
VERSI BAHASA INDONESIA

PETUNJUK TEKNIS YOUNG SCIENTISTS COMPETITION 2021

1. Persyaratan Administratif Peserta

- 1.1. Young Scientists Competition 2021 (YSC 2021) merupakan Lomba Peneliti Belia yang diperuntukkan bagi siswa SMA/MA/SMK/SMP/MTs di Provinsi Jawa Barat, yang diikuti secara perorangan atau berkelompok maksimal 2 siswa per kelompok.
- 1.2. Peserta YSC 2021 adalah siswa yang belum pernah mengikuti lomba internasional berikut: International Conference of Young Scientists (ICYS), Asia Pacific Conference of Young Scientists (APCYS), dan International Conference of Young Social Scientists (ICYSS).
- 1.3. Setiap sekolah hanya boleh mengirimkan maksimal 2 (dua) judul penelitian untuk tiap bidang lomba, sehingga jumlah penelitian maksimal yang dapat dikirimkan oleh satu sekolah adalah 20 (dua puluh) penelitian. Jika terdapat lebih dari 2 judul yang didaftarkan, maka panitia akan mengambil 2 judul penelitian yang didaftarkan paling awal.
- 1.4. Setiap peserta hanya boleh mengajukan satu judul penelitian. Jika seorang peserta mengajukan lebih dari 1 judul penelitian, maka panitia akan mengambil 1 judul penelitian yang pertama didaftarkan.
- 1.5. Bidang lomba adalah: 1) Matematika 2) Fisika 3) Ilmu Hayati 4) Lingkungan 5) Komputer 6) Sejarah 7) Geografi 8) Psikologi 9) Ekonomi 10) Sosiologi.
- 1.6. Peserta wajib mendaftar melalui pendaftaran *online*.
- 1.7. Peserta wajib mengunggah **scan/foto Surat Keterangan Sekolah** (sesuai format yang diberikan pada saat pendaftaran *online*, surat asli tidak perlu dikirimkan).
- 1.8. Peserta wajib mengunggah **scan/foto Surat Kesediaan Publikasi** (sesuai format yang diberikan pada saat pendaftaran *online*, surat asli tidak perlu dikirimkan).
- 1.9. Peserta wajib mengunggah **file foto diri** pada saat pendaftaran *online*.
- 1.10. Peserta wajib mengunggah **file Makalah Penelitian** (sesuai format yang diberikan pada saat pendaftaran *online*, *hardcopy* tidak perlu dikirimkan).
- 1.11. Peserta wajib mencantumkan **link video presentasi penelitian** yang diunggah di Youtube pada saat pendaftaran *online*.
- 1.12. Peserta wajib membayar biaya pendaftaran lomba sebesar Rp. 100.000,- (seratus ribu rupiah) per-judul penelitian.
- 1.13. Hanya peserta yang sudah memenuhi butir 1.6. sampai 1.12. yang akan dinyatakan sah menjadi peserta YSC 2021.

2. Pendaftaran Online

- 2.1. Pendaftaran dilakukan secara *online* melalui *link* berikut ini:
<https://bit.ly/YSC2021pendaftaran>
- 2.2. Pendaftaran selambatnya tanggal 12 September 2021.
- 2.3. Peserta mendaftar (*submit*) sebanyak 1x (satu kali) saja.

3. Surat Keterangan Sekolah

- 3.1. Penamaan *file* Surat Keterangan Sekolah mengikuti aturan berikut:
Keterangan_namasiswa1-siswa2_namasekolah_singkatanbidang_YSC2021
- 3.2. Singkatan bidang:
 - a. Mathematics (Matematika) = M
 - b. Physics (Fisika) = P
 - c. Computer Sciences (Komputer) = CS
 - d. Environmental Science (Lingkungan) = ES
 - e. Life Science (Ilmu Hayati) = LS
 - f. History (Sejarah) = H
 - g. Geography (Geografi) = G
 - h. Sociology (Sosiologi) = SO
 - i. Economics (Ekonomi) = E
 - j. Psychology (Psikologi) = PS
- 3.3. Contoh penamaan *file* Surat Keterangan Sekolah untuk siswa bernama Muhammad Ridho dari SMAN 1 Cianjur dengan penelitian bidang Sosiologi :
Keterangan_Muhammad Ridho_SMAN 1 Cianjur_SO_YSC2021
- 3.4. Format Surat Keterangan Sekolah bisa diunduh melalui *link* berikut :
<https://bit.ly/YSC2021suratsekolah>

