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18 सांस्थागत क्षेत्र, शहीद जीत सिंह मार्ग, नई दिल्ली-110602
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No.F.: No.11029/05/2015-KVS(HQ)/Acad/

Dated: ~~29-06-2015~~
०१/०७

The Deputy Commissioner,
Kendriya Vidyalaya Sangathan,
All Regions

Subject: **KVS PRE JUNIOR MATHEMATICAL OLYMPIAD- 2015**

Sir/Madam,

The Mathematical Olympiad Programme in India, which leads to participation of Indian students in the International Mathematical Olympiad (IMO) is organized by the Homi Bhabha Centre for Science Education (HBCSE) on behalf of the National Board for Higher Mathematics (NBHM) of the Department of Atomic Energy (DAE), Government of India. This programme is one of the major initiatives undertaken by the NBHM. Its main purpose is to spot mathematical talent among pre-university students in the country.

For the purpose of training and selection of students for the Olympiad contest, 25 regions all over the country, have been designated and each assigned a Regional Coordinator. Additionally, three groups (Central Board of Secondary Education (CBSE), Navodaya Vidyalaya Samiti (NVS) and Kendriya Vidyalaya Sangathana (KVS) have a 'Regional Coordinator' each.

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 five stages, **The Regional Mathematical Olympiad (RMO)** is usually held during October-December in 25 regions.

The Indian National Mathematical Olympiad (INMO) is 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.

KVS – Mathematical Olympiad New Scheme:

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 17 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 60-70 students are trained and tested by **KVS- RMO**. Top 30 students selected from **KVS-RMO** 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.

- From last year Class XII students are not eligible to participate in INMO . It has been decided by KVS to include class IX students so as to groom **the inherent talents of the deserving students for a longer period.**
- **KVS will conduct Mathematical Olympiad program in three phases as under:**
- **KVS- School Level Mathematical Olympiad (Pre-JMO)-** School level examination involving class IX and class X students. Centralized question paper of slightly lower level would be supplied by KVS (H Q).
- **KVS JMO 2015**
KVS National level exam involving class IX and X students who have secured at least 70% marks in KVS-Pre-JMO and class XI students who have secured A1 and A2 grade in class X CBSE examination are eligible to appear in JMO 2015.
- **KVS- Regional Mathematical Olympiad (KVS-RMO) :**
Bright and creative students who qualify the JMO (minimum qualifying marks to INMO –Preparatory Camp will be decided by KVS), will be invited to participate in INMO –Preparatory Camps in two phases.
KVS –RMO exam will be held on last day of the 2nd INMO –Preparatory Camp.
30 to 35 students may be selected through KVS- RMO who will further participate in Indian National Mathematical Olympiad (INMO) conducted by NBHM.

AIMS & OBJECTIVES OF KVS 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:

School Level Mathematical Olympiad – 2015 (Pre-JMO):

- A student studying in class IX or X ,who has secured at least A1 or A2 grade in mathematics in previous class.

Eligibility Criteria :

JMO - 2015:

- A Student studying in class IX or X who has secured **70% or more marks in School level Olympiad (Pre-JMO) 2015** shall be eligible to appear in the JMO 2015 and
- A student studying in class XI with Mathematics as an elective subject (irrespective of stream opted) who secured **A1 or A2 grade in Mathematics in class X** examination can appear in JMO -2015.

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 levels, but the problems under each topic involve high level of difficulty and sophistication. The difficulty level increases from Pre-JMO and further.

Registration Fee

KVS has decided not to charge any registration fee from any student to appear in KVS- School Level or KVS JMO-2015

Procedure For Registration

KVS- Pre-JMO- School level screening Test:

All eligible students of classes IX and X will register at school level only.

