DEPERTMENT OF VETERINARY MICROBIOLOGY COLLEGE OF VETERINARY SCIENMCE AND ANIMAL HUSBANDRY ACHARY NARENDRA DEVA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY KUMARGANJ, AYODHYA (Uttar Pradesh)



With establishment of College of Veterinary Science and Animal Husbandry under A.N.D. University of Agriculture and Technology, Kumarganj, Ayodhya (U.P.) in year 1999 and subsequently, admission of the first batch of B.V.Sc& A.H. students in year 2000, Department of Veterinary Microbiology came into existence in year 2000. Since then, department is offering B.V.Sc. & A.H. courses as per the Indian Veterinary Council Act – 1984, regulations as per Veterinary Council of India amended time to time. The post Graduate programme leading to award of M.V.Sc. degree in Veterinary Microbiology and Ph. D. degree in Veterinary Immunology was started in year 2004 and 2010 respectively. Presently the M.V.Sc.(Veterinary Microbiology) and Ph.D (Veterinary Microbiology) degree programs are offered as per the recommendations of ICAR i.e. BSMA 2019.

1. Faculty members:-

A. Teaching staff:-

Name	Designation	Mobile No.	email Address
Dr. R.K.Joshi	Professor and Head	9451663077	rkjvet26@gmail.com
Dr.Vibha Yadav	Assistant Professor	9450423644	vibhavet2005@gmail.com
Dr.R.P. Diwakar	Assistant Professor	9452488447	raj.diwakar74@gmail.com

B. Non Teaching staff:

Steno	01	Vacant
Lab Assistant	01	Shri Ayodhya Prasad Tiwari
Lab Technician	01	Vacant
Clerk	01	Shri Swami Nath Pal
Typist Clerk/Store keeper	01	Vacant
Animal Attendant	01	Shri Mata Badal
Sweeper	01	Ram Tirath

2. Courses Offered:-

A. Under Graduate (B.V.Sc. & A.H.) courses: As per VCI, MSVE-2019

Veterinary Microbiology paper I	
Veterinary Microbiology paper II	

B. Post Graduate (M.V.Sc.) courses:

Course Code	Title of the Course	Credit hr.
VMC501	General Bacteriology	2+1=3
VMC502	Systemic Veterinary Bacteriology	0+2=2
VMC503	General Virology	2+1=3
VMC504	Systemic Veterinary Virology	2+1=3
VMC505	Principle of Veterinary Immunology	0+2=2
VMC506	Veterinary Mycology	2+1=3
VMC507	Vaccinology	2+0=2
VMC508	Techniques in Microbiology	2+0=2
VMC509	Techniques in Molecular Microbiology	2+1=3
VMC510	Molecular Immunology	2+1=3
VMC511	Mucosal Immunology	2+1=3
VMC512	Introduction to Microbial Bio-Informatics	0+2=2
VMC591	Master's Seminar	0+2=2
VMC599	Master's Research	2+1=3

Undergraduate students in practical class









Post graduate students in practical class









3. Facilities:-

- Bacteriology and Mycology Lab. Well equipped Bacteriology
 laboratory with facilities of isolation and characterization of bacteria.
- 2. Virology Lab- Well equipped with egg inoculation booth and cell culture facilities.
- <u>3.</u> **Veterinary Immunology Lab. -** Well equipped Immunology laboratory with diagnostic facilities.
- <u>4.</u> **Molecular Biology Ilabaoratory:** Well equipped molecular biology Laboratory with facilities of PCR and genomic characterization.
- 5. Sterilization room
- 6. Cleaning washing and Media preparation room
- 7. Clinical Diagnosis laboratory: Well equipped Clinical diagnosis laboratory to provide help in laboratory diagnosis of animal infectious diseases.

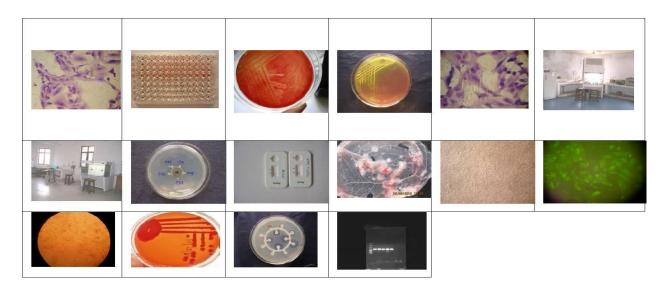
4. Salient Achievements:-

Teaching:-

- ➤ The department has developed practical manuals for undergraduate and Post graduate courses for giving first hand information to the students.
- > Teaching materials in the form of Power point projections are developed for providing better reading materials to the students.

Research:-

- At least 200 *E.coli* serotypes are isolated and characterized from cases of calf diarrhea, poultry faces and meat and are maintained in the department.
- ➤ Infectious bursal disease virus was isolated and characterized from poultry farms in the region.
- Fowl pox virus was isolated and characterized from poultry farms in the region.
- New castle disease virus of poultry was characterized.
- Canine Parvo Virus was isolated and characterized from dogs in the region.
- Isolation and characterization of Staphylococcus aureus from cases of Bovine Mastitis.
- ➤ Isolation and characterization of Methicillin Resistant Staphylococcus aureus from cattle



Extension:-

Department is actively engaged in the extension activities in coordination with Department of Veterinary Extension and Directorate of Extension of the University.

1. Important Achievements:

- Molecular Veterinary Bacteriology Laboratory has been established in the department through NAHEP scheme in 2020.
- Dr. R. P. Diwakar was awarded Best Paper Presentation Award on world Rabies Day by Blue Cross – Society organized in College of Veterinary and Animal Sciences, Pantnagar, 2020.
- Dr. Vibha Yadav awarded with outstanding Microbiologist Award in recognition of novelty, valuable contributions and achievements by Green Agri Professional Society, Dhanbad Jharkhand in 2020.

