of Xidian University	2020	Nil	Dept. of Zoology, Holkar Sc. College,	Nil

						Indore	
Histopathology of Liver & Kidney of Teleost ClariasBatrachus of Arsenic Contaminated Chhilpura pond water		Santosh Gaherwal	Uttar Pradesh Journal of Zoology	2020	Nil	Dept. of Zoology, Holkar Sc. College, Indore	Nil
3.4.6 h-index of the Institutional Publications during the year. (based on Scopus/ Web of science)							
Title of the paper	Name of the author	Title of the journal	Year of publication	h-index	Number of citations excluding self citations	Institutional affiliation as mentioned in the publication	
Nil	Nil	Nil	Nil	Nil	Nil	Nil	
3.4.7 Faculty participation in Seminars/Conferences and Symposia during the year :							
No. of Faculty			International level	National level		State level	Local level
Attended Seminars/ Workshops			40	120		13	54
Presented papers			05	00		00	00
Resource Persons			03	07		01	06
3.5 Consultancy							
3.5.1 Revenue generated from Consultancy during the year							
Name of the Consultant(s) department	Name of Consultancy project		Consulting/Sponsoring Agency			Revenue generated (amount in rupees)	
Nil	Nil		Nil			Nil	
3.5.2 Revenue generated from Corporate Training by the institution during the year							
Name of the Consultant(s) & Department	Title of the Programme		Agency seeking training	Revenue generated (amount in rupees)		Number of trainees	
Nil	Nil		Nil	Nil		Nil	
3.6 Extension Activities							
3.6.1 Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year							
Title of the Activities				Organizing unit/ agency/ collaborating agency		Number of teachers co-ordinated in such activities	Number of students participate d in such activities
Plantation on Kargil Martyr (31/07/19)				Red Cross Soc. & Biochem		05	20
Blood Donation Camp (30/12/19)				NSS, Red Cross Soc. & Biochem.		05	20

Polythene Free Campus Prog. (26/01/20)	Red Cross Soc.	05	25
Lecture on scientific basis of cancer awareness and training on CPR (07/02/20)	Red Cross Soc. & Biochem.	05	25
Health Checkup camp on women day (07/03/20)	Red Cross Soc., Women Empowerment cell	05	50
Poster competition on AIDS Awareness (17/01/20)	Red Cross Soc. & Biochem.	05	15
Poster competition on cancer Awareness (04/02/20)	Red Cross Soc. & Biochem	05	15
Visit to Musakhedi Slum area and Nutrition Awareness (08/08/19)	Red Cross Soc. & Biochem.	05	30
Vigilance Awareness Week (29/10-03/11/19)	Red Cross Soc. & Biochem.	05	30
Sadbhavna Divas (Shapath) (20/08/19)	NSS	06	50
Plantation: Hariyali Mhotsav 19-20 (11/08/19)	NSS	10	65
Rally against "Food Adulteration" (24/08/19)	NSS	25	65
Women Empowerment Session JUDO/Karate Organized (07/09/19)	NSS	10	55
"Kaumi Ekta" Shapath programme" (19/11/19)	NSS	05	45
Street play on AIDS awareness (20/11/19)	NSS & Red Ribbon Club	05	30
AIDS awareness rally (29/11/19)	NSS & Red Ribbon Club	05	25
Rastriya YUVA Diwas celebration (12/01/20)	NSS	05	35
Poster Making competition: "AIDS Awareness" and "Blood Donation" in college campus) (28-30/12/19)	NSS & Red Ribbon Club	05	50
Lecture on Road Safety (26/02/20)	NSS	04	55
Blood donation camp (01/12/19 at MY Hospital & 30/12/19 in college campus.)	NSS	08	60
Eye Checkup camp (17/11/19)	NSS & Red Ribbon Club	05	55
NSS camp (21-27/11/19)	NSS	02	50
Polio Abhiyaan (16/10/19)	NCC	03	55
Kagil Vijay Divas celebration (26/07/19)	1MPBNNCC	03	75
Painting Programme by cadets: on the occasion of Gandhi Jayanti (11/07/19)	NCC	03	30
Traffic Control Programme (15/07/19)	1MPBNNCC	02	25
Tikakaran motivation to people	1MPBNNCC	02	28
Helping to Medical Staff	1MPBNNCC	01	55
Cleanliness Drive(Sawccha Bharat) (14/12/19)	9MPBN & 1MPBN NCC	02	70
Awarding Ceremony (24/11/19)	9MPBNNCC	02	20
Visit to Heritage (Kastoorba Gram) (29/11/19)	9MPBNNCC	02	33
Literacy Activities	Dept. of Hindi	04	26
National AIDS Control Program	National AIDS Control Organization & Bot.	01	50
Environment Awareness programme on air pollution: Dilip Wghela (30/07/19)	Dept. of Botany	12	60
Plantation Activities: Botanical Garden (30/08/19)	Dept. of Botany	10	25
Tagging of Plant: College campus (22/09/19)	Dept. of Botany	05	15
Visit to Jyoti Niwas old age home (14/01/20)	Dept. of Botany	02	20

Vermi compost Training: Kasturba Gram (25/01/20)	Dept. of Botany	02	25
Poster competition: Route of drug Administration and dosage form (30/12/19)	Dept. of Pharma	05	12
Quiz Competition (14/01/20)	Dept. of Pharma	05	25
Astha Old Age Home Visit (14/11/19)	Dept. of Pharma	05	35
Alumni Meet (02/11/19)	Dept. of Pharma	06	35
Research Studies on Unknown Foul Odour of Indore City” (Nov.-Dec. 19)	Dept. of Microbiology	02	05
Excursion trip: “Parenteral drugs pvt. Ltd., Mandlehwar” (22/01/20)	Dept. of Microbiology	02	15
PTA (04/03/20)	Dept. of Microbiology	05	25
Covid-19 Awareness Programme (04-06/06/20)	Dept. of Microbiology	05	30
Kargil Divas Calibration: Basket Ball Complex, Indore (28/07/19).	Dept. of Biochemistry	02	25
Programme on Health and Nutrition (16/09 – 12/10/19)	Dept. of Biochem & Carrier guidance Cell	05	25
Alumni Meet (03/11/19)	Dept. of Biochemistry	03	25
PTA (15/02/20)	Dept. of Biochemistry	03	20
Mushroom Cultivation training (06/03/20)	Dept. of Biochemistry	03	25
Online Quiz : (Nutrition and Immunology)(03/06-09/06/20)	Dept. of Biochemistry	03	150
Gosthi-Jal Evam Paryavaran Sankat, Samadhan and Upay (06/08/19)	Dept. of Geology	05	20
Lecture on Air Pollution: July 2019, Geo Tagging on Tree: September 2019, Movie on Environment: October 2019, Drama for environment awareness “Halla- Bol”: November 2019, Crop assessment: January 2020, Green good deeds: February 2020, Cleanliness Campaign: March 2020	Dept. of Seed & Hort, Eco Club	10	125
Various activities Under “Ek bharat Shreshtha Bharat” Ek bharat Shreshtha Bharat club established: November 2019, Quiz Competition: December 2019, Essay Writing: January 2020, Film Show: January 2020, Language knowledge & display board activity: January 2020, Clay model lecture & film show: February 2020, Apply Water pot to birds: February 2020	Dept. of Seed & Hort.	02	150
Plantation: August 2019, Parents teacher meeting: September 2019, Farmer’s Day: Village Kalod kartal: December 2019, Educational Tour: Tirupati Nursery, Badwah: December 2019 & Eagle Seeds & Biotech LTD: February 2020, Cycle day: January 2020, Alumni Meet: February 2020	Dept. of Seed & Hort.	02	155
Visit to village “Jamlia”: Cultural, Social & Health Activities (12/10/2019)	Dept. of Zoology	02	20

National Graduate Physics Examination (IAPT) (19/01/20)	Dept. of Physics	05	150
Plantation: 01/08/19, CSIR NET Classes:01/09-30/11/19, Parents Teacher meeting: 02/11/19, A visit to Jeevan Shala Visharjan Ashram (slum area):02/11/19, Science Olympiad: 29/02/20	Dept. of Biotech & Bio Info.	15	150

3.6.2 Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the Activity	Award/recognition	Awarding bodies	No. of Students benefited
State level leadership Camp 03- 09/01/20(NSS)	Two students Bhurelal Dawar and Kusum Dhakad are selected and Participated	State	02
Pre- RDC Camp(NSS) 29/10- 09/11/19	One student Nikhil Khira is selected and Participated	National	01
Pollution Awareness Pakhwada	Awarded By Directorate First Position 9MPBNNCC	Regional	15
RDC(1MPNCCBN Girls)	SUO Aarti Yadav Completed RDC	National	01
RDC(1MPNCCBN Girls)	SGT Rashmi Kumari Made place till decade 1	National	01
RDC(1MPNCCBN Girls)	SGT Nidhi Katare Made place till decade 2	National	01
TSC(1MPNCCBN Girls)	SGT Unnati Jagdale Made place till decade 2	National	01
IGC (9MPMNNCC)	Kamal Nayan Dwivedi Participation	National	01
TSC (9MPMNNCC)	Somesh Parikh Silver Medal	National	01
TSC (9MPMNNCC)	Nikilesh Patidar Participation	National	01
RDC (9MPMNNCC)	Sonal Chawda Drill front line contingent, CM Awardee	National	01
Tracking Camp (9MPMNNCC)	Tejas Ishi Tracking Camp participation	National	01
TSC (2MPBNNCC Armed)	Harsh Gupta, Pallavi Vishwakarma, Dharmendra Chouhan, Lokesh Bhade, Malay Panchakshari, Niranjane Sharma Participation	National	06
National AIDS Control Program (Bot)	Certificate of recognition	National Aids Control Origination	50

3.6.3 Students participating in extension activities with Government Organizations, Non-Government Organizations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organizing unit/ agency/ collaborating agency	Name of the activity	Number of teachers co-ordinate d such activities	Number of students participat ed in such activities
Ek Bharat Shrestha Bharat	Dept. of Hindi	Nukkad Natak	04	10
	Dept. of Seed & Hort.	Ek bharat Shreshtha Bharat club established,	02	150