4. Surat Kesediaan Publikasi

- 4.1. Penamaan *file* Surat Kesediaan Publikasi mengikuti aturan berikut:
Publikasi_namasiswa1-siswa2_namasekolah_singkatanbidang_YSC2021
- 4.2. Singkatan bidang: lihat butir 3.2. di atas.
- 4.3. Contoh penamaan *file* Surat Kesediaan Publikasi siswa bernama Muhammad Ridho dari SMAN1 Cianjur dengan penelitian bidang Sosiologi :
Publikasi_Muhammad Ridho_SMAN 1 Cianjur_SO_YSC2021
- 4.4. *Template* surat kesediaan publikasi bisa diunduh melalui *link* berikut :
<https://bit.ly/YSC2021suratpublikasi>

5. Foto/Pas foto

- 5.1. Foto peserta berwarna boleh menggunakan format pas foto, atau foto diri dari pinggang ke atas yang menunjukkan wajah dengan cukup jelas dan terang.
- 5.2. Penamaan *file* Foto mengikuti aturan berikut:
Foto_namasiswa1-siswa2_namasekolah_singkatanbidang_YSC2021
- 5.3. Contoh penamaan *file* Foto siswa bernama Muhammad Ridho dari SMAN1 Cianjur dengan penelitian bidang Sosiologi :
Foto_Muhammad Ridho_SMAN 1 Cianjur_SO_YSC2021

6. Makalah Penelitian

- 6.1. Makalah Penelitian dibuat dalam Bahasa Indonesia maksimum 10 (sepuluh) halaman ukuran A4 Font Arial 11 pt spasi 1,5 berbentuk 2 kolom, sesuai format pada butir 6.2. dengan isi sebagai berikut :
 - a. Abstrak Penelitian (maksimal 200 kata)
 - b. Latar Belakang Penelitian
 - c. Perumusan Masalah
 - d. Studi Pustaka
 - e. Metodologi Penelitian
 - f. Hasil dan Pembahasan
 - g. Kesimpulan
 - h. Daftar Pustaka
- 6.2. Format Makalah Penelitian bisa diunduh melalui *link* berikut:
<https://bit.ly/YSC2021makalahpenelitian>
- 6.3. Penamaan *file* Makalah Penelitian mengikuti aturan berikut:
Makalah Penelitian_namasiswa1 siswa2_namasekolah_singkatanbidang_YSC2021
- 6.4. Contoh penamaan *file* Makalah Penelitian siswa bernama Muhammad Ridho dari SMAN 1 Cianjur dengan penelitian bidang Sosiologi :
Makalah Penelitian_Muhammad Ridho_SMAN 1 Cianjur_SO_YSC2021

7. Video Presentasi

- 7.1. Video rekaman presentasi peserta berdurasi maksimal 5 menit dengan tidak mempercepat rekaman video.
- 7.2. Unggah video di Youtube dan harus dapat diakses oleh publik (di-setting 'public') dengan *hashtag* #YSC2021 #penelitibelia #CYS.
- 7.3. Format judul video di Youtube mengikuti aturan berikut:
Judul Penelitian_namasiswa1 siswa 2_singkatan bidang
Contoh penulisan judul video:
Hubungan Siswa dan Guru selama Pandemi COVID-19_Muhammad Ridho_SO

- 7.4. Peserta membuat akun Youtube dengan alamat email masing-masing.
- 7.5. Materi video presentasi sama dengan butir-butir pada makalah penelitian.
- 7.6. *Link* video presentasi dikumpulkan pada saat melakukan pendaftaran *online*.