Current Projects:

a. **Project in hand :** FMD collaborating center (ICAR-National Institute on Foot & Mouth Disease (NIFMD)

PI- Dr. R. K. Joshi (PI)

Co PI- Dr. Namita Joshi

Co-PI- Dr. Vibha Yadav

b. Project sanctioned "Strengthening of Microbiology Laboratory with Advance Diagnostic Facilities for the Detection of Infectious Diseases in particular reference to Eastern Uttar Pradesh (RKVY)

2. Important publications

Type of Publicat ion	Author	Year	Title	Journal name	Vol.(No.) : pp	NAAS rating/Indexe d/ISSN no./Impact Factor
Research papers	Joshi, R.K. , Chandra,R., Rao,V.D.P. and Garg,S.K.	1989	Coagglutination test: A simple and rapid diagnostic technique for goat pox.	Tropical Animal Health and Production,	21 : 233-235.	(NAAS- 7.4)
	Joshi, R.K., Chandra, R., Rao, V.D.P. and Garg, S.K.	1990	Detection of goat pox antigen and antibody by counter immuno-electrophoresis.	Indian Journal of Animal Sciences	60 : 34-35.	(NAAS- 6.6)
	Joshi, R.K. and Sharma, V.D.	1991	Detection of thermolabile phospholipase-C in the cell free supernatants of Salmonellas.	Indian Journal of Comparative Microbiology, Immunology and Infectious Diseases	12 : 153-157.	(NAAS- 3.0,
	Joshi,R.K., Chandra,R., Rao,V.D.P. and Garg, S.K.	1991	Passive haemagglutination test with goat pox virus.	Indian Journal of Veterinary Medicine,	11 : 56-57.	NAAS- 4.0
	Joshi, R.K. and Dixit, V.P.	1993	Antibiogram of Salmonella isolated from processed food preparations	Indian Journal of Comparative Microbiology, Immunology and Infectious Diseases	14 : 45-46.	NAAS- 3.0
	Joshi, R.K., Chandra, R., Rao, V.D.P. and Garg, S.K.	1994)	Cytopathogenicity of goat pox virus	Indian Journal of Comparative Microbiology, Immunology and	15 : 35-36.	NAAS- 3.0

			Infectious Diseases		
Joshi, R.K., Garg, S.K., Chandra, R. and Sharma, V. D.	1995	Growth and cytopathogenicity of goat pox virus in MDBK cell line.	Indian Journal of Virology,	11 : 31-33.	NAAS- 6.7)
Joshi, R.K. and Shakya, S.	1997	Rapid diagnosis of fowl pox with coagglutination assay.	Tropical Animal Health and Production,	29 : 147-150.	(NAAS- 7.4)
Shakya, S. and Joshi, R.K.	1997	Coagglutination test for rapid detection of infectious bursal disease virus antigen.	Tropical Animal Health and Production,	29 : 105- 107.	(NAAS- 7.4)
Shakya, S., Joshi, R.K. , Gupta, N. and Chauhan, H.V.S.	1999	Organ culture of chicken bursa as a model to study the pathogenicity of infectious bursal disease virus isolates.	Avian Diseases,	43 : 164-171.	(NAAS- 7.7)
Shukla, V.K., Joshi, R.K., Joshi, N. and Kukreti, K.	2011	Canine parvovirus isolate FZB-1 capsid protein (VP2) gene, partial cds.	GeneBank accession	JF95762 3.1.	
Tyagi, S.P., Joshi, R.K. and Joshi, N.	2013	Characterization and Antimicrobial Sensitivity of Staphylococcus aureus Isolates from Subclinical Bovine Mastitis.	Journal of Animal Health and Production.	1 (2): 20– 23.	1 (2): 20–23.
Dutta A., Joshi, N., Joshi, R.K. and Kamal, A.	2014	Molecular characterization of <i>e. coli</i> isolated from raw vegetable.	Advances in Animal and Veterinary Sciences.	2(1): 42 – 45.	2(1): 42 – 45.
Diwakar, R.P., Joshi, N., Joshi, R.K. and Yadav, V.	2014	Isolation and antibiogram of enterobacteria associated with bovine calf diarrhea	Advances in Animal and Veterinary Sciences	2 (2S): 43-45.	2 (2S): 43-45.

Vibha Yadav, Joshi R.K. Joshi, N. and Diwakar, R.P.		Congo red binding and Plasmid profile of <i>E. coli</i> Isolates of poultry Origin.	Journal of Animal Health and Production	2 (3): 31 - 32.	2 (3): 31 – 32.
Verma, R.K., Joshi, R.K. Gangwar A.K., Joshi, N and Shukla, S.		Propagation of a field isolate of avian pox virus on chorioallantoic membrane of developing chicken embryo and in BGM-70 cell line.	Journal of Pure and Applied Microbiology,	9(1):169- 174.	9(1):169-174.
Verma, R.K., Joshi, R.K., Joshi, N. Gangwar. A.K. and Shukla, S.		Study on Histopathological changes induced by fowl pox virus (FPV) in chorioallantoic membrane (CAM) of developing chicken embryo and immunological characterization of the egg adapted and cell culture grown virus.	Journal of Pure and Applied Microbiology,	9(2): 134 9-1354.	9(2) : 1349- 1354.
Verma, R.K., Joshi, R.K., and Shukla, S	2015	Identification of FPV by PCR amplification of p4b gene in infected cell culture and Chorioallantoic membrane	Journal of Pure and Applied Microbiology,	9(4): Dec. 2015	9(4): Dec. 2015
Pandey, A, Joshi, N. Joshi R.K., Prajapati, R. and Singh, A		Virulence Attributes and Antibiotic Resistance Pattern of <i>E. coli</i> Isolated from Human and Animals.	Asian Journal of Animal and Veterinary Advances, 11: 67-72. DOI: 10.3923/ajava.201 6.67.72.		
Joshi, R.K., Chandra R., Rao, V.D.P. and Garg, S.K		Detection of goat pox antigen and antibody by counter immuno-electrophoresis.	Indian Journal of Animal Sciences,	60 : 34- 35. (NAAS- 6.6)	60 : 34-35. (NAAS- 6.6)
Joshi, R.K. and Sharma V.D.	1991	Detection of thermolabile phospholipase-C in the cell free supernatants of Salmonellas.	Indian Journal of Comparative Microbiology, Immunology and Infectious Diseases,	12: 153- 157. (NAAS- 3.0, 2007)	12: 153-157. (NAAS- 3.0, 2007)