		Quiz Competition, Essay Writing, Film Show, Language knowledge & display board activity, Clay model lecture & film show, Apply Water pot to birds etc		
Eco Club	Dept. of Seed & Hort. & Eco Club	Lecture on Air Pollution, Geo Tagging on Tree, Movie on Environment, Drama for environment awareness “Halla- Bol”, Crop assessment, Green good deeds, Cleanliness Campaign etc	10	125
AIDS & Cancer Awareness	Dept. of Botany & National AIDS Control Origination	AIDS Control	01	50
	Red Cross, NSS	Poster Competition, Lecture & Tr. On CPR, Street Play, Rally etc	08	150
Gender Issue	Red Cross, NSS	Women’s day, Judo-Karate etc	05	50
Swacchha Bharat	Red Cross, NSS, NCC	Polythene free campus, Swacchhta Abhiyan etc	08	150
Plantation	Seed Tech. & Hort. , Red Cross, NSS	Ek Vidharthi Ek Phodha, Kargil Martyr, Hariyali Mahotsav, Ropan Abhiyan etc	11	145
Visit Old Age Home, Slum Areas	Dept. of For. Sc. & Robin Hood Army (NGO)	Collection of fresh food from hotels, parties and its distribution to the needy.	02	08
	Department of Geology	Distribution of fruits and utility items to the inmates of Nishaktjan Aadhar Welfare Society	02	40
	Red Cross & Dept. of Biochem.	Visit to Musakhedi slum area: Nutritional Awareness Prog.,	02	15
	Dept. of Botany	Visited Jyoti Niwas Old Age Home	02	15
	Dept. of Pharma	Visited Astha Old Age Home	02	20
Voter's Awareness Program	Dept. of For. Sc & District Election Office, Indore (M.P)	Voter's awareness related competitions like Slogan & Essay writing, Debate, Drawing etc. (25.01.2020)	08	21
Research Project	Microbiology Department	Research Studies On Unknown Foul Odour Of Indore City(2019)	05	16

3.7 Collaborations

3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of Activity	Participant	Source of financial support	Duration
Research Activity (Biochem)	T. Rangwal & Sandhya Sharmal	Nil	2018-2020

3.7.2 Linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration (From-To)	Participant
Internship (Bot)	Bio Fertilizer and Gobar Gas production	Ahilya Goshala Keshar Bag Road, Indore	Jan. to Feb. 2020	08 (PG)
-do-	Fruit and vegetable Preservation	Horticulture Department, Indore	-do-	08 (PG)
Research (Pharma)	Characterization of samples	RRCAT Indore	2019-20	01
Internship (Micro Bio)	Internship	Gurjar Hospital	2019-20 (Jan. to Feb.)	20(UG)
-do-	Internship	Kamla Nehru Pranisangrahalay	2019-20 (Jan. to Feb.)	05
-do-	Internship	Shree Pathology	2019-20 (Jan. to Feb.)	06
-do-	Internship	Ipca Laboratory	2019-20 (Jan. to Feb.)	02
-do-	Internship	Shree diagnosis	2019-20 (Jan. to Feb.)	03
-do-	Internship	Dhanwantri Laboratory	2019-20 (Jan. to Feb.)	01
-do-	Internship	Naveen Middle School	2019-20 (Jan. to Feb.)	01
-do-	Internship	Shree Balaji Pathology	2019-20 (Jan. to Feb.)	01
-do-	Internship	Zenith Drug Laboratory	2019-20 (Jan. to Feb.)	01
-do-	Internship	Kalpataru Computers	2019-20 (Jan. to Feb.)	02
-do-	Internship	Suyog Pathology	2019-20 (Jan. to Feb.)	01
-do-	Internship	Delhi public School	2019-20 (Jan. to Feb.)	01
-do-	Internship	Piramal enterprises	2019-20 (Jan. to Feb.)	01
-do-	Internship	First Choice Laboratory	2019-20 (Jan. to Feb.)	01
-do-	Internship	Chocolate Botique	2019-20 (Jan. to Feb.)	01
-do-	Internship	Vinayak Pathology	2019-20 (Jan. to Feb.)	01
-do-	Internship	Orange Pathology and Laboratories	2019-20 (Jan. to Feb.)	01
-do-	Internship	Shree Krishana Vidya Mandir	2019-20 (Jan. to Feb.)	01
-do-	Internship	City medical investigation	2019-20 (Jan. to Feb.)	01
-do-	Internship	Parental drug Pvt. Ltd., Mandleshwar	2019-20 (Jan. to Feb.)	16 (PG)
Training (PG-Geo)	Internship	Geological Survey of India	24/01-01/02/20	09
-do-	Internship	Manganese Ore India Ltd	01/01 - 31/01/20	05
Training (UG-Geo)	Internship	Mining Officer, Indore district, Mandasour district and Neemuch District, M.P.	--	40
-do-	Internship	Rajeev Gandhi Water Shed Mission, Panchayat Office, Panchayat Bhawan, Indore	--	10
-do-	Internship	Rajmi Geoexploration & Engineering Pvt. Ltd, Indore	--	10
-do-	Internship	Ultratech Cement Ltd. Vikram Cement Works, Vikram Nagar, Khor, Distt. Neemuch, M.P.	--	12
-do-	Internship	M/s. S. S. Exploration	--	25

		Enterprises,80, Anurag Nagar, Indore, M.P.		
-do-	Internship	Western Railway, Construction – II, Indore, M.P.	--	12
3.7.3 MoUs signed with institutions of national, international importance, other institutions, industries, corporate houses etc. during the year				
Organization	Date of MoU signed	Purpose and Activities	Number of students/teachers participated under MoUs	
Research institute of Org. Agri. Switzerland (Bot)	15/12/2019	Research and Student Exchange Program	Awaited for Renewal	
Government Institute of Forensic Science, Nagpur, Maharashtra (For. Sc.)	09/09/2019	Exchange of researchers, students, publications, books, academic programs and research projects.	NIL	
PG Tech Research Institute	--	Training Prog.	30 (Pharma)	
PG Tech Research Institute	--	Internship by UG Students	35 (Pharma)	
PG Tech Research Institute	--	Certificate course	28 (Pharma)	
Govt. Mata Jijabai Girl's PG college, (Micro Bio)	08/07/2019	MOU for Academic and Scientific cooperation	Nil	
Index Medical College Indore (Biotech & Info.)	11/10/2019	For Students internship and training, For Knowledge Sharing and Research Activity	Student 17 Teachers 02	

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES						
4.1 Physical Facilities						
4.1.1 Budget allocation, excluding salary for infrastructure augmentation during the year						
Budget allocated for infrastructure augmentation			Budget utilized for infrastructure development			
34000000			33721330			
4.1.2 Details of augmentation in infrastructure facilities during the year						
Facilities			Existing		Newly added	
Campus area			34 Acres		Nil	
Class rooms			51		Nil	
Laboratories			44		Nil	
Seminar Halls			05		Nil	
Classrooms with LCD facilities			25		Nil	
Classrooms with Wi-Fi/ LAN			15		Nil	
Seminar halls with ICT facilities			04		Nil	
Video Centre			Nil		Nil	
No. of important equipments purchased (≥ 1-0 lakh) during the current year.			48		09	
Value of the equipment purchased during the year (Rs. in Lakhs)			--		10417084	
Others			Nil		Nil	
4.2 Library as a Learning Resource						
4.2.1 Library is automated {Integrated Library Management System (ILMS)}						
Name of the ILMS software		Nature of automation (fully or partially)		Version		Year of automation
SOUL		Fully		2.0		2015
4.2.1 Library Services:						
	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	63149	--	--	--	63149	--
Reference Books	28890	--	--	--	28890	--
e-Books	Del-net	--	--	--	--	--
Journals	3791	--	--	--	--	--
e-Journals	Infilbnet	--	--	--	--	--
Digital Database	65121	--	--	--	--	--
CD & Video	350	--	--	--	--	--
Library automation	Fully	--	--	--	--	--
Weeding (Hard & Soft)	--	--	--	--	--	--
Others (specify) Thesis	660	--	--	--	660	--
4.2.2 E-content developed by teachers such as: e-PG-Pathshala, CEC (under e-PG-Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc						
Name of the teacher		Name of the module		Platform on which		Date of

		module is developed	launching e - content
Dr. MMP Shrivastava	Syllabus of B.Sc. I & II	Online	Aug. 2019
Dr. K Billore	Syllabus of B.Sc. I & II	Online	Aug. 2019
Dr. R Sharma	Syllabus of B.Sc. I & II	Online	Aug. 2019
Dr. V K Sharma	Syllabus of B.Sc. I & II	Online	Aug. 2019

4.3 IT Infrastructure

4.3.1 Technology Upgradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Canters	Computer Centres	Office	Departments	Available band width (MGBPS)	Others
Existing	270	13	Yes	03	02	18	21	100MBPS	--
Added	70	Nil	Yes	Nil	Nil	Nil	Nil	Nil	--
Total	340	13	Yes	03	02	18	21	Nil	--

4.3.2 Bandwidth available of internet connection in the Institution (Leased line)

100MBPS

4.3.3 Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
Nil	Nil

4.4 Maintenance of Campus Infrastructure

4.4.1 Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
7000000	6890430	27000000	26830900

4.4.2 Procedures and policies for maintaining and utilizing physical, academic and support facilities – laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website) (Annexure VI)

Response:

The college has its Maintenance Policy which was implemented in 2015. (<http://www.collegeholkar.org>)

The college has a lush green campus spread in 34 acres of land. For academic activities the college has a number of buildings like the historical Red Building, Yashwant Hall, Main Office Block, Academic Block, Library, The Examination Department, Various Life Sciences Departments, Boys Hostel and Staff Quarters. The buildings are constructed with state-of-the-art technologies, which consist of energy efficient, water conserving and sustainable building materials. All the buildings are well connected through well maintained roads. The College has huge sports grounds where the sports and physical activities are carried out.

The college has a dedicated engineering section maintained by PWD. The department looks after the periodic maintenance of the buildings, the roads, excessive rainwater and grey-water drainage. The engineering department maintains the buildings by painting them at regular intervals apart from civil repairs and other maintenance as per the necessity or on request.

There are 14 science departments with well equipped laboratories, computers, other useful gadgets and ICT facilities. There is a separate research wing in the college where researchers and scholars can work independently.

Adequate provision in the budget is made by the Janabhagidari Samiti and the State Government to conduct the above activities smoothly

The college has a fully automated main library with approximate 92 thousand text and reference books. The departments have their separate departmental libraries also.

The regular monitoring and maintenance of these academic facilities is undertaken by the respective departments through dedicated AMCs and all up-gradation and repair works is done by the department internally. In addition, PWD undertakes periodic survey of the various infrastructures on the campus and takes proactive steps to ensure high standards of maintenance.

The sports facilities on the campus are actively managed by the Sports department, which is headed by two sports officer and their supportive staff. The computers and the networking on the campus are maintained through dedicated AMCs. Computer department and IT cell is also responsible for the maintenance of entire digital physical infrastructure in the campus.

College gardens are maintained by gardeners under the supervision of Garden Committee and Botany department. The college has deputed watchmen and a third Party Security Agency that works under the supervision of the college administration. They are in charge of the security for the institution.

Annual stock checking of furniture, lab equipment, ICT facilities is done internally by the departments. The department makes committee to write off the equipments, books etc. The report is submitted to the administration by the head of department. There are sweepers and a outsourced housekeeping team to look after the cleanliness and hygiene in the college.