8. Biaya Pendaftaran

- 8.1. Biaya pendaftaran sebesar Rp. 100.000,- (Seratus Ribu Rupiah) per-judul penelitian, dibayarkan ke rekening panitia sebagai berikut :
Bank : Bank Central Asia (BCA)
Cabang : Riau Bandung
No.Rekening : 0863-0422-48
Atas Nama : CV. Puduk Scientific
- 8.2. Penamaan file bukti bayar mengikuti aturan sebagai berikut :
Bukti Bayar_namasiswa1-siswa2_namasekolah_singkatanbidang_YSC2021
- 8.3. Contoh penamaan file Bukti Bayar siswa bernama Muhammad Ridho dari SMAN1 Cianjur dengan penelitian bidang Sosiologi:
Bukti Bayar_Muhammad Ridho_SMAN 1 Cianjur_SO_YSC2021
- 8.4. Biaya pendaftaran lomba mencakup:
 - a. Medali bagi siswa juara 1, 2 dan 3
 - b. *Hardcopy* sertifikat juara bagi siswa juara 1, 2, 3 dan harapan
 - c. *Hardcopy* sertifikat peserta bagi siswa non-juara
 - d. *Hardcopy* sertifikat guru pembimbing
- 8.5. Kelengkapan yang disebut pada butir 8.3. akan dikirim ke alamat sekolah setelah YSC 2021 dan LPB Nasional 2021 selesai.

9. Pengumpulan Berkas

Berkas pada butir 3 sampai 8 diunggah pada saat melakukan pendaftaran *online* dengan format *.pdf atau gambar (*.jpeg atau *.jpg), dan ukuran file maksimal 1 MB per file, selambat-lambatnya tanggal 12 September 2021.

10. Konsep Lomba

- 10.1. YSC 2021 berlangsung melalui penilaian substansi makalah penelitian dengan dukungan video presentasi.
- 10.2. Gambaran umum penelitian pada masing-masing bidang lomba:
 - a. **Mathematics (Matematika)**

Presentasi riset bidang Matematika mencakup bidang Matematika teori. Pada bidang ini, siswa diharapkan mempresentasikan suatu temuan baru yang didukung oleh teori-teori terdahulu, maupun suatu temuan persamaan matematika baru untuk diterapkan

pada suatu fenomena tertentu, namun tidak menutup kemungkinan jika siswa mempresentasikan teori matematika baru.

b. Physics (Fisika)

Presentasi riset bidang Fisika mencakup riset fisika teori dan fisika terapan atau engineering. Hasil yang diharapkan dari riset bidang Fisika adalah sudut pandang baru tentang suatu fenomena alam dan juga temuan baru di bidang terapan yang memanfaatkan pengetahuan Fisika dan peserta harus mampu menjelaskan dengan pendekatan Fisika.

c. Computer Sciences (Komputer)

Presentasi riset bidang Computer Sciences mencakup riset temuan baru mengenai proses komputasi, meliputi pengembangan algoritma, data dan informasi, serta berbagai proses aljabar yang menyertainya. Bidang riset Computer Sciences mencakup upaya-upaya pengembangan komputasi atas data, mulai dari simulasi, manipulasi/ rekayasa, pemrosesan, pengolahan, pengenalan pola, penyimpanan, komunikasi (jaringan/ network) komputer, hingga keamanan data dan informasi, termasuk aplikasi-aplikasi informatika yang berkaitan.

d. Environmental Science (Lingkungan)

Bidang Ilmu Lingkungan (Environmental Science) adalah suatu bidang ilmu interdisiplin yang mempelajari tentang lingkungan dan penyelesaian permasalahan yang ada di lingkungan. Dengan mempelajari permasalahan-permasalahan di bidang Ilmu Lingkungan, maka kita dapat lebih memahami dan dapat membantu untuk menyelesaikan permasalahan-permasalahan yang ada di lingkungan yang umumnya melibatkan interaksi antara manusia dengan lingkungannya.

e. Life Science (Ilmu Hayati)

