

Development of Item bank

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- ☐ Beginning of work 2007
- Subjects
 - Montenegrin
 - Mathematics
 - English
- Population
 - 9- and 12-year-old students



- ☐ Training for teachers applied for each subject
 - Examination syllabus
 - Characteristics of the different item types
 - Using the Item writing form



- ☐ Item writing form is a document which, on a principle of drop-down menu, enables selection of domain, assessment objectives, cognitive domain, level of difficulty and marking scheme
- ☐ Data about author of item and time of writing are recorded



Formular za pisanje ajtema

Predmet	Matematika
Razred	4.
Područje	▼
Ispitni cilj (Učenik pokazuje da umije da)	•
Grupe sposobnosti	_
Tip ajtema	_
Procjena težine ajtema	v
Vrijeme (unijeti broj)	minuta
Nadimak ajtema	
Šifra ajtema	
Ajtem	
Obrazloženje za distraktore (za ajteme višestrukog izbora); tačno rješenje (za ajteme kratkog odgovora); šema za ocjenjivanje (za ajteme dužeg odgovora)	
Maksimalan broj bodova (unijeti broj)	
Broj alternativa (unijeti broj)	Tačan odgovor (unijeti broj tačne alternative)
Autor ajtema	JMBG
Datum (dd.mm.gggg)	

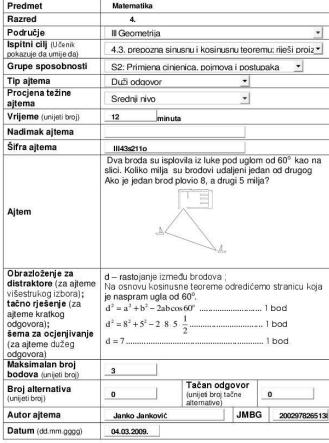


Formular za pisanje ajtema

Predmet	Matematika
Razred	4.
Područje	III Geometrija •
Ispitni cilj (Učenik pokazuje da umije da)	l Brojevi; Racionalni algebarski izrazi Il Elementarne funkcije; Jednacine i nejednacine
Grupe sposobnosti	III Geometrija IV Elementi matematicke analize
Tip ajtema	V Kombinatorika, vjerovatnoca i statistika
Procjena težine ajtema	
Vrijeme (unijeti broj)	minuta
Nadimak ajtema	
Šifra ajtema	
Obrazloženje za distraktore (za ajteme višestrukog izbora); tačno rješenje (za ajteme kratkog odgovora); šema za ocjenjivanje (za ajteme dužeg odgovora)	
Maksimalan broj bodova (unijeti broj)	
Broj alternativa (unijeti broj)	Tačan odgovor (unijeti broj tačne alternative)
Autor ajtema	JMBG
Datum (dd.mm.gggg)	



Formular za pisanje ajtema Matematika





- ☐ After pre testing, Item bank is reviewed
- ☐ There are about 1500 items for each subject
- ☐ Items were used for national assessments from 2008 to 2012
- ☐ In 2013, national assessments are replaced by external exams



Item bank for national exams

□ Preparations for matura and professional exam started in 2008

- ☐ There is no pre-test of matura items
 - relatively a small number of students/schools
 - high-stake exam



Item bank for national exams

- ☐ Method of items storage is the same as for the national assessment
- ltems are classified by domain, cognitive competence and item type
- ☐ After revision, items with good metric characteristics are entered to the base



From item bank to test construction

- ☐ Test is developed according to a test grid It shows:
 - the domains to be tested
 - the weight given to each item
 - the type of items
- □ A special application enables us to choose the item with required characteristics. The final choice is made by the subject adviser



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