CRITERION V - STUDENT SUPPORT AND PROGRESSION			
5.1 Student Support			
5.1.1 Scholarships and Financial Support			
	Name /Title of the scheme	Number of students	Amount in Rupees
Financial support from institution	Half Free ship	42	171200
Financial support from other sources			
a) National	SC	705	12258769
	ST	110	2020542
	OBC	444	9578860
	Gaon Ki Beti	223	1115000
	Pratibha Kiran	38	190000
	Nishaktjan	07	82000
	MMV	2901	43015000
	NFHE(Zoology)	02	50000
	Total	4430	68310171
b) International	Nil	Nil	Nil
5.1.2 Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,			
Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Remedial Classes (Zoology)	2019	08	Dept. Faculties (World Bank Pariyojna/RUSA)
Remedial classes(Pharma)	21/11/19	30	-do-
Remedial Classes (Chemistry)	01/10-29/02/20	List??	-do-
Remedial Class(English)	??	25	-do-
Tr. Prog. on “Advanced Agro Techniques for Entrepreneurship Development”	22/01-14/02/20	25	Dept. of Botany & Carrier Guidance Cell
Hands on Training Programme on Mushroom Cultivation for self employment	10 -11/10/19	30	Dept. of Horticulture & Seed Technology
Lecture on Bio Diversity (Dept. of Zoology & Fisheries & Carrier Guidance Cell)	02/03/20	25	Resourse Person: Dr. C.S. Shrivastava
Short term employment oriented Tr. On “Health and Nutrition”	16/09-12/10/19 & 02-31/12/19	40	Dept. of Biochem. & Career Guidance Cell
‘SWOT’ (Carrier Guidance Cell)	29/07/2019	45	डॉ. कान्ता मूलचंदानी, ए. डॉ. सुवर्णा तनवानी, डॉ. भारती सिसोदिया, डॉ. सोना सांक्ले, शासकीय होलकर विज्ञान महाविद्यालय, इन्दौर
Lecture: C.V. Writing(Carrier Guidance	30/09/2019	45	Mr. Pankaj Kothari,

Cell)			
Lecture: Mock Interview (Practical) (Carrier Guidance Cell)	04/10/2019	35	Mr. Pankaj Kothari, Trainer and P.D. Coach
(व्याख्यान) "राजीव गाँधी का सपना" आई.टी. – कम्प्यूटर में अग्रणी देश हो अपना (निबंध एवं परिचर्चा) छात्रों में आई.टी. से संबंधित कार्य क्षेत्र पर चर्चा। (Carrier Guidance Cell)	11/11/2019	50	डॉ. संजीदा इकबाल, शासकीय होलकर विज्ञान महाविद्यालय, इन्दौर
Lecture: Career Aspects of Bio Sciences Students in Conservation of National Parks. (Carrier Guidance Cell)	12/12/2019	45	Mr. Mridul Kumar Pathak, Chief conservator Officer and ex field director, Bandhogarh National Park.
Lectures: 1. Career Opportunities in Govt. Sector. 2. Assessment of Aptitude through hand writing. (Carrier Guidance Cell)	30/01/2020	55	Shri Shailesh Tiwari & Prof. Rishi Mathur – Graphologist
Lectures: Bio Diversity Conservation Through a lens of a Forester, Technology for Avian Studies, Wild Life Sustainability and Management, Zoo Management, Biodiversity (Carrier Guidance Cell)	02/03/2020	50	श्री अनिल नागर ए श्री अजय गडीकर ए डॉ. सुशांत पुनेकर ए डॉ. उत्तम यादव ए डॉ. सी. एस. श्रीवास्तव
Lecture on Job Opportunities in Questioned Documents (Carrier Guidance Cell & Dept of For. Sc.)	15/01/2020	20	Mr. H.S. Tuteja, (Questioned Document Expert)
Forensic Examination of Blood, Bloodstains and Blood Grouping System (Carrier Guidance Cell & Dept of For. Sc.)	23/04/2020	20	Mrs. Aayushi Dhariwal (Forensic Professional) Central Forensic Science Laboratory Bhopal (M.P.), India
Tr. Prog. on "Organic Farming for Sustainable. Development and Conservation of Environment" (Carrier Guidance Cell & Dept of Seed & Hort.)	28/02-03/03/2020,	35	(Carrier Guidance Cell & Dept of For. Sc.)
Lecture on career opportunities in Geology (Carrier Guidance Cell & Dept of Geology)	26/11/2019	25	Mr. Bhupesh Sakalle, Alumnus of Dept. Geology, GIS specialist, Canada
"नैतिक मूल्य और विद्यार्थी जीवन" (Carrier Guidance Cell)	07/11/2019	35	वरिष्ठ साहित्यकार, डॉ. सूर्यकांत नागर
Personality Development & Communication Programme (Career Guidance Cell & Dept. of Chemistry)	23/09-14/10/19	94	Mr. Manoj Kothari as Resource person
Language Lab (Career Guidance Cell & Dept. of Chemistry)	23/09-14/10/19	94	College Faculties
Yoga & Meditation (Career Guidance Cell)	23/09-14/10/19	94	College Faculties
Personal Counselling and Mentoring (Career Guidance Cell)	23/09-14/10/19	94	College Faculties

Computer Hardware, Equipment Repairing & fabrication training Workshop (Career Guidance Cell & Dept. of Electronics)	18/11-16/12/19	30	Mr. Tarkeshwar Vyas & his Team, Vyas Computer, Kiran Robotix, Sai Electronics & Electronics & Electrical		
Tr. On Basic Programming with Python(Career Guidance Cell & Dept. of Electronics)	2019-20	36	Industrial Expert.		
Tr. On Embedded System Design based on Aurdino (Career Guidance Cell & Dept. of Electronics)	2019-20	20	Industrial Expert.		
Rashtriya Aandolan (Personality Development Cell)	21/08/2019	80	Dr. Vikas Dave		
Aatankvad Samasya Evam Samadhan (Personality Development Cell)	09/09/2019	124	Dr. Yogendranath shukal		
Gandhi Evam Aatmnirbharta (Personality Development Cell)	10/10/2019	72	Dr. Vikas Dave		
Gurunanak ke Vichar (Personality Development Cell)	27/11/2019	92	Dr. Trupat Kaur Chawla		
Bangladesh Ke Kranti (Personality Development Cell)	28/01/2020	65	Dr. Sanjay Jain		
Meetings with HR of Various Companies (Placement Cell)					
Divergent Software Labs pvt. Ltd.	10.10.2019	480	Mr. Ankit patel		
iLEAD	05.10.2019		Ms. Riya Wora		
Symbiotec Pharmalab Labs Pvt. Ltd.	08.11.2019		Ms. Shreya Bhatt		
Sahaj Regenerative Cell Therapeutics	10.12.2019		Ms. Megha Vankhade		
Pantaloon Pvt. Ltd.	27.12.2019		Mr. Abhishek Sharma		
Ipca Laboratories Ltd.	10.02.2020		Mr. Sourabh Jain		
CIPLA Pharmaceutical	08.05.2020		Ms. Preeti Pawar		
5.1.3 Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year					
Year	Name of the scheme	Number of benefited students by Guidance for Competitive examination	Number of benefited students by Career Counselling activities	Number of students who have passed in the competitive exam	Number of students placed
2019-20	Competitive Exams	160	--	NET: 02(Forensic Science), 02(Computer Science)	Nil
				SLET: 01(Zoology)	
				GATE: 06(Geology)	
				State Govt. Ser.: 06 (Chemistry),	

				01(Zoology)	
				UGC JRF: 01(Forensic Science)	
				Others: 01(Chemistry)	
2019-20	Career Guidance :	--	750	--	Campus Placement in Various Companies(On Campus : 63
					Campus Placement in Various Companies(Off Campus): 01(Pharma)
Total		160	750	20	64

5.1.4 Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	No. of grievances redressed	Average number of days for grievance redressal
Nil	Nil	Nil

5.2 Student Progression

5.2.1 Details of campus placement during the year

On campus			Off Campus
Name of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
LUPIN, Pithampur (off campus)	01	--	01(Pharma Chem.)
Divergent Software Labs pvt. Ltd.	100	22	--
iLEAD	150	09	--
Symbiotec Pharmed Labs Pvt. Ltd.	50	05	--
Sahaj Regenerative Cell Therapeutics	60	05	--
Pantaloon Pvt. Ltd.	30	05	--
Ipca Laboratories Ltd.	40	09	--
CIPLA Pharmaceutical	50	08	--
Total	492	63	01

5.2.2 Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of Programme admitted to
2019-20	29	B.Sc.	Zoology	Govt. Holkar Science College	M.Sc. Zoology
2019-20	22	B.Sc.	Pharma Chem.	Govt. Holkar Science College	M.Sc. (Pharma. Chem.)

2019-20	04	B.Sc.	Biotechnology	Govt. Holkar Science College	M.Sc. (Biotech.)
	03	B.Sc.	Biotechnology	Govt. Holkar Science College	M.Sc. (Botany)
	02	B.Sc.	Biotechnology	Govt. Holkar Science College	M.Sc. (Zoology)
	01	B.Sc.	Biotechnology	Govt. Holkar Science College	M.Sc. (Chemistry)
2019-20	07	B.Sc.	Comp. Sc.	Govt. Holkar Science College	M.Sc.(Comp. Sc.)
2019-20	10	B.Sc.	Electronics		PG

5.2.3 Students qualifying in state/ national/ international level examinations during the year (eg: NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	No. of Students selected/ qualifying	Registration number/roll number for the exam
NET	02(Forensic Science)	MP03503228, MP0705200663
	02(Computer Science)	MP0705203650, MP0705203800
SET		
SLET	01(Zoology)	15120646
GATE	06(Geology)	GG20S42038160, GG20S43028136, GG20S42051041, GG20S48007055, GG20S48006066, GG20S48004103
GMAT	--	--
CAT	--	--
GRE	--	--
TOFEL	--	--
Civil Services	--	--
State Government Services	06 (Chemistry)	Not available
	01(Zoology)	6006015221
Any Other	01(Chemistry)	Not Available
(UGC-JRF)	01(Forensic Science)	MP03503228

5.2.4 Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Participants
Basketball(W) (08-09/11/19)	Division Level	180
Tennis(M) (21/12/19)	Division Level	35
Tennis(M) (Jan. 20)	Division Level	50
Teachers/Employee Sports(Feb. 20)	Division Level	450
Volleyball(M) (09-10/11/19)	District Level	250
Volleyball(W) (14-15/10/19)	District Level	180
Football(M) (02-05/11/19)	District Level	250
Borans Cup: Cricket	District Level	350
Online Quiz: Physical & Mental Fitness with Covid-19 Awareness (16-20/06/21)	National Level	350
Webinar on “Improve Immunity & Peace by Meditation” (21/06/20)	National Level	300
Training camp were organized during the session for various games: Volleyball, Basketball, Softball, Chess, Table-Tennis etc.	College level	450
Judo Karate training camp for girls in self defence	College level	150
Yoga training camp	College level	145
Various games activities on the occasion of annual function	College Level	1200
Annual function organized (29 – 30/2020): Various culture activities & Literacy activities organized	College level	1500
College level Inter class youth festival organized (26-28/09/19): Music – Solo song (classical, Sugam, Western), Group song	College level	50