Bidang Ilmu Hayati (Life Sciences) adalah suatu bidang ilmu yang mempelajari makhluk hidup yang ada di bumi, dari prokariot termasuk bakteri, tanaman hingga hewan dan manusia. Ilmu Hayati mempelajari tentang semua kehidupan yang ada di muka bumi ini, termasuk proses-proses yang terjadi pada makhluk hidup. Penelitian di bidang Ilmu Hayati sangat luas, termasuk mempelajari komposisi, struktur dan fungsi yang dimiliki oleh makhluk hidup. Dengan mempelajari berbagai fenomena di bidang Ilmu Hayati, maka kita dapat meningkatkan pemahaman tentang kehidupan. Penelitian di dalam bidang Ilmu Hayati ini jika menggunakan kelompok hewan vertebrata sebagai objek yang diteliti termasuk manusia, khususnya jika perlakuan dalam eksperimen dapat menimbulkan rasa sakit, menderita ataupun dapat berbahaya bagi kesehatan, maka diperlukan ijin khusus yang disebut Ijin Etik (*Ethical Clearence*) dari suatu komisi etik.

f. History (Sejarah)

Penelitian Sejarah mencakup kronologi kejadian dahulu/sejarah dan bagaimana keterhubungannya yg merupakan proses yg berkesinambungan. Itu knp dlm riset Sejarah ALUR WAKTU sangat penting. Bukti2 sejarah berupa dokumen ataupun media lainnya serta keilmuan harus diteliti dan di verifikasi. Metodenya harus menjelaskan/

memformulasikan aturan/hukum yg benar serta waktu kejadian dan tempat. Apabila memungkinkan butuh sumber/seseorang yg mengetahui bahasa, bisa membaca dokumen, dan memahami artinya.

g. Geography (Geografi)

Geografi adalah ilmu yang mempelajari persamaan, dan perbedaan fenomena geosfer (atmosfer, litosfer, biosfer, antroposfer, hingga hidrosfer) dengan sudut pandang kewilayahan, dan lingkungan dalam konteks keruangan. Sudut pandang tersebut dalam penelitian-penelitian ilmu geografi biasanya mengkaji struktur keruangan (spatial structure), pola keruangan (spatial pattern), dan proses keruangan (spatial processes), dengan mengaitkan hubungan antara makhluk hidup dan lingkungan alam di suatu ruang serta mengombinasikan antara pendekatan keruangan dan pendekatan kelingkungan. Peta dalam hal ini dimanfaatkan sebagai alat bantu yang dapat diinterpretasi untuk menggambarkan fenomena pada geosfer mapun topik penelitian yang sedang diteliti tersebut. Dengan adanya perkembangan teknologi perpetaan (sistem informasi geografis dan penginderaan jauh) sangat membantu untuk menjawab kompleksitas masalah yang ingin dijawab dalam penelitian.

h. Sociology (Sosiologi)

Riset Sosiologi mencakup berbagai hal yg berhubungan antara individu dengan individu, golongan dgn golongan, maupun individu dgn golongan, dan masyarakat serta perilakunya. Penelitian Sosiologi dianggap tdk mudah krn objeknya manusia. Penelitian yg objeknya manusia ataupun hubungan antar manusia seringkali tidak bisa dikatakan PASTI atau KONKRIT sehingga penelitian ini membutuhkan alat ukur yg jelas baik itu dalam penelitian kuantitatif maupun kualitatif.

i. Economics (Ekonomi)

Presentasi riset bidang Economics mencakup bidang business development, entrepreneurship, investment dan economic empowerment. Tujuan dari riset adalah untuk mengembangkan pemahaman ilmiah dalam berbagai masalah ekonomi dan bisnis baik di organisasi swasta maupun publik. Hasil penelitian dapat meningkatkan sinergi antara teori dan terapan sehingga dapat digunakan untuk mendukung pengembangan ilmu pengetahuan dan praktik dalam ekonomi dan bisnis.

j. Psychology (Psikologi)

Riset Psikologi mencakup berbagai hal yg berhubungan dgn ilmu kejiwaan, karakter serta kepribadian. Banyak riset bidang psikologi dilakukan untuk menguji sebuah teori dan membuktikan teori tersebut dengan tujuan membantu tercapainya kesehatan mental serta mungkin saja pemahaman akan kesehatan mental tersebut.

10.3. Kriteria penilaian adalah:

- a. Keunikan ide penelitian
- b. Kesesuaian metodologi penelitian dengan tujuan penelitian (*objectives*)
- c. Ketepatan analisa terhadap hasil yang diperoleh pada penelitian
- d. Kesahihan kesimpulan penelitian.

