

केन्द्रीय विद्यालय संगठन

KENDRIYA VIDYALAYA SANGATHAN

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No.F: 11029-5/2009-KVS(HQ)/JSO

Dated: 27th June, 2013

1. The Deputy Commissioner, Kendriya Vidyalaya Sangathan, All Regions.

2. The Principal, KV Kathmandu/Moscow/Tehran

Subject: 16TH KVS JUNIOR MATHEMATICAL OLYMPIAD- 2013

Sir/Madam,

Mathematical Olympiad is the only school level mathematical problem solving contest held annually. It is conducted by different organizations to identify, encourage, promote and nurture the talent in Mathematics at State, Regional, National and International levels. In India, this is organized by National Board for Higher Mathematics (NBHM), since 1988. This is conducted in three stages, the Regional Mathematical Olympiad (RMO) usually held during October-December in 23 regions, the Indian National Mathematical Olympiad (INMO) held in Feb. and then an International Mathematical Olympiad Training Camp (IMOTC) organized in April- May from where a team of the best six students is selected to represent India in International Mathematical Olympiad (IMO) held in July each year in a member country of the IMO. The academic coordination is mainly done by the Mathematical Olympiad Cell (MO Cell) in Indian Institute of Science, Bangalore.

Kendriya Vidyalaya Sangathan, a premier organization in the field of secondary and senior secondary education has its specific mission "To pursue excellence and set the pace in the field of school education". For last 15 years KVS has been conducting its own Mathematical Olympiad programme in two phases –

Junior Mathematical Olympiad (JMO) and Regional Mathematical Olympiad (KVS-RMO). After screening the students by JMO, about top 100 students are trained and tested by RMO. Top 30 students from RMO will then participate in INMO conducted by NBHM. Selection at National level leads to participation at the International Mathematical Olympiad (IMO) through another round of training / test /orientation etc.

AIMS & OBJECTIVES OF MATHEMATICAL OLYMPIAD:

KVS is nurturing the talent of students through Mathematical Olympiad Programme which includes:

- Identifying talent in Mathematics.
- Promoting excellence in Mathematics.
- Providing opportunities to young and talented students to solve challenging problems in Mathematics.
- Encouraging talented students to pursue careers in the field related to Mathematics.

GENERAL GUIDELINES:

Eligibility Criteria to appear in 16th KVS JMO -2013

- A Student studying in class X who secured A2 or higher grade in Mathematics in class IX examination and
- A student studying in class XI with Mathematics as an elective subject (irrespective of stream opted) who secured A2 or higher grade in Mathematics in class X examination can appear.
- A student studying in class XII with Mathematics as an elective subject who secured 80% and above marks in class XI in Mathematics can also appear.

Note- There will be a common question paper for all the participants.

Syllabus

The syllabus for Mathematical Olympiad (regional, national, international) is pre-degree college Mathematics. The areas covered are arithmetic of integers, geometry, quadratic equations and expressions, trigonometry, co-ordinate geometry, system of linear equations, permutations and combinations, factorization of polynomials, inequalities, elementary combinatorics, probability theory and number theory, finite series and complex numbers and elementary graph theory. The syllabus does not include calculus and statistics. The major areas from which problems are given are number theory, geometry, algebra and combinatorics. The syllabus is in a sense spread over class XI to class XII levels, but the problems under each topic involve high level of difficulty and sophistication. The difficulty level increases from JMO \rightarrow RMO \rightarrow INMO \rightarrow IMO.

Registration Fee

This year KVS has decided not to charge any registration fee from any student to appear in 16th KVS JMO-2013.

Procedure For Registration

The eligible & willing candidate has to register herself / himself on prescribed form (Annexure-I). The school will retain one copy of the filled Registration Form for the record. However, a consolidated list of students, registered Vidyalaya-wise for the Olympiad should be sent to the undersigned in the format given in Annexure-VII

Last Date

Last date for submission of list of registered students to the Regional Office will be 15th July 2013.