(Western, Ger Filmy), Instrument (Solo-Non perkusan tal vadhya, Thap) competitions were organized		
College level Inter class youth festival organized (26-28/09/19): Debate, Speech, Quiz, Poster making, On the spot, Colas, clay modelling, cartooning, Rangoli competitions were organized	College level	55
College level Inter class youth festival organized (26-28/09/19): Dance (classical), Group dance (Folk base), Ekanki, Maims, Skit, Mimicry competitions were organized	College level	55
Inter collegiate youth festival organized (03-05/10/20) were organized	District level	100

5.3 Student Participation and Activities

5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/ medal	National/ International	Sports	Cultural	Student ID number	Name of the student
2019-20	Winner	State Level	Table Tennis	--	--	Zainab Khan
2019-20	Winner	State Level	Table Tennis	--	--	Shivani Patidar
2019-20	Representation	University	Cricketl	--	--	Sagar Barde
2019-20	Representation	University	Cricketl	--	--	Bhumika Chauhan
2019-20	Representation	University	Volleyball	--	--	Mahi Sharma
2019-20	Representation	University	Volleyball	--	--	Deeksha Barde
2019-20	Representation	University	Volleyball	--	--	Sakshi Mandloi
2019-20	Representation	University	Table Tanis	--	--	Zainab Khan
2019-20	Representation	University	Athletics	--	--	Mahak Khan
2019-20	Representation	University	Chess	--	--	Akshita Dubey
2019-20	Representation	University	Hockey	--	--	Himanshu Verma
2019-20	Representation	University	Hockey	--	--	Tejaswini Goud
2019-20	Representation	University	Football	--	--	Shobha Yadav
2019-20	Representation	University	Football	--	--	Megha Yadav
2019-20	Representation	University	Boxing	--	--	Rashmi Kumari
2019-20	Representation	University	Baseball	--	--	Jaya Mourya
2019-20	Representation	University	Volleyball	--	--	Sumit Raghuwanshi
2019-20	Representation	University	Table Tennis	--	--	Shivani Patidar
2019-20	Representation	University	Softball	--	--	Jaya Mourya
2019-20	Representation	University	Softball	--	--	Deepika Patel
2019-20	Representation	National	--	Writing Competition	--	Mausam Rajput
2019-20	Representation	National	--	Poetry	--	Mausam Rajput
2019-20	Representation	National	--	Elocution	--	Mausam Rajput
2019-20	Representation	National	--	Essay Writing	--	Mausam Rajput
2019-20	Representation	State level	--	Debate	--	Mahi Sharma
2019-20	Representation	State level	--	Speech	--	Mahi Sharma
2019-20	First & Running Trophy	University	--	Debate (organized by Maheshwari College)	--	Anirudh Chandrawanshi, Nikhil Neve
2019-20	Representation	University	--	Debate	--	Utkarsh Mishra

2019-20	Prashsti Patra	National	--	Indian Book of Record (Maximum word heritages sketched on waste coconut shells)	--	Gajendra Sharma
					--	Radhika Udawat
2019-20	Second	University	--	Debate (organized by Abhyas Mandal)	--	Nikhil Neve
2019-20	Third					Raksha Yadav
2019-20	First	University	--	Dance (organized by Arihant College)	--	Nikhil Kheera
2019-20	Third	University	--	Group Dance (organized by Arihant College)	--	Rinkesh and Diksha
2019-20	Performance	State level	--	Group Dance (State level Youth Fest. At APS Univ. Rewa)	--	Souabh Gadwal

5.3.2 Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

Every year student committee of meritorious students is constituted. This committee played an important role in the smooth functioning of college annual function. The committee took active part in the annual cultural festival held every year in the college. Students are also actively involved in various societies of the college like NCC, NSS, Cultural Society, Women's development cell, Placement cell and many others etc. Student also acts as a member of board of studies of various departments. On merit basis there are PG associations are also constituted in PG departments. These associations look after the academic activities, seminars of student and educational tours etc of the departments during the session.

5.3 Alumni Engagement

5.3.1 Whether the institution has registered Alumni Association? Yes/No, if yes give details (maximum 500 words):

Yes, The college has a registered alumni association (registration no. IND/539/91) from 08/08/91, Old Holkarian Association (OHA). At present OHA has following office bearers:

Dr. Narendra Dhakad	President
Dr. R.C. Dixit	Vice President
Dr. Sanjay Vyas	Secretary
Dr. Pradeep Sharma	Joint Secretary
Dr. Suwarna Tanvani	Treasurer
Dr. M M P Shrivastava	Executive Member
Dr. R. K. Nagar	Executive Member
Dr. Monika Jain	Executive Member

The association helps the development work of the college. During the alumni meeting feedback is collected on curriculum and college environment through a structural format. As the college is around 125 years old, many alumni of this prestigious institution serve as faculty, as sports personal, as Industrialist/entrepreneurs, as Bank professionals, as NGO, as Doctors, as IT professional, in Film Industry, as Researcher, as Literary person, as Scientist, as Freedom Fighters, as Journalist, as Administrator, in Judiciary Service, as Politician, as Academician, in Defence etc. During the session on 24/06/20 the online alumni meet organized by the college around 331 alumni across the country/world were join this meet and gave their feedback, made suggestions for the betterment of the institution. Apart from these various Departments have departmental alumni association. These departments organize alumni meets time to time. During the session alumni meet organized by Seed & Hort., Biochemistry departments. In these meetings the feedback are taken, analyze and taken steps as per feedback.

5.3.2 No. of registered Alumni:
407
5.3.3 Alumni contribution during the year (in Rupees) :
OHA – Nil, Alumni of Horticulture & Seed Dept.: Rs.5000, Alumni of Biochemistry Dept.:30000;
5.3.4 Meetings/activities organized by Alumni Association :
OHA: 01, Horticulture & Seed Dept.: Meeting – 02, Activity – 01; Biochemistry Dept.: Meeting : 03, Activity: 01(Golden Jubilee Celebration 03/11/2019)

CRITERION VI –GOVERNANCE, LEADERSHIP AND MANAGEMENT	
6.1 Institutional Vision and Leadership	
6.1.1 Mention two practices of decentralization and participative management during the last year (maximum 500 words)	
<p>Response:</p> <p>Holkar Science College, Indore is one of the most prestigious institution in central India. It is an autonomous institute since 1989. The College practices both decentralization and participative management at three levels i.e. at Academic level, Administrative level and by the Examination Department.</p> <p>For academic activities, the departments are given sufficient autonomy. The principal appoints head of the departments under the decentralized policy. The HOD's along with the faculty members take various decisions for the smooth functioning of the department. The committees, various cells etc are formed by the administration that looks after the various schemes, admission process, finance, career counselling for the students etc. The entire college is involved and participates for the betterment of the institution.</p> <p>At administrative level also, the college practices decentralization and participative management. The budget allotted by State Govt./UGC/ Janbhagidari Samiti is distributed to various departments according to their requirements. The heads of teaching departments are responsible for the utilizing the sanctioned amount as per state Govt. rules and instructions given by the administration and purchase committee. Further, beyond those levels, the financial decisions are taken at College administrative level by A/O and the principal. Permission for exceptional proposals is put up in Governing body meeting and in front of Janbhagidari Samiti for approval.</p> <p>The activities related to examination are controlled by the Examination Department headed by the controller and deputy controllers along with supportive office staff. Examination department makes the examination schedule. The college follows semester system at UG and PG levels. From the year 2017 college adopted annual system at UG level.</p>	
6.1.2 Does the institution have a Management Information System (MIS)?	
Yes/No/Partial:	
Partial	
6.2 Strategy Development and Deployment	
6.2.1 Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):	
❖ Curriculum Development:	
<p><i>College follows the syllabi designed by Central Board of Studies under the Department of Higher Education. The College has its own board of studies in each department. Departmental Board of Studies of the college approves the syllabi proposed by the Department of Higher Education. The College has the autonomy of 10% enhancement in the proposed syllabi at UG level for their respective courses for maintaining the standards of instruction. Framing of Guidelines for examination and valuation is conducted by the examination department. At PG level Credit based choice system has been implemented with open elective papers. This approach aims to empower learners to shape their education through choices. Each year the syllabi are revived/revised accordingly in the presence of the subject experts. It involves planning, identifying, modifying and evaluating the content according to the learner. The reviews are done on the basis of practical requirements and industry needs. The developed curriculum is adapted in relevance with Regional/National/Global development needs. The contents of the syllabus is oriented toward generating employability, entrepreneurship and skill development. The curriculum design teaches</i></p>	

students how to look at a problem and formulate a solution. Considered an authentic form of learning because students are exposed to real-life issues, this model helps students develop skills that are transferable to the real world. Problem-centered curriculum design has been shown to increase the relevance of the curriculum and encourages creativity, innovation and collaboration in the classroom.

❖ **Teaching and Learning**

The college continuously improves its infrastructure and incorporates new technology, tools and aids, to improve the teaching and learning processes. Classrooms and all laboratories are equipped with projectors. Wi-Fi is available across the college campus. Browsing centre is available for students to access internet and it helps students to prepare their presentations. Teaching is supplemented with workshops, educational tours, laboratory visits, and field trips. For effective teaching and learning, teachers adapt techniques like - power point presentations, smart board, posters etc. Expert lectures, seminars and workshops were conducted in the college to enhance learning. To improve teaching different types of teaching methods have been adopted by teachers as: Telling method (Lecture method, storytelling method, discussion method etc), Activity method (Project method, problems solving method, etc.), Visual Method (Textbook method, demonstration method, etc.), Mental method (Inductive and deductive, analysis, synthesis method, etc), Lecture Method, Demonstration Method, Tutorial Method, Questions-Answer method, Discussion method, Project method, Analysis method, Field trip method, Observational method, Survey method etc. remedial classes are organized for slow- learners.

❖ **Examination and Evaluation**

The rules and regulations concerning the evaluation process, distribution of marks of internal assessment are framed by the examination department. Each department maintains the record of syllabi covered every month and ensures that the tests, assignment, presentations etc are conducted. Moreover the departments ensure the Internal Assessment monitoring, record of attendance, sending the marks of assignments, internal exams, tests and projects to examination department. The college follows semester system at BCA(UG) and PG levels. From the year 2017 college adopted annual system at B.Sc.(UG) level. For B.Sc.(UG) courses, 2 internal exams (Quarterly & Half yearly), assignments are mandatory followed by one final exam in each year. For BCA(UG) courses, 2 internal assignments (CCE) are mandatory followed by final examination in each semester. For PG students, 2 CCE Assignments and viva-voce are mandatory followed by one final exam in each semester. To maintain transparency in evaluation system, the students were given a privilege to view their answer books of CCE. The CCE of the students is ensured through test, assignments, seminars etc. and there is a written examination at the end of the semester. In order to maintain confidentiality and academic standards it mandatory that at least 50% of the exam papers are set by the external setters. The college follows a centralized pattern of valuation at UG level and PG level valuation is done by the setter. Examination results are made available on college website, student can download the provisional mark list. The various steps are taken to evaluate of answer books- Mixing, coding, valuation, scrutiny, review, decoding, data-entry, results on website. Mandatory moderation of question paper before the commencement of examination. Provision to show valued answer sheets on the request of the students in the presence of the subject experts and guardian to satisfy the students by removing their doubts. Here students can challenge the valuation. Revaluation done by two examiners. Examiner for M.Sc. practical exams and for M.Phil. Viva voce are from outside the native university.