- e. Keluasan pandangan peneliti dalam melihat peluang selanjutnya (*future work*)
- 10.4. Penilaian lomba dilakukan pada makalah penelitian dan video presentasi Youtube untuk menentukan juara.
- 10.5. Pada setiap bidang lomba akan ditentukan juara yaitu: Juara 1, Juara 2, Juara 3 dan Juara Harapan.
- 10.6. Hasil Lomba akan diumumkan pada website **Young Scientists Competition (YSC) 2021** (www.pudak-scientific.com/ysc/) atau **Center for Young Scientists** (<http://www.cys.or.id>) pada hari Senin, tanggal 11 Oktober 2021.

11. Hadiah dan Penghargaan

Para juara pada setiap bidang (Matematika, Fisika, Ilmu Hayati, Lingkungan, Komputer, Sejarah, Geografi, Sosiologi, Ekonomi, dan Psikologi) akan mendapatkan medali (bagi juara 1, 2 dan 3) dan sertifikat juara, serta diundang sebagai peserta Lomba Peneliti Belia Nasional 2021.

12. Sosialisasi Lomba

- 12.1. Informasi terkini mengenai YSC 2021 dapat dilihat pada Instagram CYS (**cys_indonesia**), Facebook group (**Peneliti Belia, Indonesia**), Instagram Puduk Scientific (@pudakscientific), dan FB Puduk Scientific (www.facebook.com/pudak.adm)
- 12.2. Ikuti *talkshow* bersama Pembina Tim Indonesia untuk lomba internasional ICYS, APCYS, ICYSS, tentang teknik merancang penelitian. Nantikan informasinya di Instagram CYS.

13. Timeline YSC 2021 dan LPB Nasional 2021



14. Informasi LPB Nasional 2021

- 14.1. Lomba Peneliti Belia Nasional (LPB Nasional) 2021 hanya diikuti oleh para juara Lomba-lomba Peneliti Belia 2021 yang diselenggarakan oleh CYS di berbagai provinsi. Lomba ini akan diselenggarakan pada tanggal 14 November 2021.
- 14.2. Penelitian yang dibawakan pada saat LPB Nasional 2021 adalah penelitian yang dimenangkan pada saat YSC 2021.
- 14.3. LPB Nasional 2021 merupakan seleksi pembentukan Tim Indonesia untuk lomba penelitian internasional yang bernama **ICYS 2022** (International Conference of Young Scientists), **APCYS 2022** (Asia Pacific Conference of Young Scientists), **ICYSS 2022** (International Conference for Young Social Scientists), serta lomba lain di Malaysia, Korea Selatan, Thailand, Abu-Dhabi, Tunisia, Korea Selatan, Belanda, dan Amerika Serikat.