KVS- JMO National Level:

The eligible student of Pre-JMO as per fixed criteria & willing student of class XI, 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**

Date & Time of KVS- School level Mathematical Olympiad -2015:

The school level exam will be conducted on 1st Sunday of August .i.e. 01-08-2015

Time: 9:00 AM to 12:00 Noon

Last Date of submission of List of students for JMO:

Evaluation of School Level exam will be finalized up to 7th August 2015. The list of students who qualified Pre-JMO 2015 and eligible students of Class XI will be sent to Regional Office by 12-08-2015. The consolidated list (soft copy in excel format) at Regional level will be sent to Principal K V Vigyan Vihar Delhi, by 17th August 2015.

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.**

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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 in that school will be written as:

0	9	1	4	0	6	0	0	5
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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.

Important: The Deputy Commissioner of the Region will allocate more centers of examination keeping in view that students may not travel far off distance to appear in examination.

Date & Time Of Examination :

6th September 2015, Sunday. Time: 10:00 AM to 1:00 PM.

Question Papers

KVS- School Level Mathematical Olympiad (Pre-JMO -2015) – KVS (HQ) will send soft copy of common question paper to all The Deputy Commissioners with marking scheme for onward transmission to all KVs under the Region.

KVS- JMO -2015:

The soft copy of question papers for JMO-2015 will be sent directly from KVS (HQ) to Deputy Commissioners of all Regions.

Answer Books

Answer books with 16 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 **KVS- JMO -2015**, 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. The merit list of students will be prepared as per minimum cut off marks decided by KVS.

Declaration of Result

The result of **KVS- JMO -2015** is likely to be declared in the month of October 2015.

INMO Preparatory Camp-2015:

Mathematics Olympiad Committee KVS (H Q) will decide the minimum cut off marks to call students to attend two INMO Preparatory Camps for 10 days each during autumn break and winter break of the year-2015.

Venue for Training Camps for INMO 2016

To motivate/ facilitate the participants, this year also it is decided that 02 camps for 10 days during winter break would be organized at the following centres as per schedule given below:

- (i) KV NFC Vigyan Vihar Delhi –Autumn brak
- (ii) KV- IIT Chennai - 26th December 2015 – 4th January 2016.

KVS- JMO (Junior Mathematical Olympiad)-2015

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 JMO will be selected on the basis of combined merit of both the centres. They will then participate in INMO in the month of Feb 2016 conducted by NBHM. Selection at National level leads to participation at the International Mathematical Olympiad (IMO) through another round of training/test/orientation etc.

Merit Certificates & Cash Awards – KVS- JMO -2015

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 at least 35% marks in KVS- JMO -2015. The number of merit certificates to be issued will be decided by the Olympiad Committee at KVS (H.Q.)

Merit Certificates And Cash Awards: KVS - JMO

An incentive as per the following criteria would be awarded to the student who perform the best in JMO

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

Merit certificate & Cash Award – INMO – 2016

The students who are selected in INMO- 2016 would be awarded by a merit certificate and cash award of Rs. 20,000/ (applicable for INMO awardees only).

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.
2. The Principal of each school will send the list of students registered in **Annexure- II** to the concerned Regional Offices by **12-08-2015**. **You are requested to send the consolidated list of the participating students Vidyalaya wise as per the format given in Annexure- VII to the Joint Commissioner (Acad.) KVS HQ on or before 17th August 2015 with a copy to Principal KV NFC Vigyan Vihar Delhi.**

3. Identify **07 to 08 examination centres** to conduct the **KVS- JMO -2015**, in your region keeping in mind that students should travel minimum distance to write the exam. Number of examination centres may be increased if the Deputy Commissioner of the Region feels so keeping in view the convenience of the students. Principal of each school should 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 concerned region. **You are further requested to send the list of examination centres and requirement of the question papers for the KVS- JMO -2015 examination in Annexure-V to the National Coordinator Mr G S Lawania , PGT-Mathematics KV No. 2 Faridabad and a copy to the Principal, Kendriya Vidyalaya, NFC, Vigyan Vihar, Delhi on their email id's on or before 17th August 2015.**
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 17th August 2015**
6. **Mr M L Agrawal, Principal, Kendriya Vidyalaya, NFC, Vigyan Vihar, Delhi- 110092, will be “Director of Evaluation” for KVS-JMO -2015**
7. The Principal of the Examination Centre will be the Superintendent for conduct of **KVS- JMO -2015**. The centre charges of conducting **KVS-JMO -2015** will be met from school VVN as per norms given in **Annexure -IX**
8. The Centre Superintendent shall make all the necessary arrangements to dispatch the answer scripts of **KVS- JMO -2015** on or before **07th 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**