Allocation Of Roll Number

The Principal of KV concerned will allocate the Roll No. on registration form of each candidate. The same roll no. should be mentioned on the admit card. The roll numbers will be allocated strictly in the following manners.

• Each student will be allotted nine digit roll number. The first two digits on the left will show the Region code, next four digits will show the Vidyalaya code and last three digits will show the serial number of the candidate.

Coding Procedure for allocating Roll Numbers:

Region Code	Vidyalaya Code	Sr. No.

Example: The roll Number of Master Mukesh of KV NTPC Badarpur (KV Code-1406) of Delhi (Code No.09) and having serial number 005 in the list of students registered for Olympiad will be written as:

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ŀ	(1)	u		Ι ΔΙ	(1)	l h	(1)	1 (1	1 1 1
- 1	•		1	T	U	0		•	-

Note: For allotting roll number to students each KV should follow strictly the standardized codes for Regional Offices and Kendriya Vidyalayas covered in each region as per codes mentioned in transfer guidelines. This is necessary as the same codes are to be maintained by KVS (HQ) during Computerization of the registration/result etc.

NOTE: Double shift schools will allocate roll nos in the same sequence in increasing order starting from sr.no 001 from 1st shift.

Admit Card

The admit card to the students will be issued by the Principal after allotting the Roll Number and the Examination Center. However, the roll number on the admit card should remain the same as allotted in registration form of the candidate. The format of the Admit card is enclosed at **Annexure-III**.

Examination Center

The Deputy Commissioner of the Region concerned will identify the Examination Centers and intimate the same to the Principals. The same will be intimated by the Principals to the students through Admit Cards.

Date & Time Of Examination:

1st September 2013, Sunday. Time: 10:00 AM to 1:00 PM.

Question Papers

The question papers for the Junior Mathematical Olympiad (JMO) will be dispatched directly from KVS (HQ) to examination centers identified by the Deputy Commissioner of the Region concerned.

Answer Books

Answer books with 28 pages (A-4 size) with the title page as shown in the ANNEXURE-IV are to be provided by the examination centre.

Spot Evaluation /Merit List

The answer scripts of 16th KVS- JMO- 2013 will be brought to KV, NFC, Vigyan Vihar Delhi (Spot Evaluation Centre) and be evaluated by the examiners (TGT/PGT – Maths) of Delhi and nearby Regions. A merit of about top100 students will be prepared. These 100 students will attend the training camp for KVS- RMO/INMO- 2013 for 10 days during winter break of the year-2013.

Declaration of Result

The result of 16th **JMO** is likely to be declared in the month of November 2013.

Merit Certificates & Cash Awards – JMO:2013

KVS (HQ) will confer the following Cash Awards and Merit certificates as per the laid down criteria:

- (a) Cash awards of Rs.10,000/-, Rs.8000/- and Rs.5000/- for securing first, second and third position respectively at KVS National Level.
- (b) Cash awards of Rs.5000/-, Rs.4000/- and Rs.3000/- for securing first, second and third position respectively at Regional Level.
- (c) Students eligible for KVS National as well as Regional level awards shall be conferred with higher cash prize only.

Merit certificates will be given to those students who secure atleast 35% marks in JMO.

Merit Certificates And Cash Awards: KVS - RMO

It is proposed that an incentive as per the following criteria may be awarded to the student who is the best performer in **RMO**.

First Prize – Rs. 10000/-, Second Prize – Rs. 8000/-, Third Prize – Rs. 5000/- Respectively along with the merit certificates.

Merit certificate & Cash Award - INMO - 2014

It is also proposed that the student who perform best in INMO- 2014 will be awarded by a merit certificate and cash award of Rs. 20,000/ (applicable for INMO awardees only).

Venue for Training Camps – INMO 2014

Last year, it has been observed that the attendance of the participants in the training camps was increased from 65% to 84%. Further to motivate/ facilitate the participants, this year also it is proposed that 02 camps for 10 days during winter break may be organized at the following centres as per schedule given below:

- (i) KV- IIT, Chennai. 26^{th} December 2013 4^{th} January 2014.
- (ii) KV- NFC, Vigyan Vihar, Delhi. 26th December 2013 4th January 2014.