15. Kontak Panitia

Panitia YSC 2021

Jl. Puduk No. 4 Bandung - 40113

Phone : +62-22-723 1046 Ext.1160

WA : +62 811-2111-2101 / +62 878-2494-8998

Email : ysc@pudak.com | Website : www.pudak-scientific.com/ysc

Instagram: @pudakscientific | Facebook: www.facebook.com/pudak.adm

ENGLISH VERSION

TECHNICAL INSTRUCTION OF YOUNG SCIENTISTS COMPETITION 2021

1. Participants Administrative Requirements

- 1.1. Young Scientists Competition 2021 (YSC2021) is Youth Research Competition which intended for Senior High School (SMA/MA/SMK) and Junior High School (SMP/MTs) students in the area of West Java Province, which is attended individually or in groups of up to 2 students per group.
- 1.2. YSC2021 participants are students who have never participated in the following international competitions: International Conference of Young Scientists (ICYS), Asia Pacific Conference of Young Scientists (APCYS), and International Conference of Young Social Scientists (ICYSS).
- 1.3. Each school is only allowed to submit a maximum of 2 (two) research titles for each competition category, so that the maximum number of research studies that can be submitted by each school is 20 (twenty) studies. If there are more than 2 titles registered, the committee will take the 2 research titles that were registered the earliest.
- 1.4. Each participant is only allowed to submit 1 research title. If there are more than 1 titles registered, the committee will take the 1 research titles that were registered the earliest.
- 1.5. The competition categories are: 1) Mathematics; 2) Physics; 3) Life Sciences; 4) Environmental Science; 5) Computer Science; 6) History; 7) Geography; 8) Psychology; 9) Economics; 10) Sociology.
- 1.6. Participants must register through online registration.
- 1.7. Participants must upload a scan/photo of the **Letter of Declaration** (Surat Keterangan Sekolah) according to the format provided on the online registration, the original letter does not need to be sent.
- 1.8. Participants must upload a scan/photo of the **Letter of Publication** (Surat Kesiediaan Publikasi) according to the format provided on the online registration, the original letter does not need to be sent.
- 1.9. Participants must upload an ID Photo when registering online.
- 1.10. Participants must upload the Research Paper file (according to the format provided at the time of online registration, hardcopy does not need to be sent).
- 1.11. Participants must include a **research presentation video link** uploaded on Youtube during the online registration.
- 1.12. Participants must pay a competition registration fee of Rp. 100.000,- (one hundred thousand rupiah) for each research title.

- 1.13. Only participants who have met rules 1.6. until 1.12. who will be declared valid to be YSC2021 participants.

2. Online Registration

- 2.1. Registration is done online via the following link:
<https://bit.ly/YSC2021pendaftaran>
- 2.2. Registration no later than 12 September 2021.
- 2.3. Participants register (submit) 1x (once) only.

3. Letter of Declaration

- 3.1. The naming of Letter of Declaration file follows the following rules:
Keterangan_ student1-student2_schoolname_categorycode _YSC2021
- 3.2. Field Code:
 - a. Mathematics = M
 - b. Physics = P
 - c. Computer Sciences = CS
 - d. Environmental Science = ES
 - e. Life Science = LS
 - f. History = H
 - g. Geograph = G
 - h. Sociology = SO
 - i. Economics = E
 - j. Psychology = PS
- 3.3. Example of naming a Letter of Declaration file for a student named Muhammad Ridho from SMAN 1 Cianjur with research in the field of Sociology:
Keterangan_Muhammad Ridho_SMAN 1 Cianjur_SO_YSC2021
- 3.4. School Certificate Format can be downloaded via the following link link:
<https://bit.ly/YSC2021suratsekolah>

4. Letter of Publication

- 4.1. The naming of the Letter of Publication file follows the following rules:
Publikasi_ studentname1-student2_schoolname_fieldcode_YSC2021
- 4.2. Field code: see item 3.2. above.
- 4.3. Example of naming a student's Letter of Publication file named Muhammad Ridho from SMAN1 Cianjur with research in the field of Sociology:
Publikasi_Muhammad Ridho_SMAN 1 Cianjur_SO_YSC2021
- 4.4. The Letter of Publication template can be downloaded via the following link:
<https://bit.ly/YSC2021suratpublikasi>

5. ID Photo

5.1. Photographs of color participants may use a passport photo format, or a photo of yourself from the waist up that shows the face quite clearly and brightly.

5.2. Naming a Photo file follows the following rules:

Foto_ studentname1-student2_schoolname_fieldcode_YSC2021

5.3. Example of file naming ID Photo of a student named Muhammad Ridho from SMAN 1 Cianjur with research in the field of Sociology:

Foto_Muhammad Ridho_SMAN 1 Cianjur_SO_YSC2021

6. Research Paper

6.1. The research paper is written in Indonesian for a maximum of 10 (ten) pages of A4 size, Arial 11 pt font, 1.5 spacing, in the form of 2 columns, according to the format in point 6.2. with the following contents:

- a. Research Abstract (200 words max)
- b. Research Background
- c. Problem Formulation
- d. Literature Review
- e. Research Methodology
- f. Results and Discussion
- g. Conclusion
- h. Bibliography

6.2. The Research Paper Format can be downloaded via the following link:

<https://bit.ly/YSC2021makalahpenelitian>

6.3. Research Paper file naming follows the following rules:

Makalah Penelitian_ studentname1-student2_schoolname_fieldcode _YSC2021

6.4. An example of naming a Research Paper file for a student named Muhammad Ridho from SMAN 1 Cianjur with research in the field of Sociology:

Makalah Penelitian_Muhammad Ridho_SMAN 1 Cianjur_SO_YSC2021

7. Presentatino Video

7.1. Video recording of participant presentations has a maximum duration of 5 minutes without speeding up the video recording.