Joshi,R.K., Chandra,R., Rao,V.D.P. and Garg, S.K.	1991	Passive haemagglutination test with goat pox virus.	Indian Journal of Veterinary Medicine,	11: 56- 57. (NAAS- 4.0, 2007)	11 : 56-57. (NAAS- 4.0, 2007)
Joshi, R.K. and Dixit, V.P.	1993	Antibiogram of Salmonella isolated from processed food preparations.	Indian Journal of Comparative Microbiology, Immunology and Infectious Diseases,	14 : 45-46. (NAAS-3.0, 2007)	14 : 45-46. (NAAS- 3.0, 2007)
Joshi, R.K., Chandra, R., Rao, V.D.P. and Garg, S.K.	1994	Cytopathogenicity of goat pox virus.	Indian Journal of Comparative Microbiology, Immunology and Infectious Diseases, 15:	35-36. (NAAS- 3.0, 2007)	35-36. (NAAS- 3.0, 2007)
Joshi, R.K., Garg, S.K., Chandra, R. and Sharma, V. D.	1995	Growth and cytopathogenicity of goat pox virus in MDBK cell line.	Indian Journal of Virology,	11 : 31- 33. (NAAS- 6.7)	11 : 31-33. (NAAS- 6.7)
Shakya, S. and Joshi, R.K.	1995	Preliminary characterization of a local isolate of contagious pustular dermatitis virus.	The Indian Journal of Small Ruminants,	01 : 38- 40. (NAAS- 4.3)	01 : 38-40. (NAAS- 4.3)
Sharma, V.D., Dixit, V.P. and Joshi, R.K.	1995	Occurrence of Salmonella serovars in foods of animal origin with special reference to antibiogram and enterotoxigenicity.	Journal of Food Science and Techonology,	32 :221- 223. (NAAS- 6.8)	32 :221-223. (NAAS- 6.8)

Joshi, R.K. , Garg, S.K., Chandra, R. and Sharma, V.D.	1995	Adaptation of goat pox virus in Vero cells.	1. Indian Veterinary Medical Journal,	19 : 119- 203	19 : 119-203
Joshi, R.K. , Shakya, S. and Gupta, N:	1995	Isolation of fowl pox virus from fowl pox vaccinated layer flock. Indian Journal of Comparative Microbiology, Immunology and Infectious Diseases, 16: 138-140. (NAAS- 3.0, 2007)	Indian Journal of Comparative Microbiology, Immunology and Infectious Diseases,	138- 140. (NAA S- 3.0, 2007)	138-140. (NAAS- 3.0, 2007)
Shakya, S., Joshi, R.K. and Ali, S.L	1995	Seroepidemiological survey of bovine brucellosis in a village of Madhya Pradesh.	Indian Veterinary Journal,	72 : 1327-1328. (NAAS-6.0)	72 : 1327-1328. (NAAS-6.0)
Joshi, R.K., Shakya,S. and Ali, S.L.	1996	Occurrence of contagious pustular dermatitis among goats in Madhya Pradesh.	Indian Veterinary Journal,	73 : 04- 06. (NAAS- 6.0)	73 : 04-06. (NAAS- 6.0)
Joshi, R.K. and Shakya, S.	1996	Studies on an infectious bursal disease outbreak in a commercial poultry farm in Madhya Pradesh.	Indian Veterinary Medical Journal,	20 :41-42.	20 :41-42.
Joshi, R.K. ,Garg, S.K., Chandra, R. and Sharma, S.N.	1996	Growth behaviour of sambalpur strain of goat pox virus on chorioallantoic membrane of developing chicken embryo.	Indian Journal of Virology,	12 : 109- 111.	12 : 109- 111. (NAAS- 6.7)

Jo	shi, R.K. and Shakya, S.	1997	Comparative evaluation of agar gel precipitation, Counter-immunoelectrophoresis and Coagglutination test for detection of infectious bursal disease virus antigen.	Indian Veterinary Medical Journal,	2. 21 : 1	
Jo	shi, R.K. and Garg, S.K	1997	The morphology and morphogenesis of goat pox virus isolate.	Indian Journal of Virology,	13 : 121- 123. (NAAS- 6.7)	NAAS- 6.7
	akya, S., Joshi, R.K. d Ali, S.L.	1997	Seroprevalence of egg drop syndrome-76 virus in Chattisgarh region of Madhya Pradesh.	Indian Veterinary Journal,	74 : 370- 372.	NAAS- 6.0
	shi, R.K. , Shakya, S. d Hirpurkar, S.D.	1998	Passive haemagglutination test for detection of antibodies against infectious bursal disease virus.	Indian Veterinary Journal,	75 : 192- 193.	. NAAS- 6.0
Jo	shi, R.K., Shakya, S. and Hirpurkar, S.D.	1998	A rapid slide coagglutination test for detection of Egg drop syndrome-76 virus antigen.	Indian Journal of Virology,	14 : 159- 161	NAAS- 6.7
Jo	shi, R.K. and Garg, S.K.	1998	Detection of goat pox virus antigen by reverse passive haemagglutination test.	International Journal of Animal Science,	13 : 99- 100. (NAAS- 6.6)	NAAS- 6.6
	pta, N., Joshi, R.K. and akya, S.	1998	Encephalocele in duck embryos.	Indian Veterinary Journal,	75 : 758. (NAAS-6.0)	75 : 758. (NAAS- 6.0
Ma	hajan, S.K., Shakya, S., Joshi, R.K. , Gupta, N. and Chauhan, H.V.S.	1998	Studies on etiopathology of fin rot disease in fry stage of <i>Labeo rohita</i> .	International Journal of Animal Science,	13:	13: 115- 1 1 6