KVS-RMO (Regional Mathematical Olympiad)

On the penultimate day of the **INMO** preparatory camp, a test of 3 hours for 100 marks will be conducted and evaluated at both the centres (Delhi/ Chennai). About top 30 students of **RMO** will be selected on the basis of combined merit of both the centres. They will then participate in **INMO** in the month of Feb.2014 conducted by **NBHM**. Selection at National level leads to participation at the International Mathematical Olympiad (**IMO**) through another round of training/test/orientation etc.

You are requested to take up the following steps:

1. Circulate the information and the guidelines to all the Vidyalayas and ensure the **mass participation** of the eligible students under your region in time.

- 2. The Principal of each school will send the list of students registered in Annexure- II to the Regional Office concerned by 15th July 2013. You are requested to send the consolidated list of the participating students Vidyalaya wise as per the format given in Annexure- VII to the undersigned on or before 22nd July 2013.
- 3. Identify 05 to 06 examination centres to conduct the 16th KVS JMO-2013 in your Region. Principal of each school will send the list of students registered in Annexure-II and attendance sheet in Annexure-VI completed in all the respects (except the signature of the candidates) to the respective examination centres and a copy to the Deputy Commissioner of the Region concerned. You are further requested to send the list of examination centres and requirement of the question papers for the JMO examination in Annexure-V to the National Coordinator Mr Jagat Singh, PGT- Mathematics KV Sector -IV R.K. Puram, New Delhi -110022 and a copy to the Principal, Kendriya Vidyalaya, NFC, Vigyan Vihar, Delhi on their email id's on or before 22nd July 2013.
- 4. Nominate 02 Mathematics teachers (one PGT and one TGT) of your Region, one as Regional coordinator and another as Associate Regional Coordinator and send their names with mobile nos in Annexure –VIII to National Coordinator, KVS Maths Olympiad and a copy to the Joint Commissioner(Acad.) KVS, HQ on their email id's on or before 22nd July 2013.
- 5. An orientation programme will be organized for Regional Coordinators of Mathematical Olympiad in Delhi in the second fortnight of July 2013. Some experts from IIT, Delhi University and in-house experts may be invited to give an orientation about the scheme of Mathematics Olympiad at different levels.
- 6. Mr M L Agrawal, Principal, Kendriya Vidyalaya, NFC, Vigyan Vihar, Delhi- 110092, will be "Director of Evaluation" for 16th KVS-JMO-2013.
- 7. The Principal of the Examination Centre will be the Superintendent for conduct of 16th KVS- JMO-2013.
- 8. The Centre Superintendent shall make all the necessary arrangements to dispatch the answer scripts of 16th KVS-JMO -2013 on or before 2nd September (Monday) Positively by Speed Post along with one copy of attendance sheet on Annexure-VI, and a copy of Annexure -II (Bilingual) at the following address.

The Principal Kendriya Vidyalaya, NFC, Vigyan Vihar (Opposite Vivek vihar Police station) Delhi-110092

9. Last year also it has been observed that some schools had sent incomplete information /Annexures and wrong spellings of the name of student/ father's name etc which created a lot of confusion in

preparing the merit certificates. You are therefore requested to instruct all the principals of your region to ensure that all the entries / Annexures being sent to the KVS (HQ) are correct. Later on no correction at any stage will be entertained.

The important email id's for correspondence:

J.C (Acad.) KVS	jcacadkvs@gmail.com
D.C.(Acad.) KVS	acedpkvs@gmail.com
Principal, KV Vigyan Vihar, Delhi. (Director of evaluation)	kvvigyanvihar@yahoo.co.in
National Coordinator KVS	jagatsingh.kvs1@gmail.com

This issues with the approval of competent authority.

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Yours faithfully

(Dr. V.Víjayalakshmi) Joint Commissioner (Acad.)