7.2. Upload videos on Youtube and must be accessible to the public (set 'public') with the hashtag #YSC2021 #penelitibelia #CYS.

7.3. The format of video titles on Youtube follows the following rules:

Research title_student name1 student 2_fieldcode

Example of writing video title:

Student and Teacher Relations during the COVID-19 Pandemic_Muhammad Ridho_SO

- 7.4. Participants create Youtube accounts with their respective email addresses.
- 7.5. The material for the presentation video is the same as the points in the research paper.
- 7.6. Presentation video links are submitted during online registration.

8. Registration Fee

- 8.1. The registration fee is Rp. 100.000,- (One Hundred Thousand Rupiah) per research title, paid to the committee's account as follows:

Bank : Bank Central Asia (BCA)

Cabang : Riau Bandung

No.Rekening : 0863-0422-48

Account Name: CV. Puduk Scientific

- 8.2. The naming of the proof of payment file follows the following rules:

Bukti Bayar_ student name1 student 2_fieldcode _YSC2021

- 8.3. Example of naming a Proof of Payment file for a student named Muhammad Ridho from SMAN1 Cianjur with research in the field of Sociology:

Bukti Bayar_Muhammad Ridho_SMAN 1 Cianjur_SO_YSC2021

- 8.4. Competition registration fee includes:

- a. Medals for 1st, 2nd and 3rd place students
- b. Hardcopy of champion certificate for 1st, 2nd, 3rd and runner up
- c. Hardcopy of participant certificate for non-champion students
- d. Hardcopy of the supervising teacher's certificate

- 8.5. The equipment referred to in point 8.3. will be sent to the school's address after YSC2021 and 2021 National LPB are completed.

9. File Submission

Files in points 3 to 8 are uploaded at the time of online registration in *.pdf or image format (*.jpeg or *.jpg), and the maximum file size is 1 MB per file, no later than 12 September 2021.

10. Competition Concept

- 10.1. YSC 2021 takes place through an assessment of the substance of research papers with the support of video presentations.
- 10.2. Overview of research in each field of competition:

a. Mathematics

The presentation of research in the field of Mathematics covers the field of theoretical mathematics. In this field, students are expected to present a new finding that is supported by previous theories, as well as a finding of a new mathematical equation to be applied to a particular phenomenon, but it is possible if students present a new mathematical theory.

b. Physics

Research presentations in Physics include theoretical physics research and applied physics or engineering. The expected result of research in the field of Physics is a new perspective on a natural phenomenon and also new findings in the applied field that utilize knowledge of Physics and participants must be able to explain with a Physics approach.

c. Computer Science

Research presentations in the field of Computer Science include research on new findings regarding the computational process, including the development of algorithms, data and information, as well as various accompanying algebraic processes. The field of Computer Science research includes efforts to develop computing on data, ranging from simulation, manipulation/engineering, processing, pattern recognition, storage, computer communications (networks/networks), to data and information security, including information technology applications that related.

d. Environmental Science

The field of Environmental Science is an interdisciplinary field of science that studies the environment and solving problems that exist in the environment. By studying problems in the field of Environmental Science, we can better understand and can help to solve problems that exist in the environment which generally involve interactions between humans and their environment.

e. Life Science

The field of Biological Sciences is a field of science that studies living things on earth, from prokaryotes including bacteria, plants to animals and humans. Biological Sciences studies about all life that exists on this earth, including the processes that occur in living things. Research in the field of Life Sciences is very broad, including studying the composition, structure and function of living things. By studying various phenomena in the field of Life Sciences, we can increase our understanding of life. This research in the field of Life Sciences uses a group of vertebrate animals as the object under study, including humans, especially if the treatment in the experiment can cause pain, suffer or can be harmful to health, then a special permit called an ethical clearance is required from an ethics commission.