8. Last year also it has been observed that some schools had sent incomplete information /Annexure and wrong spellings of the name of student/ father's name etc which created a lot of confusion in writing the merit certificates. You are therefore requested to instruct all the principals of your region to ensure that all the entries /

Annexure 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	jccadkvs@gmail.com
A.C.(Acad.) KVS	acacadkvs@gmail.com
Principal, KV Vigyan Vihar, Delhi. (Director of evaluation)	kvvigyanvihar@yahoo.co.in
National Coordinator KVS	gslawania@gmail.com

This issues with the approval of competent authority.

Yours faithfully



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

Copy to:-

1. Ms, Anjana Hazarika Assistant Commissioner (Acad.) KVS, HQ New Delhi.
2. Sh. ML Agarwal, Principal, KV, NC Vigyan Vihar, New Delhi
3. Mr G S Lawania –National Co-ordinator- Mathematics Olympiad. K.V Pushp Vihar New Delhi

Joint Commissioner (Acad.)

KVS Junior Mathematical Olympiad -2015

Roll No.

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Paste recent 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 .

I. 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 correct.

(Signature of the Candidate)

Verification by Class teacher

Counter Signed by Principal
with seal

KVS Junior Mathematical Olympiad -2015

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

Name of KV Name of Region:

Roll No	Student's Name in block Letters		Sex M/F	Father's Name		Mother's Name		Class in which student is studying	Grade / Marks obtained in Maths in previous class
	Hindi	Eng		Hindi	Eng	Hindi	Eng.		

Signature of Principal with seal

KVS Junioe Mathematical Olympiad -2015

Paste recent
passport size
Photograph
attested by the
Principal

Admit Card (For student only)

Roll No.

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(Fill the Roll No. Strictly as per the instructions given in guidelines)

Date of the Examination : **06th September 2015 (Time 10 A.M. to 01:00 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 Principal with seal

Signature of candidate in examination hall

Signature of Invigilator

KVS Junior Mathematical Olympiad -2015

NAME OF EXAMINATION CENTRE-.....

Answer Sheet

Roll Number-

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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
Principal

Signature of centre supdt /

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.

KVS Junior Mathematical Olympiad -2015**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.	Name of schools covered

**Signature of Deputy Commissioner
With seal**

KVS Junior Mathematical Olympiad -2015**ATTENDANCE SHEET**

NAME OF EXAM CENTRE-----NAME OF REGION -----

Roll No	Student's Name in block Letters		Father's Name		Mother's Name		Name of KV	Class in which student is studying	Signature of candidate in exam hall	Marks obtained in JMO (Please leave blank)
	Hindi	Eng	Hindi	Eng	Hindi	Eng.				

Signature of Centre Supdt. with seal

KVS Junior Mathematical Olympiad -2015**Name of the Region:**

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

Total**Signature of Deputy Commissioner With Seal**

KVS Junior Mathematical Olympiad -2015

Name of Region -----

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**

KVS Junior Mathematical Olympiad -2015**Norms for payment of Centre Charges**

The Principal will be the Centre Superintendent to conduct the examination. If the no of registered candidates is more than 250, one Deputy Superintendent can be engaged. The remuneration norms are as under:

1. Centre Superintendent- Rs. 800/-
2. Deputy Superintendent- Rs 500/-
3. Invigilators- Rs. 400/- (1:20)
4. Sub staff- Rs 200/- (1:100)
- 5 Contingency- Rs 500 per center.

All the expenditure will be incurred from Vidyalaya VVN of concerned examination Centre.