❖ **Research and Development**

The college has a College Research Cell. This cell provides guidance to faculty about funding agencies promotes interdisciplinary research and monitors progress of research activities, motivates faculties to publish research papers in peer reviewed journals with high global impact factor for quality research, motivates to submit the Major/ Minor research projects to funding agency.

Motivates faculties to attend seminars and workshops and presenting research papers. College has registered as research centre in six subjects. College has facilities for research work. Rresearch labs have emerged as specialized areas involve new research ideas and promote research culture. It encourages the students to undertake the research in the new fields. New high tech instruments like FTIR, IR etc. are available in labs. Every teaching departments of the college has been equipped with internet in order to facilitate research activities. Latest research journals are available in the departments and in the library. For e-journals and e-books del-net is installed in library. The college follows two types of research:

1. Basic Research: This type of research system is followed at PG level on the basis of small project and assignments.

2. Applied Research: This type of research is mainly followed in PG and Post PG research where students focus mainly on more specific and directed objectives and investigations.

During the session one major project (Physics) is ongoing, one symposium on IPR, one workshop on IPR, About 32, Seminar/Workshop/FDP/Webinar were organized by the institute during the session. 14 Ph.D. awarded under the guidance of faculties, 82 papers published in various journals of national & international repute by the faculties, about 227 participations, 05 paper presentations by the faculties during the session.

❖ Library, ICT and Physical Infrastructure / Instrumentation

The library is fully automated and has 63149 text books and 28890 reference books all bar coded, 3791 Journals, 350 CDs, 660 Thesis, 65121 digital database. 25 computers. Del-Net, INFLIBNET, e-journal facility is available in the library. Library is fully automated by SOUL 2.0 ILMS software. Some PG departments have separate departmental libraries e.g. Biochemistry, Microbiology, Pharmaceutical chemistry, Horticulture and Seed Tech. etc. Facility of LCD projector for effective audio-visual teaching learning, ICT technology is used as effective teaching tool, IT lab and instrumentation rooms, available for students. The college spread in 34 acres of land having 51 classrooms, 44 laboratory, 05 seminar halls, one auditorium (Yashwant hall), Indoor and Outdoor sports facilities, one boys Hostel is available in the college. New constructions are also in progress.

❖ Human Resource Management

The college has a well-defined administrative set up for the smooth functioning of the institution. While the Principal as the head of the institution remains at the helm of all the academic and administrative affairs in the college, the administrative officer serving as a link between the principal and the other staff members facilitates day to day administration of the institution. Every teaching department is headed by a senior professor entrusted with the administrative and academic responsibilities of that particular department. The recruitment of the permanent employees is done by the Department of Higher Education Govt. of M.P.. The salary and other benefits related to finance, leaves, health etc. are regulated and implemented as per the rules laid down by the department of higher education. The recruitment of the temporary employees is done by the college authorities as per the rules laid down by the department of higher education. Confidential performance appraisals are regularly filled, Personal files well maintained. The college has computerized account keeping and administrative system. Pay slips and PF statements of employees are transmitted electronically. Grievance redressal cell is active to resolve the grievances of the employees and students.

❖ Industry Interaction / Collaboration

Educational Trips to Industries are organised by department of Microbiology and department of Pharmaceutical Chemistry for M.Sc. students to help them understand the working of various Industries and Laboratories with regard to their subjects in syllabus and with respect to various job opportunities. Students are prepared for interviews by arranging lectures of various eminent personalities working in various sectors. They make students aware about the scope and environment of the companies. Department of pharmaceutical chemistry has collaborated with PG Tech research

institute (PGTRI) and certificate courses are organized yearly with collaboration with this institute during the session. Collaborative support for internship and field training from different government, public sector and private organization such as GSI, ONGC, MOIL, Rajami Geo-Exploration and SS enterprises. Placement Cell of College provides the students with exposure to resume writing, soft skill training and employment opportunities. Companies are invited to conduct interviews, offer internships and hold talks and discussions. Linkages and Collaborations: National institutes – Institute of Excellence in Higher Education (IEHE), Bhopal (M.P.), Dr.H.S.Gour University, Sagar, PG Tech. Inst., ONGC, Directorate of Geology and mines, Manganese ore India Ltd., Hindustan Copper Ltd., DAVV Indore, RR CAT Indore, NRCS Indore, IUC Indore, MGMMC Indore, Parental Drug India Ltd. Indore, Disha Fertility Centre Indore, NFI Ltd. Dewas, IVRI Bareilly (UP), IAHVBP Mhow, CHL-Apollo Hospital Indore, Plethico Lab. Indore, Chouksey Lab. Indore, Sahkari Dugdh Sangh Maryadit Indore etc. Agriculture College Indore, BioRe Association Kasrawad, JNU New Delhi, MPUAST Udaipur, Noble Alchem Pvt. Ltd. (Agribooster), Sanwer Road, Indore, M.P., Tuteja's Forensic Examination and Research Centre, Indore. International institutes - Research Institute of Organic Agriculture, Switzerland. During the session college has sign MOU's from Research institute of Org. Agri. Switzerland (Dept. of Botany)(renewal), Government Institute of Forensic Science, Nagpur, Maharashtra (Dept. of For. Sc.), Govt. Mata Jijabai Girl's PG college, Indore (Dept. of Micro Bio), Index Medical College Indore (Dept. of Biotech & Info.).

❖ Admission of Students

The admission process is highly transparent. Rules and regulations of the Department of Higher Education Govt. of M.P. are strictly Followed. Admissions are purely merit based. At UG and PG level candidates are required to apply on-line through admission portal of Higher Education Department along with choice of colleges/Programmes/courses. After that on the merit basis as per the allotment the students can seek the admission in the college. For vacant seats, at the end of merit round, admissions are open for all and filled by college level counselling on merit basis from the present candidates. Entrance test followed by interview is mandatory for admission to M.Phil. Courses. The faculty and office staff of the college is involved in administration, verification and admission process.

6.2.2 : Implementation of e-governance in areas of operations:

❖ Planning and Development

The college has its own website. Each and every information is uploaded on the website from time to time. The departmental profile is available on the website where all the activities conducted by the departments, syllabus, scheme of marks etc are uploaded. Students profile has also been created on the website. A student can download his/her result, exam forms etc from it. Admission and examination fee are collected through online/SBI collect portal is used for this purpose. Scholarships of different schemes are also online through portal of respective schemes. Students can submit their examination form, renewal of admission in next semester/year is online. The examination results are uploaded on the website. Students can see their results and download his/her provisional mark sheet from the website by proper login ID. Link of different schemes are available on the website of the college www.collegeholkar.org.

❖ Administration

The college has a well-defined administrative set up for the smooth functioning of the institution. While the Principal is as the head of the institution remains at the helm of all the academic and administrative affairs in the college, the administrative officer serving as a link between the principal and the other staff members facilitates day to day administration of the institution. Every teaching department is headed by a senior professor entrusted with the administrative and academic responsibilities of that particular department. There are formed various committees comprising senior and experienced members of the staff for a number of activities taking place on the campus through the year. All information's and communication between AO and various departments are

made through e-mail of each department/ through college website. Student's data are maintained online. Each student can view his/her academic data throughout the year. Service record of teaching and non- teaching staff is maintained by Higher education department online through e-service-book, updated every year by college administration using their login ID and password. Employee can view his/her profile online any time anywhere and can get benefit accordingly.

❖ **Finance and Accounts**

The students deposit their fee online through SBI collect portal managed by college. College is using Tally ERP 9.0 for maintaining the books of accounts and Payroll software for salary dispersal of guest/temporary faculties and employees appointed by JBS. The statutory dues of students and faculties are paid online on time. The salaries of regular employee's are maintained through IFMIS system by the Government.

❖ **Student Admission and Support**

The admission process is highly transparent. Rules and regulations of the Department of Higher Education Govt. of M.P. are strictly followed. Admissions are purely merit based. At UG and PG level candidates are required to apply on line through admission portal of Higher Education Department along with choice of colleges/Programmes/courses. After that the application form are verified at any Govt. college of M.P.. Finally, on the merit bases as per the allotment the student can seek the admission in the allotted college/course. This process done in many round as required. At the end for vacant seats the CLC round is organised at college on first come first/merit basis. All the information of the students admitted to the college is available on Higher Education department/College website.

❖ **Examination**

The activities related to examination are controlled by the examination department. This department make examination schedule. The college follows semester system at PG level & at UG(BCA) level, while annual system at UG(B.Sc.) level. Student can fill their examination forms. Admit cards are generated online and student can download from the college website. CCE marks and examination results are made available on college website; students can view their results online and can download the provisional mark list. Students can deposit fee online through SBI collect.

6.3 Faculty Empowerment Strategies

6.3.1 Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
Nil	Nil	Nil	Nil	Nil

6.3.2 Number of professional development / administrative training programmes organized by the Colleges for teaching and non-teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non- teaching staff	Dates (from- to)	No. of participants (Teaching staff)	No. of participants (Non- teaching staff)
2020	Workshop for Laboratory Technicians (Chemistry)	--	04/01/20	25	225
2020	Application of Advanced Scientific Instrumentation with entrepreneurship guidance (Pharma Chem. & PG Tech.)	--	08-15/06/20	150	--

2019	One week workshop on “Qualitative & Quantitative Analysis (Pharma Chem. & PG Tech.)	--	10-15/10/19	45	--
2019	One week Workshop on “Research Methodology”(Comp. Science)	--	16-20/12/19	55	--
6.3.3 No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year					
Title of the professional development programme		Number of teachers who attended		Date and Duration (from – to)	
Faculty Induction Programme: RCPV Naronha Academy Bhopal		02 (Tasnem Rangwala, Sheetal Uike)		20-25/01/20	
Refresher Course: DAVV, Indore		01 Nidhi Parmar 01 (Chemistry)		29/08-11/09/19	
FDP: Design & Development of MOOCs and e learning Technologies: Guru Govind Singh Indraprastha University		01 (Pramila Sadhav)		10-16/0520	
FDP: Modern Educational Tools and Pedagogical Practice for Online Teaching: Vidhyalankar Inst. of Tech.		01 (Pramila Sadhav)		20-25/06/20	
FDP: Managing online classes and Co-Creating MOOCs:2.0:Ramanujan College, Univ. of Delhi		01 (Pramila Sadhav)		18/05-03/06/20	
FDP: Application of Advanced Scientific Instrumentation with Entrepreneurship guidance: Dept. of Higher Ed. & PG Tech.		08, Vishnu Gadgil, Priyanka Tiwari, Prameela S, Ruchi Shivle, Alka Dubey, Shanti Patidar, Kamla Shivani, Pramila Sadhav 02 (Bio Chemistry), 01 (Microbio), 01 (Mathematics)		08-15/06/20	
FDP: Recent Awareness in Forensic Ballistic and Explosive Examination: SVVV Indore		04, Ritu Bharti, Anklesh Ahirwar, Neha Chourasia, Satish Rai		03-04/10/19	
Short term Course: Advanced Agro Tech. For Entrp. Development: H.Sc. (Botany)		05, Kislaya Pancholi, N.K.Jain, Smita Dubey, Pramila Sadhav, Preeti Chaturvedi		22/01-14/02/20	
Short term Online Course: Research Methodology in Social Sciences: HSGour Univ. Sagar		01 Laxmi Tantuway		16-22/09/19	
Short Term Tr.: Health Nutrition: H.Sc. (Biochem & Career Guidance Cell)		02, Deepti Khare, Anuja Sharma		16/09-12/10/19	
Short term Course: Big data & Machine Learning: DAVV Indore		02 Naresh Patel, Chitranjan Sharma		14-19/10/19	
SWAYAM online course: Modern Algebra: Madurai Kamraj Univ.		01 Naresh Patel		July to Oct.19	