f. History

Historical research includes the chronology of past/historical events and how they are connected which is a continuous process. That is why in History research TIME FLOW is very important. Historical evidence in the form of documents or other media as well as science must be researched and verified. The method must explain/formulate the correct rules/laws as well as the time and place of the incident. If possible need a source/someone who knows the language, can read the document, and understands its meaning.

g. Geography

Geography is a science that studies the similarities and differences of geosphere phenomena (atmosphere, lithosphere, biosphere, anthroposphere, to hydrosphere) from a regional and environmental point of view in a spatial context. This point of view in researches in geography usually examines spatial structure, spatial patterns, and spatial processes, by linking the relationship between living things and the natural environment in a space and combining spatial approaches and environmental approaches. Maps in this case are used as tools that can be interpreted to describe phenomena in the geosphere and the research topic being studied. With the development of mapping technology (geographical information systems and remote sensing) it is very helpful to answer the complexity of the problems to be answered in research.

h. Sociology

Sociological research covers various matters relating to individuals and individuals, groups to groups, and individuals to groups, and society and its behavior. Sociological research is considered not easy because the object is human. Research whose objects are humans or relationships between humans often cannot be said to be DEFINITE or CONCRETE so this research requires clear measuring tools, both in quantitative and qualitative research.

i. Economics

The presentation of research in the field of Economics covers the fields of business development, entrepreneurship, investment and economic empowerment. The aim of research is to develop scientific understanding of various economic and business issues in both private and public organizations. Research results can increase the synergy between theory and application so that it can be used to support the development of science and practice in economics and business.

j. Psychology

Psychological research covers various things related to psychology, character and personality. A lot of research in the field of psychology is carried out to test a theory and prove the theory with the aim of helping to achieve mental health and possibly understanding mental health.

10.3. The assessment criteria are:

- a. Unique research idea;
- b. The suitability of the research methodology with the research objectives;
- c. The accuracy of the analysis of the results obtained in the study;
- d. Validity of research conclusions;
- e. The breadth of the researcher's view in seeing the next opportunity (future work).

- 10.4. The competition assessment is carried out on research papers and Youtube presentation videos to determine the winner.
- 10.5. In each field of competition, a winner will be determined as: 1st place, 2nd place, 3rd place and runner up.
- 10.6. Competition results will be announced on the website **Young Scientists Competition (YSC) 2021** (www.pudak-scientific.com/ysc/) or **Center for Young Scientists** (<http://www.cys.or.id>) on Monday, October 11, 2021.

11. Prizes and Awards

The winners in each field (Mathematics, Physics, Life Sciences, Environment, Computers, History, Geography, Sociology, Economics, and Psychology) will get medals (for 1st, 2nd and 3rd place winners) and a certificate of champion, and are invited as participants in the Research Competition National Youth 2021.

12. Competition Socialization

- 12.1. The latest information about YSC2021 can be seen on CYS Instagram (**cys_indonesia**), Facebook group (**Peneliti Belia, Indonesia**), Instagram of Puduk Scientific (@pudakscientific), and Facebook of Puduk Scientific (**Puduk Scientific**)
- 12.2. Join a talk show with the Indonesian Team Mentor for international competitions ICYS, APCYS, ICYSS, about research design techniques. Stay tuned on CYS Instagram for more information.

13. Timeline YSC 2021 and LPB Nasional 2021



14. Information of LPB Nasional 2021

- 14.1. The 2021 National Youth Research Competition (LPB Nasional) will only be participated by the winners of the 2021 Youth Research competitions organized by CYS in various provinces. This competition will be held on November 14, 2021.
- 14.2. The research that was carried out at the 2021 National LPB is the research that was won at the 2021 YSC.
- 14.3. The 2021 National LPB is a selection for the formation of the Indonesian Team for an international research competition called **ICYS 2022** (International Conference of Young Scientists), **APCYS 2022** (Asia Pacific Conference of Young Scientists), **ICYSS 2022** (International Conference for Young Social Scientists), and other competitions in Malaysia, South Korea, Thailand, Abu-Dhabi, Tunisia, South Korea, Netherlands, and the United States.

15. Contact Person

YSC 2021 Comitte

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