Joshi, R.K. , Ali, S.L., Shakya, S. and Rao, V.N	1999	Clinico-epidemiological studies on a natural outbreak of goat pox in Madhya Pradesh.	Indian Veterinary Journal,	76 : 279- 281. (NAAS- 6.0)	NAAS- 6.0
Joshi, R.K. , Shakya, S., Gupta, N. and Rajagopal, S	2000	Salmonellosis in a commercial layer flock.	Indian Veterinary Medical Journal,	24: 219- 221.	
Joshi, R.K.	2000	Growth of a goat pox virus isolate on the chorioallantoic membrane of developing chicken embryo	Indian Veterinary Medical Journal	, 24: 297-298.	
Joshi, R.K.	2001	Physico-chemical chacterization of 'Durg' isolate of goat pox virus.	Indian Veterinary Journal,	78: 369- 370. (NAAS- 6.0)	NAAS- 6.0
Shakya, S., Joshi, R.K. , Tewari, S.K., Ali, S.L. and Pande, C.B	2001	Infectious Bursal disease of poultry: An investigation.	. Indian Veterinary Medical Journal,	25: 38-40.	
Bhonsle, D., Joshi, R.K. , Chaurasia, S.K. and Hirpurkar, S.D.	2001	Incidence of subclinical mastitis in relation to teat shape and quarters affected in buffaloes.	Indian Veterinary Medical Journal,	25: 83-84.	
Shakya, S., Joshi, R.K. , Tewari, S.K., Ali, S.L. and Pande, C.B.	2001	Evaluation of Wisprec Cream against bacterial and fungal associated skin affections in parrots (<i>Psittacula eupatria</i>).	Indian Veterinary Medical Journal	, 25 : 85-87.	

Namita Joshi, Garg, S.K. and Joshi, R.K. Gupta, N., Shakya, S. and	2002	Effect of routes of inoculation on yield of R ₂ B strain of Newcastle disease virus. Haematological and pathological	Indian Veterinary Medical Journal, Indian Veterinary	26 : 343-344. 81 : 137-	NAAS 60
Joshi, R.K.	2004	changes in experimental Egg- Drop Syndrom- 76 virus infection in laying hens.	Journal,	139. (NAAS- 6.0)	NAAS- 6.0
Namita Joshi, Joshi, R.K . and Garg, S.K.	2007	Immunogenicity of R ₂ B strain of Newcastle Disease Virus Adapted to Vero Cells.	. Indian Journal of Animal Sciences	1110. (NAAS- 6.6)	NAAS- 6.6
Kamana Dwivedi, Joshi R.K ., Joshi, N. Diwakar, R.P. and Niyogi, D.	2007	Isolation and Antibiogram of E.coli from Poultry in Purvanchal region of Uttar Pradesh.	Indian Journal of Animal Health	46 : 77- 80. (NAAS- 3.0, 2007)	NAAS- 3.0
Chandra, B., Niyogi, D., Ghosh, C.K., Shukla, V.K., Joshi. R.K ., Jana, S. and Mukhopadhyay, S.K.	2008	Incidence and pathomorphology of spontaneous Escherichia coli infection in broiler birds in two districts (Birbhum and Kolkata) of west Bengal.	Journal of Interacademicia	12(4) : 521- 524.	
Namita Joshi, Joshi, R.K. and Nagappa, K.	2008	Occurrence of Haemorrhagic Septicemia in Eastern Uttar Pradesh.	Indian Journal of Veterinary Medicine	28(2): 105-106. (NAAS- 4.0, 2007)	NAAS- 4.0
Diwakar, R.P. Joshi, N., Joshi , R.K., Niyogi, D. and Dwivedi, K.	2008	Serotyping and antibiogram of <i>E. coli</i> isolated from diarrheic calves.	Indian Journal of Animal Health.	47 (2): 119-121. (NAAS- 3.0, 2007)	NAAS- 3.0

Niyogi, D., Mohan, N.H., Singh, H.N., Joshi, R.K., Pramanik, P.S., Mukhopadhyay, S.K. and Shukla, V.K.	2008	Pyelonephrotis in a tharparkar Hifer: A Pathological study.	Journal of Interacademicia,	13 (03): 376- 377. (NAA S- 3.0)	NAAS- 3.0
Vibha Yadav, Joshi, R.K. and Maurya, S.K.	2009	Isolation and identification, serotyping and antibiogram of <i>Escherichia coli</i> from diarrheic poultry.	Journal of Veterinary Public Health,	07 (02: 145- 147. (NAA S- 3.8)	NAAS- 3.8
Joshi, N. and Joshi, R.K.	2009	Detection of Newcastle disease virus antigen by co-agglutination test using antibody coated Staphylococcus aureus.	Indian Journal of Comparative Microbiology, Immunology and Infectious Diseases,	30 (02):67- 69 . (NAAS- 3.0, 2007)	NAAS- 3.0
Bajpai, U.K., Joshi, R.K. and Joshi, N.	2010	Adaptation and characterization of field isolate of Infectious bursal disease virus in BGM-70 cells.	Indian Journal of Animal Sciences, 80	(12): 1179– 81. (NAA S- 6.6)	NAAS- 6.6
Antimicrobial Resistance of <i>E. coli</i> Isolated from Chickens in two districts (Faizabad and Sultanpur) of Uttar Pradesh.	2009	Antimicrobial Resistance of <i>E. coli</i> Isolated from Chickens in two districts (Faizabad and Sultanpur) of Uttar Pradesh.	Indian Journal of Animal Health, 48	(01): 59- 61. (NAAS- 3.0, 2007)	NAAS- 3.0