SWAYAM online course: Differential Calculus: Univ. Of Kaikat	01 Naresh Patel	July to Oct.19	
Covid-19 crisis awareness: Ayurveda Immunity Boosting Plants: Old GDC, Indore	05,Kislaya Pancholi, Kamla Shivani, Smita Dubey, Priti Chaturvedi, Pramila Sadhav 01(Microbio)	18-24/05/20	
Covid-19 crisis awareness: Immunity Boost by Plants and Yoga: GDC, Ujjain	04, Pushpa Makwane, Meenal Shrivastava, Reeta Agrwal, Pramila Kori,	08-14/06/20	
Smmer Tr. :Harbal Drugs: SAGE Univ.	01, Kamla Shivani	01-06/06/20	
Nature’s Altruism and our contribution: SNPG College, Khanwa	04, Pushpa Makwane, Meenal Shrivastava, Reeta Agrawal, Pramila Kori,	28/05-03/06/20	
Cmbridge Assesment English: Cambridge Univ.	05, Suwarna Tanwani, Prerna Ojha, T. Abbasi, K. Mulchandani, Rajni Mishra,	03-06/09/19	
DST Sponsored Winter School: Geospatial Technologies: MS Univ. Udaypur	01 S. Choure	09-10/12/19	
DST Sponsored Sumer School: Geospatial Technologies in water Resource Management: Birla Inst. of Sc. Research, Jaipur	01 S. Choure	11-12/11/19	
DST Sponsored Winter School: Geospatial Technologies: MNIT Bhopal	01 S. Choure	29-30/01/20	
STeaching Learning & Evaluation (NACC Crit.2)	01Micro)	19- 20/06/20	
FDP: Tr. on C & C++: Comp. Sc. (HSC Indore)	23 (Computer Science)	10 – 23/12/19, 15-19/06/ 20, 10-14/06/20, 15-20/06/20, 17-21/06/20, 19-24/06/20, 20-21/06/20, 22-28/06/20, 27/06- 04/07/20	
Workshop: Academic Development: RCPV Naronha Academy, Bhopal	03, Bijendra Rai, V.R. Choure, M.K. Diwedi	16/08/19	
Total	85		
6.3.4 Faculty and Staff recruitment (no. for permanent recruitment):			
Teaching		Non-teaching	
Permanent	Fulltime	Permanent	Fulltime
NA	NA	NA	NA
6.3.5 Welfare schemes for			
Teaching	Health services: The college has PHC in its premises. Health camps are organized for teaching staff. The college organizes awareness Programmes on AIDS, drugs etc. Various awareness programmes were organized during the session. Medical Reimbursements: As per the guidelines of state Govt. medical		

	<p>reimbursements are given to teachers. Group Insurance Scheme is available for all teachers. Reservation scheme in admission of wards in the college of teachers is available.</p> <p>Leaves: As per the rules laid down by the state government various types of leaves like - casual leave, optional leave, earned leave, medical leave are available for all teachers.</p> <p>TWF: 4% Teachers welfare fund is collected and made available by the college as per the necessity of teachers.</p> <p>Academic Facilities: Computer facility with internet is available in library and for all teachers and employees.</p> <p>Staff Quarters: The college provides Three residential houses for teaching faculties in the college campus.</p>
Non-teaching	<p>Health services: The college has PHC in its premises. Health camps organized for teaching staff. The college organize awareness Programmes AIDS, drugs etc. Various awareness programmes are organized during the session.</p> <p>Medical Reimbursements: As per the guidelines of state Govt. medical reimbursements are given to employees. Group Insurance Scheme available to all employees. Reservation scheme in admission of wards of employees those who are working in higher education department is available.</p> <p>Leaves: As per the rules laid down by state government various type of leave facilities like casual leaves, optional leaves, earn leaves, medical leaves are available to all employees.</p> <p>Academic Facilities: Computer facility with internet is available in library and for all employees.</p> <p>Staff Quarters: The college provides Twelve residential quarters available for non teaching staff in the college campus</p>
Students	<p>Health services: The college has PHC in its premises. Students can seek health facility and counselling free of cost. Health camp, AIDS and other disease awareness programmes, awareness from drugs programmes etc are organized for the students in the college time to time. Various awareness programmes are organized during the session.</p> <p>Teaching and Learning supports: Department of higher education provides smart phones to students while the college provides free Wi-Fi facility to the students so that they are able to incorporate the use of technology while learning. Swami Vivekanand Career Guidance cell, Personality development cell in the college provide counselling regarding the career option. Placement cell invites various companies for campus placement. Remedial classes for slow learners, career counselling, spoken English classes, communication skill programmes are organized from time to time for students. Under book bank scheme of higher education department reading materials (text books) and stationary is provided free of cost to SC/ST students. College provides the counselling facility to students free of cost for their personal and academic problems.</p> <p>Free ship and Scholarship: The college provides half free ship for poor students/ students who have lost their earning parents. The college assists the students in getting bus and railway travel concession passes. Student of the year award is given from each stream to encourage students who excel in academics as well as extra/ co curricular activities. For differently abled students college makes every possible effort to make the campus disabled friendly for persons with disability and ensures that every required infrastructural facility is provided. The college assists the students to life Insurance policy at nominal premium. Kits, uniforms and</p>

	refreshment are provided to NCC, NSS volunteers. Various scholarships: SC, ST, OBC, Gaonkibeti, Pratibha Kiran, Vikrmaditya, Inspired and Minority scholarships etc are available for students. Hostel facility: College has a 100 setter boy's hostel in the campus.			
6.4 Financial Management and Resource Mobilization				
6.4.1 Institution conducts internal and external financial audits regularly (with in 100 words each)				
College conducts internal financial audit. For this various committees are made for smooth functioning of financial activities. Moreover for the internal financial audit the college hire the service of CA, they do the complete financial audit every year. This is a state government college so that the external audit is done by the state government auditors and also by AG MP.				
6.4.2 Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)				
Name of the non-government funding agencies/ individuals		Funds/ Grants received in Rs.		Purpose
Nil		Nil		Nil
6.4.2 Total corpus fund generated :				
1121816				
6.5 Internal Quality Assurance System				
6.5.1 Whether Academic and Administrative Audit (AAA) has been done?				
Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Dept. of Higher Education (World Bank Project)	Yes	College
Administrative	Yes		Yes	
6.5.2 Activities and support from the Parent – Teacher Association (at least three)				
The College does not have a formal Parent Teacher Association. However, the college ensures a healthy interaction with the parents. Parents-Teachers Meetings (PTM) are organized by various departments at departmental level in the beginning of each semester. In these meetings in addition to the resolution of individual problems of the students, issues like improvement in the institution, educational system, students benefit policies etc. are discussed. Parents are also apprised of their ward's progress in the institution. Parents give suggestions and feedbacks in these meetings. The college takes due action on the valuable suggestions provided by the parents.				
6.5.3 Development programmes for support staff (at least three)				
The college encourages and support the staff to attend workshops and training programs conducted by competent authority outside the College like workshop on lab skill training for the laboratory staff of Chemical and Life Sciences, Accounting and office working training to office staff etc.				
6.5.4 Post Accreditation initiative(s) (mention at least three)				
Water Harvesting System: For ground water recharging water harvesting system is installed on the roof of all the buildings of the college.				
Solar Power Panels: For the production of green energy and energy conservation solar power plant setup on the rooftop of the College buildings is being proposed.				
MOU's and Collaboration: Try to sign MOU with various institutes of national and international repute.				
6.5.5				
a. Submission of Data for AISHE portal : (Yes /No) Yes				
b. Participation in NIRF : (Yes /No) Yes				
c. ISO Certification : (Yes /No) No				
d. NBA or any other quality audit : (Yes /No) No				

6.5.6 Number of Quality Initiatives undertaken during the year				
Year	Name of quality initiative by IQAC	Date of conducting activity	Duration (from-----to-----)	Number of participants
2019	Hardware/ Networking workshop:	Dept. of Comp. Sc. & Astha Mishra, Amit Pandit	15-16/11/19	250
2019	Computer Hardware, Equipment Repairing & Fabrication Tanning Workshop	Dept. of Electronics	18/11/19	36
2020	Certificate Course on Basic Programming with Python:	Dept. of Electronics	24/01/2020	36
2020	Certificate course on Embedded System Design using Arduino:	Dept. of Electronics	24/01/2020	20
2019	Personality Development & Communication Skill for M.Sc. Student:	Dept. of Chemistry & Carrier Guidance Cell	23/09-13/10/19	88
2019	Psychological counselling center is started for UG and PG Students :	Dept. of Chemistry & Carrier Guidance Cell	23/09-13/10/19	80
2020	Internship Programme on “Instrumentation Techniques”:	Dept. of Chemistry & Pharma. Chem	06-18/01/20	48
2020	Short term Tr. On “Advanced Agro Techniques for Entrepreneurship Development”	Dept. of Botany	22/01-14/02/20	25
2019	Hands on Training Programme on Mushroom Cultivation for self employment	Dept. of Horticulture & Seed Technology	10 -11/10/19	30
2020	National Workshop on Intellectual Property Rights	Dept. of Physics & Electronics	12-13/03/20	55
2019	National Symposium on Mathematics (Ramanujan Day)	Dept. of Mathematics	24/12/19	65
2019	International Conference on “Recent Advances in Life Science for Betterment of Human Health” (ICRALBEH-19)	Dept. of Zoology	14-15/12/19	150
2020	Bio Diversity	Dept. of Zoology & Fisheries	02/03/20	25
2019	One week workshop on “Qualitative & Quantitative Analysis	Dept. of Pharma Chem. & PG Tech. Research Inst. Indore	10-15/10/19	45
2020	Application of Advanced Scientific Instrumentation with entrepreneurship guidance	Dept. of Pharma Chem. & PG Tech. Research Inst. Indore	08-15/06/20	150
2019	One week Workshop on “Research Methodology”	Dept. of Comp. Science	16-20/12/19	55
2019	Bhuvisanwad (Academic Interaction Programme)	Dept. of Geology and Geological Survey of India	15-16/11/19	35