Copy To:-

- 1. Mr. Nagendra Goyal, Deputy Commissioner (Acad.) KVS, HQ New Delhi.
- 2. The Principal -KV- IIT, Chennai, for information & necessary action.
- 3. The Principal- KV-NFC, Vigyan Vihar, for information & necessary action.
- 4. Mr. Jagat Singh –National Co-ordinator- Mathematics Olympiad & PGT (Mathematics), K.V Sector-IV R.K Puram, New Delhi -110022.

Joint Commissioner (Acad.)

ANNEXURE -I

Paste recent

16th KVS Junior Mathematical Olympiad -2013

10	passport size Photograph attested by the	
		Principal

Registration Form (To be retained by the Vidyalaya for record)

(Roll No. of the eligible student - should be strictly filled in as per instructions given in guidelines)

Note: Candidate should fill up relevant columns of the registration form in his/her own handwriting.

1. Name of the student (in Block letters)		
English:		
Hindi:		
2. Mother's Name (in Block Letters)		
English:		
Hindi:		
3.Father's Name (in Block Letters)		
English:		
Hindi:		
4. Postal address of the KV :		
5. Studying in : Class	Section	
6. Grade obtained in Mathematics in class IX /	X	
7. Marks obtained in class XI (if applicable)		
I certify that particulars furnished above are co	rrect.	

(Signature of the Candidate)

Verification by Class teacher

Counter Signed by Principal With seal

16th KVS Junior Mathematical Olympiad :2013

Format for details of Registration to be sent to KVS (R.O.) by KVs	
Name of KV Name of Region:	

Roll	Student's Name in block Letters		ame in M/F Father's	Mother's	s Name	Class in which student is studying	Grade/ marks obtained in previous class		
	Hindi	Eng		Hindi	Eng	Hindi	Eng.		

Signature of principal with seal

16th KVS Junior Mathematical Olympiad - 2013

Admit Card (For student only) Roll No.	Paste recent passport size Photograph attested by
	Principal
(Fill the Roll No. Strictly as per the instructions given in guidelines)	
Date of the Examination 21st September 2013 (Time 10.00 A.M. to 1	.00 P.M.)
Examination Center	
(To be filled by KV Concerned)	
1 Name of the student (in Block letters)	
English:	
Hindi:	
2. Father's Name (in Block Letters) English:	
Hindi:	
3.Class	
4. Name of KV	
5. Region	
6. Residential Address	
Signature of the Candidate Signature of candidate in examina	tion hall

Signature of Invigilator

Signature of Principal with seal

16th KVS Junior Mathematical Olympiad :2013



Answer Sheet

Roll Number-	
Name of the student	(in English Capital Letters)
Name of the student	(in Hindi)
Father's Name	
Class	•
Name of Vidyalaya	
Name of Region	
Signature of Invigilator	Signature of centre supdt / Principal
	With seal.

Marks Awarded

Q.No1	Q.No.2	Q.No.3	Q.No.4	Q.No.5	Q.No.6	Q.No.7	Q.No.8	Q.No.9	Q.No.10	Total

Signature of Coordinator Examiner no.

Signatures of Examiner Examiner no.

16th KVS Junior Mathematical Olympiad: 2013 List of examination centers at Regional Level

Name of Region-----

S.N	Name of test centres with complete postal address& pin code	Email id of the test centres with Phone nos.	Principal's mobile no.	No. of students Regd.	No. of question papers required	Name of schools covered
1.						
2.						
3.						
4.						
5.						
6.						·

Signature of Deputy Commissioner With seal

Annexure-VI

16th KVS Junior Mathematical Olympiad: 2013

Attendance Sheet

			ice Sheet		
Roll No.	Name in Capital letters (English)	Class	KV	Region	Signatures
_			•		

Signature of Centre Supdt. with seal

Annexure VII

16th KVS Junior Mathematical Olympiad-2013

Name of the Region:

S.No	Name of the Vidyalaya	No.of students registered

Total

Signature of Deputy Commissioner With seal

16th KVS Junior Mathematical Olympiad- 2013

S No.	Name of Coordinator	Name of School	Mobile No.	Email id of the coordinator
1.	Regional			
2.	Associate			

Signature of Deputy Commissioner With seal