Shukla, V.K., Joshi, R.K. and Joshi, N.	2010	comparative efficacy of haemagglutination test, coagglutination test and polymerase chain reaction for detection of canine parvovirus antigen in fecal samples.	Indian Journal of Comparative Microbiology, Immunology and Infectious Diseases,	31(01 & 02): 67- 68. (NAAS- 3.0, 2007)	NAAS- 3.0
Niyogi, D., Pramanik, P.S., Joshi, R.K., Shukla, V.K. and Mukhopadhayay, S.K.	2009	Pathological investigation of hydropericardium syndrome outbreak in broiler birds in an organized farm.	Indan Journal of Animal Health, 49(2):	20-23 . (NAAS- 3.0, 2007)	NAAS- 3.0
Namita Joshi and Joshi, R.K.	2009	Bacteriological Quality of Meat Sold in Retail Market in Uttar Pradesh.	Journal of Veterinary Public Health,	8(2): 137-139. (NAAS- 3.8)	NAAS- 3.8
Joshi, R.K. and Joshi, N.	2010	Growth and cytopathogenicity of a field isolate of Fowlpox Virus in BGM 70Cell Line	Indian Journal of Comparative Microbiology, Immunology and Infectious Diseases,	32(01 & 02): 19- 21. (NAAS- 2.9, 2012)	NAAS- 2.9

	Namita Joshi and Joshi, R. K.	2010	Infectivity titer and HA activity of NewCastle Disease virus grown on embryonated chicken eggs.	Indian Journal of Comparative Microbiology, Immunology and Infectious Diseases,	33 (01 & 02): 52-53. (NAAS-2.9, 2012).	NAAS- 2.9
	Om Preethi, B., Joshi, R.K. and Joshi, N	2015	Isolation and Characterization of Canine Parvo Virus Grown in CRFK Cell Culture.	Journal of immunology and Immunopathology,	17 (1): 4447.DOI : 10.5958/ 0973- 9149.2015 .00006.4	
	Singh, Vimal, Kumar, Joshi, R.K and Josh i Namita	1	Growth and cytopathogenicity of a field isolate of fowl poxvirus in chicken embryo fibroblast cell culture.		18(2) 65- 68.	
Review paper	Joshi, R.K., Chandra, R., Rao, V.D.P. and Garg, S.K.	1992	Goat pox: A review. Journal of applied Animal Research,	Journal of applied Animal Research,	02 : 57-72. (NAAS-6.6)	NAAS- 6.6
	Joshi, R.K. and Shakya, S.	1995	EDS-76: An emerging viral syndrome of poultry.	The Veterinarian,.	19 : 01-03	
	Shakya, S., Joshi, R.K. and Joshi. N.	1996	Infectious bursal disease of chickens: A review.	The Veterinarian,		

Joshi, R.K.	1998	Pox virus infections of small ruminants. Key note paper in National Symposium on Ecology of microbes in relation to human and animal health organised at St. Thomas College, Bhilai(Madhya Pradesh), India.			
Joshi, R.K.	1998	Infectious bursal disease of chicken. Key note paper in National Symposium on <i>Ecology of microbes in relation to human and animal health</i> organized at St. Thomas College, Bhilai (Madhya Pradesh), India.			
Pathak, A.K., Joshi, Namita and Joshi, R.K.	2001	Bovine Spongiform Encephalopathy: A Review.	Intas Polivet, 2(2001)	01-08.	(NAAS- 4.1)
Joshi, R.K. and Joshi, N.	2001	Feline panleukopenia of wild cats.	Intas Polivet, 2(II):	234-237.	(NAAS- 4.1)

Joshi, R.	K. 2002	Feline infectious peritonitis: An appraisal.	. Intas Polivet, 3(II):	364-366. (NAAS- 4.1)	(NAAS- 4.1)
Joshi, and Joshi	R.K. 2004 , N.	Nucleic acid based molecular biological techniques for viral disease diagnosis. Lead paper in Compendium of National conference on opportunities and challenges for sustainable Livestock Production, held at College of Veterinary Science and A.H., Kumarganj, Faizabad, India (2004), p	College of Veterinary Science and A.H., Kumarganj, Faizabad, India (2004), p		
Joshi, N. and Joshi, I	R.K. 2004	Prions: An Extraordinary infectious agent. Lead paper in National conference on opportunities and challenges for sustainable Livestock Production, held at College of Veterinary Science and A.H., Kumarganj, Faizabad (U.P.).	College of Veterinary Science and A.H., Kumarganj, Faizabad (U.P.).		
Joshi, and Joshi	R.K. 2004 , N.	Peste Des Petits Ruminants (PPR) of small ruminants. In Compandium of Workshop on Emenging new technologies for control of Diseases to improve livestock Production in Eastern Uttar Pradesh, held at College of Veterinary Science and A.H., Kumarganj, Faizabad, India (2004), p 25-31.	College of Veterinary Science and A.H., Kumarganj, Faizabad, India (2004), p 25-31.		