2019	Short term employment oriented tr. On “Health and Nutrition”	Dept. of Biochem. & Career Guidance Cell	16/09-12/10/19	40
2020	National Webinar on “ Teaching- Learning and Evaluation”	IQAC HSC, Indore	19-20/06/20	160
2020	Online Certificate course on “Molecular & Computational Biology”	Dept. of Bio. Tech. & Bio. Info.	15-28/10/20	250
Various Webinars organized during the session (Covid-19 Pandemic Time)				

CRITERIONVII –INSTITUTIONAL VALUES AND BEST PRACTICES						
7.1 - Institutional Values and Social Responsibilities						
7.1.1 Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)						
Title of the programme			Period (from-to)		Participants	
					Female	Male
Vigilance Awareness Week (Red Cross Soc. & Biochem.)			29/10-03/11/19		20	15
Women Empowerment Session JUDO/Karate Organized (NSS)			07/09/19		55	10
Women’s day, Judo-Karate etc (Red Cross & NSS)			--		50	05
Judo Karate training camp for girls in self defence (Sports)			--		150	05
7.1.2 Environmental Consciousness and Sustainability/Alternate Energy initiatives such as: Percentage of power requirement of the College met by the renewable energy sources						
A number of measures have been initiated to make the Campus eco-friendly. College has made green policy to conserve the electricity, large size windows in the classrooms and laboratories have been made for good ventilation. Labs are mostly installed with CFL bulbs. In future for production of green energy and energy conservation solar power plant will be setup on the rooftop of the College building, with the expectations that more than two third of power requirements of the college will be met by solar power plant. To maintain a clean environment, the college maintains a vehicle free campus. Garden Committee of the College is instrumental in bringing about major environmental consciousness among students in the college and preserving a green campus.						
7.1.3 Differently abled (Divyangjan) friendliness						
Items Facilities			Yes/No		No. of Beneficiaries	
Physical facilities			Yes		02	
Provision for lift			No		Nil	
Ramp/ Rails			Yes		01	
Braille Software/facilities			No		Nil	
Rest Rooms			Yes		Nil	
Scribes for examination			Yes		Nil	
Special skill development for differently abled students			Nil		Nil	
Any other similar facility			Nil		Nil	
7.1.4 Inclusion and Situatedness						
Enlist most important initiatives taken to address locational advantages and disadvantages during the year						
Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date and duration of the initiative	Name of the initiative	Issues addressed	Number of participating students and staff

2019-20	--	05	14/11/2019	Astha old age Home visit (Pharma. Chem.)	Social activities. Awareness About Hygiene, Nutrition & Health.	35+5
			08/08/19	Visit to Musakhedi Slum area (Red Cross Soc. & Biochem.)		30+5
			14/01/20	Visit to Jyoti Niwas old age home (Botany)		20+2
			12/10/19	Visit to village "Jamlia" (Zoology)		20+2
			02/11/19	Visit to Jeevan Shala Visharjan Ashram (Slum area):(Biotech & Bio Info.)		15+2
2019-20	--	04	01/08/19	Plantation (Biotech & Bio Info.)	Plantation programmes for green and eco-friendly campus & awareness about environment	50+5
			11/08/19	Plantation: Hariyali Mhotsav (NSS)		65+10
			30/08/19	Plantation Activities: Botanical Garden (Botany)		25+10
			22/09/19	Tagging of Plant: College campus (Botany)		15+5
2019-20	--	02	30/12/19	Blood Donation Camp (NSS, Red Cross Soc. & Biochem.)	To create awareness in the society about blood donation	20+5
			01/12/19	Blood donation camp MY Hospital (NSS)		40+3
2019-20	--	01	26/01/20	Polythene Free Campus Prog.(Red Cross)	Clean & Eco-friendly campus	25+5
2019-20	--	02	07/02/20	Lecture on scientific basis of cancer awareness and training on CPR (Red Cross & Biochem.)	Awareness about Cancer	25+5
			04/02/20	Poster competition on cancer Awareness (Red Cross Soc. & Biochem)		15+5
2019-20	--	02	07/03/20	Health Check-up camp on women day (Red Cross & Women Empowerment cell)	Health Issues: Care & Awareness about Health	50+5
			17/11/19	Eye Check-up camp (NSS & Red Ribbon Club)		55+5

2019-20	--	05	17/01/20	Poster competition on AIDS Awareness (Red Cross & Biochem.)	Awareness programmes about AIDS	15+5
			20/11/19	Street play on AIDS awareness (NSS & Red Ribbon Club)		30+5
			29/11/19	AIDS awareness rally (NSS & Red Ribbon Club)		25+5
			28-30/12/19	Poster Making competition: "AIDS Awareness" (NSS & Red Ribbon Club)		50+5
			--	National AIDS Control Program (National AIDS Control Organization & Bot.)		50+1
2019-20	--	01	29/10-03/11/19	Vigilance Awareness Week (Red Cross & Biochem.)	Vigilance Awareness	30+5
2019-20	--	01	24/08/19	Rally against "Food Adulteration" (NSS)	Awareness about Adulteration	65+25
2019-20	--	02	26/02/20	Lecture on Road Safety (NSS)	Traffic awareness programmes	55+4
			15/07/19	Traffic Control Programme (IBNNCC)		25+2
2019 -20	01	--	Continuous process	Scenic Beauty	Maintenance of natural geography	Faculties/ students
2019 -20	01	--	Continuous process	Pollution free environment	Maintenance Green area and once a week the staff member and student use bicycle to come the college	Faculties/ students
2019 -20	01	--	Continuous process	Facilitate to students for city bus concessional pass	College situated in the city and is properly connected with BRTS roads	students/faculties /employees
2019 -20	01	--	Continuous process	Facilities of hostels	Various private hostels and governments post metric hostels are at the walking	students

					distance from the College	
2019 -20	01	--	Continuous process	Academic environment	University campus is at the walking distance from the college, students can avail the facility of university central library	students /faculties
2019 -20	01	--	Continuous process	Environment of competitive exams	Many private coaching inst. for competitive examinations like: civil services, banking services, CET etc. Are at the walking distance from the college	students
2019 -20	01	--	Continuous process	PHE available in campus	Stake holders seek consultancy about their health regularly	students /faculties /employees

7.1.5 Human Values and Professional Ethics

Code of conduct (handbooks) for various stakeholders

Title	Date of Publication	Follow up (maximum 100 words each)
Code of conduct	18/07/2018	The college functions under the Dept. of Higher Education, Govt. of M.P.. The code of conduct for various stake holders is regulated by the state government. The state government follows all the rules and regulations given by UGC. The appointment of teachers and other staff is based on the rules laid down by UGC. The college adopts all the measures published in the Gazette of India to maintain the standards in Higher Education. Besides this the college has developed five policies: Green Policy, Research Policy, IT Policy, Women empowerment policy, Values & professional policy.

7.1.6 Activities conducted for promotion of universal Values and Ethics		
Activity	Duration (from---to--)	Number of participants
Old Age home/Slum area Visit : Social Activities		
Astha old age Home visit (Pharma. Chem.)	14/11/2019	40
Visit to Musakhedi Slum area (Red Cross Soc. & Biochem.)	08/08/19	35
Visit to Jyoti Niwas old age home (Botany)	14/01/20	22
Visit to village "Jamlia" (Zoology)	12/10/19	22
Visit to Jeevan Shala Visharjan Ashram (Slum area):(Biotech & Bio Info.)	02/11/19	17
Plantation: Eco Friendly Environment		
Plantation (Biotech & Bio Info.)	01/08/19	55
Plantation: Hariyali Mhotsav (NSS)	11/08/19	75
Plantation Activities: Botanical Garden (Botany)	30/08/19	35
Biochemistry: Plantation	31/01/19	30
Tagging of Plant: College campus (Botany)	22/09/19	20
Blood Donation/Health awareness Programmes		
Blood Donation Camp (NSS, Red Cross Soc. & Biochem.)	30/12/19	25
Blood donation camp MY Hospital (NSS)	01/12/19	43
Lecture on scientific basis of cancer awareness and training on CPR (Red Cross & Biochem.)	07/02/20	30
Poster competition on cancer Awareness (Red Cross Soc. & Biochem)	04/02/20	20
Health Check-up camp on women day (Red Cross & Women Empowerment cell)	07/03/20	55
Eye Check-up camp (NSS & Red Ribbon Club)	17/11/19	60
Poster competition on AIDS Awareness (Red Cross & Biochem.)	17/01/20	20
Street play on AIDS awareness (NSS & Red Ribbon Club)	20/11/19	35
AIDS awareness rally (NSS & Red Ribbon Club)	29/11/19	30
Poster Making competition: "AIDS Awareness"(NSS & Red Ribbon Club)	28-30/12/19	55
National AIDS Control Program (National AIDS Control Organization & Bot.)	--	51
Other Activities		
Vigilance Awareness Week (Red Cross & Biochem.)	29/10-03/11/19	35
Rally against "Food Adulteration" (NSS)	24/08/19	90
Lecture on Road Safety (NSS)	26/02/20	59
Traffic Control Programme (IBNNCC)	15/07/19	27
Microbiology: Khan river water analysis	Sept. Nov. 19	45
Horticulture & Seed Tech: EkVidhyarthi Ek Phodha Ropan Abhiyan, Kisan Divas,	01-20/08/19	64
Visit To Tirupati Nursary Barwah (M.P.),	23/12/19	45
Chemistry: Visit at Blind School, Indore	12/12/19	55
	One day	25
7.1.7 Initiatives taken by the institution to make the campus eco-friendly (at least five)		
To reduce pollution and create eco-friendly campus College is working in various ways.		
Energy conservation: Large size windows in the classrooms for good ventilation, labs are mostly		

installed with CFL bulbs to minimize the expense of electricity. A solar panel plant is also proposed.

Water harvesting: Water recharging pits have been constructed at many places in the campus. The college has installed rainwater harvesting water recharge techniques on the roofs of college buildings.

Efforts for Carbon Neutrality: There is no major carbon release, AC facilities are available at the Principal's office, Yashwant Hall, Conference hall and the Examination Department.

Plantation: To make the campus green and eco friendly plantation is done throughout the campus. NSS volunteers and gardeners take care of the plants regularly. With this objective, the college has several well maintained gardens with plants of medicinal values.

Free vehicle campus: College has a free vehicle campus. A separate parking area behind the college near the sports ground is maintained by the college. The college staff and students come to the college by bicycle once in a week.

Disposal of Microbial culture: Microbial culture is always autoclaved after use for disposal. The college discourages the use of plastic material.

Reuse of papers: Reuse of one sided printed paper and remaining practical file pages is the regular practice of the College.

Microbiological Analysis: Microbiological analysis of drinking water from various sources on campus is done through department of Microbiology.

Others: We aware to students and staff to reduce the use of plastic material. Online practices are promoted to reduce paper work to save greenery. Use separate dustbins for degradable and non-degradable matters. ECO club of College organized various programmes for environment awareness and protection.