Joshi, N. and Joshi, R.K.	2004	Polymerase Chain Reaction: An imensly Diverse Molecular biological Technique. In Compendium of Workshop on Emenging new technologies for control of Diseases to improve livestock Production in Eastern Uttar Pradesh, held at College of Veterinary Science and A.H., Kumarganj, Faizabad, India (2004), p 82-85.	College of Veterinary Science and A.H., Kumarganj, Faizabad, India (2004), p 82-85.	
Singh, A., Singh, U.B., Joshi, R.K. and Gangwar, A.K.	2004	Current approaches in the control of poultry coccidiosis. In Compendium of Workshop on "Emerging new technologies for control of Diseases to improve livestock Production in Eastern Uttar Pradesh" held at College of Veterinary Science and A.H., Kumarganj, Faizabad, India (2004), p 39-46.	College of Veterinary Science and A.H., Kumarganj, Faizabad, India (2004), p 39-46.	
Verma, D.N., Joshi, R.K. and Singh, B.B.	2004	Veterinary Education in India: Past, Present and Challenges In The New Millennium.	University News 42(35): 117-122	
Joshi, R.K. and Joshi, N.	2004	Recent developments in diagnosis of microbial disease in animals. In Compendium of Training programme for field Veterinarians on "Extension methods in disease control" held at College of Veterinary Science and A.H., Kumarganj, Faizabad, India (July,2004), p 25-31.	College of Veterinary Science and A.H., Kumarganj, Faizabad, India (July,2004), p 25-31.	

Joshi, N. and Joshi, R.K.	2005	Emerging bacterial and viral diseases of livestock. In Compandium of Training Programme for field Veterinarians on Extension methods in disease control, held at College of Veterinary Science and A.H., Kumarganj, Faizabad, India (July, 2004), p 25-31	College of Veterinary Science and A.H., Kumarganj, Faizabad, India (July, 2004), p 25-31	
Joshi, R.K. and Joshi, N. pareksan hetu	2004	Rog nidan hetu namunon ko bhajne ke liya upkaron evam anya samagree ke sterilization ke bidhiyan. In Compandium of Training Programme for Veterinary Extension Officers on Pryogsala main pareksan hetu namunon ka akatran avam prasan, held at College of Veterinary Science and A.H., Kumarganj, Faizabad, India	College of Veterinary Science and A.H., Kumarganj, Faizabad, India (July,2004), p 25-31 (Hindi).	
Joshi, R.K. and Joshi, N.	2004	Jewanu janit rogon ke nidan hetu namunon ka akatran avam prasan. In Compandium of Training Programme for Veterinary Extension Officers on Pryogsala main pareksan hetu namunon ka akatran avam prasan, held at College of Veterinary Science and A.H., Kumarganj, Faizabad, India (July,2004), p 25-31 (Hindi).	College of Veterinary Science and A.H., Kumarganj, Faizabad, India (July,2004), p 25-31 (Hindi).	
Joshi, N. and Joshi, R.K.	2005	Wisanu janit rogon ke nidan hetu namunon ka akatran avam prasan. In Compandium of Training Programme for Veterinary Extension Officers on Pryogsala main pareksan hetu namunon ka akatran avam prasan, held at College of Veterinary Science and	College of Veterinary Science and A.H., Kumarganj, Faizabad, India (July,2004), p 25-31 (Hindi).	

		A.H., Kumarganj, Faizabad, India (July,2004), p 25-31 (Hindi).		
Joshi, N. and Joshi, R.K.	2005	Epidemiological overview of Avian Influenza.	Veterinarian, 29: 09-13.	
Chaudhary, P.K., Chaudhary, G.K., Sajan, R., Paul, R.K. and Joshi, R.K.	2007	Role of Langerhans cells in Immunity. North East Veterinarian, 7(2): 7-8.	North East Veterinarian, 7(2): 7-8.	
Chaudhary, G.K., Chaudhary, P.K., Sajan, R., Joshi, R.K. , Verma, R. and Paul, R.K.	2007	Cloning of animals and its utility.	North East Veterinarian, 7(3): 27- 28.	
Joshi, N. and Joshi, R.K.	2008	Bovine Leptospirosis: Diagnosis And Control. The	The North East Veterinarian, 8(3): 30-32.	
Maurya, S.K., Shrivastava, S. and Joshi, R.K.	2008	Retroviral vectors and Gene therapy: An Update.	Indian Journal of Biotechnology, 8: 349- 357.	
Joshi, R.K,	2008	Cytokines: The Diverse Cell Regulatory Molecules. In Compandium of Training Programme cum workshop on Cytokine Assay held at Department of Microbiology and Immunology, U.P.Pt. Deen Dayal Upadhyay	Department of Microbiology and Immunology, U.P.Pt. Deen Dayal Upadhyay Pashu Chikitsa Vigyan Evam Go-Anusandhan	

		Pashu Chikitsa Vigyan Evam Go- Anusandhan Sansthan, Mathura fro 26- 27 February, 2008.	Sansthan, Mathura fro 26- 27 February, 2008.	
Joshi, R.K., Joshi, N., Shukla, V.K., Niyogi, D., Singh, Y.D., and Mukhopadhyay, S.K.	2009	Loop mediated isothermal amplification of DNA (LAMP): A novel tool for diagnosis.	Journal of Interacademicia , 13 (03): 387-395.	
Joshi, R.K.	2009	Changing pattern of viral zoonoses: An Indian Prospective.	Key note address, VIII Conference and National Symposium of Indian Association of Veterinary Public Health Specialists held at ICAR Research Complex for NEH Region, Sikkim Centre, Tadong, Gangtok.	
Joshi, R.K. and Joshi, N.	2012	Molecular Techniques for diagnosis of infectious diseases. In Compandium "Recent advances in improvement of health and management of livestock", College of Veterinary Science and A.H., N.D.U. A. & T., Kumarganj, Faizabad (U.P.), pp 01-05.	College of Veterinary Science and A.H., N.D.U. A. & T., Kumarganj, Faizabad (U.P.), pp 01-05.	
Joshi, R.K. and Joshi, N.	2012	Recent approaches in vacciniology of viral diseases of livestock and poultry. In Compandium "Recent advances in improvement of health and management of livestock",	College of Veterinary Science and A.H., N.D.U. A. & T., Kumarganj, Faizabad (U.P.), pp 01-05.	

Joshi, N. and Joshi, R.K.	2012	Changing pattern of transmission of zoonoses. In Compandium "Recent advances in improvement of health and management of livestock",	College of Veterinary Science and A.H., N.D.U. A. & T., Kumarganj, Faizabad (U.P.), pp 11-16.	
Joshi, N. and Joshi, R.K.	2012	Impact of veterinary drug residue on human health. In Compandium "Recent advances in improvement of health and management of livestock", College of Veterinary Science and A.H., N.D.U. A. & T., Kumarganj, Faizabad (U.P.), pp 220-229.	College of Veterinary Science and A.H., N.D.U. A. & T., Kumarganj, Faizabad (U.P.), pp 220-229.	
Joshi, R.K. and Joshi, N.	2012	"i"k qjksx funku gsrq uewuksa dk ,d=.k ,oa Ás'k.k". In Compandium " <i>lk'kq</i> LokLF; j{kk ,oa izcU/ku esa uohu izlkj rduhd",	College of Veterinary Science and A.H., N.D.U. A. & T., Kumarganj, Faizabad (U.P.), pp 07-09.	
Joshi, N. and Joshi, R.K.	2012	LoPN nw/k mRiknu ,oa bldh xq.koRrk dk ijh{k.k". In Compandium "Ik'kq LokLF; j{kk ,oa izcU/ku esa uohu izlkj rduhd",	College of Veterinary Science and A.H., N.D.U. A. & T., Kumarganj, Faizabad (U.P.), pp 10-12.	
Joshi, N. and Joshi, R.K.	2012	nw/k Is euq";ksa esa QSyus okys j¨x. In Compandium <i>"i'kq LokLF;</i> j{kk ,oa izcU/ku esa uohu izlkj rduhd ",	College of Veterinary Science and A.H., N.D.U. A. & T., Kumarganj, Faizabad (U.P.), pp 13-15.	

	Joshi Namita and Joshi R. K.	2015	Veterinary Public Health- Past, Present and Future Perspectives.	In Souvenir of 17 th convocation held on 04 th march 2016 page no. 70-75.	
	Yadav, Vibha, Joshi R. K. and Diwaker, R.K.	2016	Paper presented in National Symposium on "Role of Veterinarian in safe, sufficient and sustainable animal health and production" organized by Department of Veterinary Medicine at N.D. University of Agri. and Tech. Kmarganj, Faizabad on 30th April 2016.Page no.5-8.	organized by Department of Veterinary Medicine at N.D. University of Agri. and Tech. Kmarganj, Faizabad on 30 th April 2016.Page no.5-8.	
	Yadav, Vibha, Joshi R. K. and Diwaker, R.K.	2017	In National Symposium on "Role of Veterinarian in safe, sufficient and sustainable animal health and production"	organized by Department of Veterinary Medicine at N.D. University of Agri. and Tech. Kumarganj, Faizabad on 30 th April 2016. Page 89- 94.	
Popular article	Joshi, R.K. and Thapliyal,D.C.	1989	Transgenic fowl	Indian Farmers digest, 25: 09-10.	

Joshi,R.K.	1993	Recombinant DNA technology in virus research	Vet Vision, 01: 04
Joshi, R.K., Joshi, N. and Shakya, S. (1996)	1996	Infectious bursal disease: An Oerview.	.Pashu Poshan Anusandhan Darshan, III
Shakya, S. and Joshi, R.K	1997	Pashuon main teekakaran ka mahatva,	1. Chattisgarh Kheti, 04: 39
Joshi,R.K.	1998	Murgeon main leechi (Angara) rog.	2. Krishak Jagat,07
Shakya, S. and Joshi, R.K.	1999	Pashuon main teekakaran ka mahatva.	3. Krishak Jagat, 25
Joshi, R.K.	1999	Bakarion main chechak rog. 17(Hindi).	4 Maati Mudeer, 02: 16- 17(Hindi).
Joshi, R.K.	1999	Diary pashuon ke sankramak rogon ke nidan ki mukhya vidhiyan. In compandium of the training programme on	Adhunik Dairy Farming Vyasay organised by Department of Livestock Production and Management from 1

Joshi, R.K.	2000	Poshan ka pashu rog nirodhak samta par provaw. In compandium of the training programme on	Pashu Poshan avam Chara utpadan ki viagyanik padhati, organised by Department of Animal Nutrition from 6	
Joshi, R.K. and Joshi, N.	2003	Barsat main murgion ko sankramak rogon se bachai. 6	Purwanchal Kheti, 14(7): 16	
Joshi, R.K. and Joshi, N	2003	Dudharu pashuon main thanaila rog avam uski roktham.	Purwanchal Kheti . 13 (10): 20	
Singh, A., Singh, U.B. and Joshi, R.K.	2004	Dudharu pashuon main kilnion ke samasya wa uski roktham.	Purvanchal Kheti. 14 (1): 22	
Shukla, V. K., Joshi, R. K., Choudhary, G. K., Choudhary, P. K. and Joshi, N	2008	Pasuoin main muh paka khur paka rog: Upchar avam bachao,	Modern Kheti (October 15, 2008): 32	
Shukla, V. K., Choudhary, G. K., Choudhary, P. K., Joshi, N. and Joshi, R. K.	2008	Pasu prajanan main ane wali pramukh samasy avam nidan,	Modern Kheti (November 1,2008): 35	
Shukla, V. K., Joshi, R. K., Joshi, N., Choudhary, G. K., and Choudhary, P. K.	2008	Pasuoin main Gala ghontu rog: Upchar avam bachao,	Modern Kheti (November 15,2008): 35	