7.2 Best Practices

Describe at least two institutional best practices. Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

(Annexure VII)

The college has been constantly following a number of best practices like: **“Butterfly Park”**, **“English Language Laboratory”**, **“Cleanliness Drive in the Campus”**, **“E-News letter& E-Magazine”**, **“Microbial Analysis of Water”** etc. Apart from these ongoing practices the college has taken up a number of other best practices like: **Old age home visit, Reuse of papers, Medicinal Park and National Awards in Chemistry etc.**

Title of the Practice: **“Microbial analysis of Water samples from different locations on GHSC campus”**

Aim and Objectives :

A.Aim: To provide facility of safe and healthy drinking water in college campus.

B. Objectives: The main objective behind this project is to provide facility of safe and healthy drinking water. This study will help in following ways:

- Identifying existing problems
- Ensuring whether water is suitable for the intended use, especially if used for drinking purpose
- Tracking changes over time
- Determining the effectiveness of a treatment system

The quality of a water source may change over time, even suddenly. Changes can go unnoticed as the water may look, smell, and taste the same.

The Context: The college has drafted its research policy to ensure a safe and healthy environment for everyone who visits the campus for various reasons. One of the best practices initiated for the betterment of facilities provided by the college is to check the water quality on campus to provide safe drinking water on campus for all. The Department of Microbiology has undertaken the project for water analysis. Dr Sanjay Vyas, Head and faculty members Dr. Deepti Khare, Prof. Anuja Sharma, Dr. Radhika Waghmare along with research scholar Neha Sharma, M.Sc. final students and staff will be working on this project. Standard Drinking Water Checks will be performed quarterly every year

from various departments and drinking points on campus regardless of the water source. Water used by public municipalities and private homeowners must be tested regularly in order to keep the source of water safe and free from environmental risks and potential health disorders. When the water is tested it offers the knowledge; required to address the problem that is currently involved with the water quality. It will also ensure that the water quality is protected from every potential cause of contamination and an appropriate approach is involved with the treatment system.

The Practice : Water testing is carried out to meet the regulatory requirements and adhere to the safety procedures that are needed for pollutant-free water.

1. Sampling of different water sources- tube well and R.O drinking water units on campus
2. Coliform bacteria- Indicate the presence of microorganisms in the water that are potentially harmful to human health.
3. Total dissolved solids- Represent the amount of inorganic substances (i.e. sodium, chloride, sulphate) that are dissolved in the water. High total dissolved solids (TDS) can reduce the palatability of water.

Evidence of Success: A total of 15 drinking water samples collected from various water sources on campus were analyzed every three months since the year 2016- till date in the Department of Microbiology. It was observed that out of 15 samples, 07 samples shown contamination by Coliforms in the session 2016-17. Out of 15 Samples 05 samples and 03 samples shown contamination by Coliforms in the sessions 2017-18 & 2018-19 respectively. In session 2019-20, out of 15 samples 02 samples shown contamination by Coliforms:

S.N.	YEAR	TOTAL NO. OF SAMPLES	CONTAMINATED SAMPLE NO.	TOTAL CONTAMINATED SAMPLES
1	2016-2017	15	03,04,05,06,07,08,10	07
2	2017-2018	15	03,04,05,07,10	05
3	2018-2019	15	03,04,05	03
4	2019-2020	15	03,04	02

Problems Encountered and Resources Required: The M.Sc. Students collected the samples from different water sources on campus and performed MPN for detecting the coliform using resources available in the department lab.

Title of the practice : **Working of the Examination Department**

OBJECTIVE: The aim of the Exam Department is to conduct the exams on time and declare the result at the earliest for the benefit of the students. The whole process is fair, impartial and transparent. The exam department aims at making the system smooth and hassle free for all. The department works with the objective of maintaining confidentiality, honesty and integrity of the entire procedure and to live up to the reputation of the institution To make innovations and thereby improve and upgrade the system according to the need of the hour.

Context: Holkar Science College is one of the oldest and the most prestigious institute in central India. It abides by the rules & regulations laid down by the Department of Higher Education Govt. of M.P. The number of students in the college is nearly 5000 and there are a variety of combinations at UG and PG levels. The exam department has to coordinate with all the departments regarding CCES, practical, seminars, internship etc. The department has to be watchful about on time conduction of exams, evaluation of the copies, declaration of the result etc.

Practice: There are five programs running successfully in the college namely B.Sc. BCA, M.Sc. M.Phil., Ph.D. The Exam Department functions round the year to maintain the annual time table declared by the Dept. of Higher Education. Some of the practices carried out by the department are:-

1. Central valuation of UG A/B's with the MOI by the setter.
2. Valuation of PG A/B's by the paper setter
3. Spot moderation (On the day of Examination)
4. MOI prepared by the paper setter

5. Showing valued A/B's to the students in front of parent's Subject expert and HOD of the subject concerned
6. Revaluation of A/B's
7. Displaying the answer books of the Toppers
8. Coding of A/B's
9. Microscrutiny of A/B 's by subject expert
10. Computerized Tabulation
11. In house printing of non confidential material
12. Hologram sticking on Marksheet
13. Merit Certificate to Toppers
14. Revaluation in main & ATKT Exam
15. M. Phil admission through Entrance Test followed by interview
16. UG, PG admission through online system
17. Exam fees deposition Online
18. Special exam for those student who have represented in National/ state level activities of NCC/NSS etc.
19. Preparation of transcripts for students going abroad for further studies.
20. Exam form can be downloaded from the college website
21. Student's profile on college website with two layered security is available. A student can view his/her result, download exam forms, revaluation form, copy showing form etc.
22. From 2017 the profile of all departments are available on the website. It includes the details of the faculty members, syllabus of the programmes and all the courses/ papers, details of workshops, seminars, conferences etc.

From 2019:

- Passport size photo of the student on the mark sheet.
- Part of Aadhar number printed on mark sheet.
- QR code printed on mark sheet.
- Conduction of on line examination due to Covid-19 pandemic.

7.3 Institutional Distinctiveness

Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust. Provide the web link of the institution in not more than 500 words. (Annexure VIII)

“Research Studies on Unknown Foul Odour of Indore City-2019”

Aim and Objectives :

Aim: To investigate the foul odour reported in Indore city and to find its probable reasons.

Objectives:

- i. To perform survey of affected localities to know the details of foul odour.
- ii. To get Questionnaires filled from local residents to get their views on foul odour.
- iii. To visit the affected regions of the city.
- iv. To perform Sampling of soil from affected regions and its analysis.
- v. To perform Sampling of water from Khan river from affected region and its analysis.
- vi. To perform Microbiological analysis of air of affected region.
- vii. To observe of wind flow directions during hours of foul odour.
- viii. To interpret the data for probable reasons of foul odour.

The Context: Indore city has been awarded with the title of “the cleanest city of India” for the last three successive years. City is well known for its cleanness and waste management. The Indore Municipal Corporation (IMC) has worked hard for the maintenance of cleanness and their efforts have led to the way for the cleanest city in the country for three consequent years. During the late months of 2019 the residents of Indore reported a foul smell in some areas of the city specially in evening hours. They claimed that the smell was very intense and unbearable.

Department of Microbiology, Govt. Holkar Science college, Indore had taken initiative to deal with

this problem as their social responsibility. The Head of the department Dr. Sanjay Vyas along with four professors of the department Dr. Shweta Hardia, Dr. Anita Mukati, Dr. Deepti Khare & Asst. Prof. Anuja Sharma and about 16 students of the department have worked and produced the report.

The Practice: *Studies had been performed at different levels. At first local survey was done around 20 different sites from where foul smell was reported. This survey was done with the help of questionnaire and the result of the survey showed that local residents of certain areas are continuously facing this problem since last 1.5 months. As per residents, the smell was similar to decomposition or fermentation. The smell usually came in the evening hours around 6-10 pm. Residents also complained health problems like headache, vomiting and eye disorders due to the smell. Residents residing in Devguradia and near by places suspected that the smell might be coming from trenching ground.*

Team had done studies on airflow, which showed change in air direction responsible for foul smell in different areas. Studies were done with the help of “wind finder application” and had shown that when the wind direction was toward south-east, the eastern regions of the city were affected while when the direction was towards south-west, the western regions where affected. It was observed that no foul smell was felt when the wind direction was south-north. This indicate that cause of the foul smell may be in southern parts of the city.

In the second level of studies, sampling was done from 06 different of suspected locations. Water and soil samples were collected from Kahn river which was suspected as a possible waste disposing area resulting in foul smell.

Evidence of Success: *Different tests were performed with water such as temperature, pH, Alkalinity, BOD, TDS, Chloride, Hydrogen Sulphide and ammonia content. It was analysed that all the samples had not shown any unusual results regarding above parameters. The samples taken from bore well of trenching ground showed very high content of ammonia and fluoride. Microbial analysis suggested normal contamination of sewage water like faecal coliforms and faecal Streptococci. Soil was analysed for physical parameters and microbial contamination and results does not showed any suspects regarding cause of foul smell.*

Microbial examination of air flora was done which showed presence of normal contaminants like Bacillus, Streptococci, Aspergillus, Penicillium, Alternaria, Rhizopus, Candida, Micrococcus etc. these studies showed that none of the microbial species was related with the possible reasons for foul smell.

The report helps in concluding that soil and water were not the possible cause for foul odour in affected areas.

Problems Encountered and Resources Required: *The team had to travel to different locations to collect survey data from the local population. The sampling kits for soil and water analysis were required to collect samples from most affected areas.*

8. Future Plans of action for next academic year (500 words)

The College and the IQAC has formed a plan to improve the academic and administrative performance of the institution to provide quality education and to develop a learner – centric environment. It is proposed that

- *More classrooms and laboratories are required.*
- *More classrooms should be converted into smart classrooms.*
- *To introduce CBCS system at UG level. As we have adopted CBCS system at PG level.*
- *To modernize labs with recent apparatus and establish separate labs for UG and PG for research in each department.*
- *To construct a fish farm in the Fisheries Department.*
- *To establish a Bio. Tech. Park in college campus.*
- *To establish waste management and manure unit.*
- *To establish solar panel plant for green energy.*
- *To establish separate computer labs and seminar halls in each department.*
- *To establish server client architecture in computer lab and an internet gallery in the college.*
- *New skill oriented and academic programmes should be started that would generate employment for the students.*
- *To organize Remedial classes and classes for competitive examinations.*
- *To establish collaborations and MOU's from institutes of national and international repute and industries.*
- *To start industrial training for the students. To start online courses and to provide E-content to students.*
- *A well equipped modern research wing should be developed in each department for the research scholars and faculty members actively involved in research pursuits.*
- *To construct an auditorium and expand the cultural centre of the college to promote rich cultural heritage of our country.*
- *To expand the library with cubical and reading rooms.*
- *To construct a separate unit for central valuation.*
- *New canteen and gym should be established.*
- *To construct separate well equipped departments with separate cubicles along with computer and internet facility for the faculties. Separate class rooms for PG classes. Bigger labs and independent departmental libraries.*

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