Shukla, V. K., Joshi, R. K. , Joshi, N., Choudhary, G. K., and Choudhary, P. K.(2008	Pasuoin main Muhpaka	Modern Kheti (December 1,2008): 35 (Hindi).	
Joshi, N. and Joshi, R.K. (2008)	2008	Glanders: Ghodo ka sankramak rog.	Purvanchal Kheti (Submitted)	
Joshi, R. K. Joshi, N. and Shukla, V.	2008	Teekakaran: Pashuon ko rogo se bachau ka upay.	Modern Kheti (Submitted) (Hindi).	
Shukla, V. K., Joshi, R. K. and Joshi, N., Pasuoin	2008	Pasuoin main thanaila rog avam uski roktham,	<i>Modern Kheti</i> (Submitted) (Hindi).	
Joshi, R.K. and Joshi, N. (2013) Pashuon ke pramukh jeevanujanit rog: Karan, Chikitsa avam Bachao. Purvanchal Kheti (Submitted)	2013	Pashuon ke pramukh jeevanujanit rog: Karan, Chikitsa avam Bachao.	Purvanchal Kheti (Submitted)	
Diwakar, R.P., Joshi, R.K., Yadav, V. and Joshi, N. (2013) Pashuon Main hone wale bibhinna bemarion main prayogshala	2013	Pashuon Main hone wale bibhinna bemarion main prayogshala janch ka mahatwa.	. Purvanchal Kheti year23, 04:24	

janch ka mahatwa. Purvanchal Kheti year23, 04:24.					
Yadav, V., Joshi, R.K., and Diwakar, R.P.	2013	Thanaila (Mastitis):- Ek Pramukh Sankramak Rog.	Purvanchal Kheti y 23,05:20-22	year	

Manual	Author	Year	Title		
VMC- 211	Joshi, R.K. and Namita pp 46.	2001	Joshi Practical Manual on General Veterinary Bacteriology		
VMC-221	Namita Joshi and Joshi, R.K.	2001	Practical Manual on Immunology and Serology		
VMC321	Namita Joshi and Joshi, R.K. (2001). pp 55.	2001	Practical Manual on Veterinary Virology		
VMC311	Jallewar, P. and Joshi, R.K. (2006). pp 36.	2006	Practical Manual on Systemic Bacteriology and Mycology		
	Joshi, R.K. and Joshi N.	2010	Practical Manual of Diagnostic virology		
	Joshi, R.K.	2011	Practical Manual of Molecular Biological techniques in Microbiology.		
VMC311	Joshi, R.K.	2012	Practical Manual on General Veterinary Bacteriology		
VMC-211	R.P.Diwakar, R.K.Joshi and Vibha Yadav.	2013	General Veterinary Microbiology		
VMC-221	Vibha Yadav, R.K.Joshi and R.P.Diwakar.	2013	Veterinary Immunology and Serology		
VMC-311	R.P.Diwakar, R.K.Joshi and Vibha Yadav.	2013	Systemic Veterinary Bacteriology and Mycology		
VMC- 321	R.P.Diwakar, R.K.Joshi and Vibha Yadav.	2013	Systemic Veterinary Virology		
	Manuals are prepared as	per New VC	I (03 manuals)		
Unit-1	R.P.Diwakar, R.K.Joshi and Vibha Yadav.	2018	General and Systematic Veterinary Bacteriology		
Unit-5	Vibha Yadav, R.K.Joshi and R.P.Diwakar	2018	Veterinary Immunology and Serology		
Unit-3	R.P.Diwakar, R.K.Joshi and Vibha Yadav.	Veterinary Mycology			

Book/ Book chapter	Author	Year	Chapter title	Book name	Publisher	ISBN/CAS/C AFT/ Withou ISBN
	R.K. Joshi, Vibha Yadav,	2016	Antibiotic resistance:	Role of vetetarians in		978935311694
	R.P.Diwakar, Prerit		Implications for a post	safe, sufficient and		1
	Kumar Singh and Shivendra Pratap Singh		antimicrobial Era	sustainable animal health and production		
	R.P.Diwakar, V. Yadav,	2018	Role of vetenarians in	Strategies and challenges		978-93-5311-
	R.K. Joshi, P.K. Singh,		the challenge of	of veterinary profession		013-0
	Rishikant, D. Niyogi and		livestock health,	to improve livelihood,		
	K.K. Tripathi		welfare and food security	food security and safety		
	V. Yadav, R.K. Joshi and R.P. Diwakar	2018	A review on epidemiology and diagnosis of Brucellosis in India	Strategies and challenges of veterinary profession to improve livelihood, food security and safety		978-93-5311- 013-0
	V. Yadav, R.K. Joshi and R.P. Diwakar	2020	Symptoms and transmission of covid-19 with special reference to immunodiagnostic approches	International conference e Book " Immunology in 21st Century for Improving One-Health	Society of Immunology and Immunopathology, India	978935408664 9
Awards	wards & Recognition Program/ Event					Year
						Funding

Awards & Recognition	Program/ Event	Year
		Funding
		agency
Project in hand/ project	One project in hand: FMD collaborating centre (National Institute on Foot & Mouth Disease	ICAR-NI
completed	(ICAR-NIFMD)	FMD
_	1. Dr. R. K. Joshi (PI)	

 Dr. Namita Joshi (Co-PI) Dr. Vibha Yadav (CO-PI) 	
One project sanctioned from RKVY ON "Strengthening of Microbiology Laboratory with	RKVY
Advance Diagnostic Facilities for the Detection of Infectious Diseases in particular reference to	
Eastern Uttar Pradesh.	

____XXXXX